EDITION 2025 / 2027

APPLITEC
CUTTING TOOLS



GENERAL CATALOGUE

PERFORMANCE | PRECISION | RIGIDITY







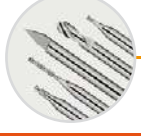












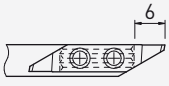
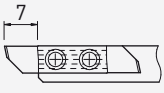
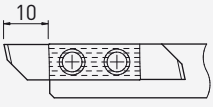
TOP-Line 1
TOP-Watch 2
ONE-Line 3
ONE-Watch 4
PRO-Line 5
ECO-Line 6
TRIO-Line 7
TURN-Line 8
ISO-Line 9
EVOCUT-Line 10
CUT-Line 11
IN-Line 12
SWITCH-Line 13
MODU-Line 14
TOOLING-Line 15
MICRO-Line 16
CIRCO-Line 17
JET-Line 18
INDEX / SYMBOL 19

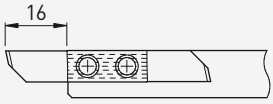
TOP-Line



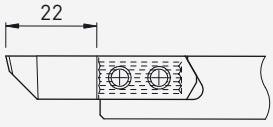
APPLITEC
CUTTING TOOLS

Index

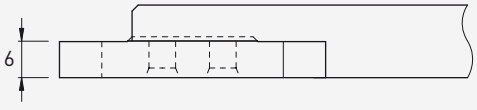
Codification Kodifizierung Coding guide			> 1.04
Infos et avantages Infos und Vorteile Infos and advantages			> 1.05
Nuances Sorten Grades			> 1.12
Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data			> 1.18
Nuances PCD PKD Sorten PCD grades			> 1.20
Paramètres de coupe indicatifs PCD PKD empfohlene Schnittwerte PCD standard machining data			> 1.21
710 / 720	Pour machines à cames Für kurvengesteuerte Maschinen For cam driven machines		> 1.22
730 / 740	**Main series** **Small type**		> 1.34
750 / 760	**Main series** **Large type**		> 1.90

770 / 780
Tronçonnage de grande capacité
Abstechen für grössere Durchmesser
High capacity parting off


> **1.164**

7050 / 7060
Tronçonnage de grande capacité
Abstechen für grössere Durchmesser
High capacity parting


> **1.176**

W750 / W760
Outils avec plaquettes ébauches larges pour profilage
Werkzeuge mit breiten WSP-Rohlingen für Profilschleifen
Tools with wide blank inserts for profiling


> **1.184**

Porte-outils spécifiques
Spezifische Werkzeughalter
Specific tool holders

> **1.192**

Pièces de rechange
Ersatzteile
Spare parts
> **1.214**

Codification
Kodifizierung
Coding guide

7	6	4	X	–	2.0	–	R20	–	HTA

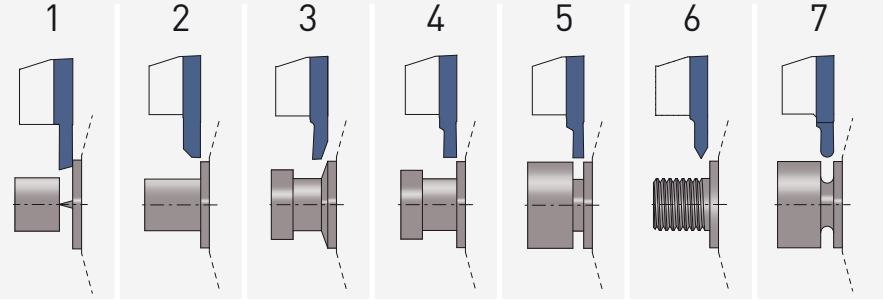
Dimension
Abmessung
Dimension

Rayon
Radius
Radius

Nuance
Sorte
Grade

Géométrie de coupe / Brise-copeaux / Particularités
Schneidgeometrie / Spanbrecher / Sondereigenschaften
Cutting geometry / Chip breaker / Special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

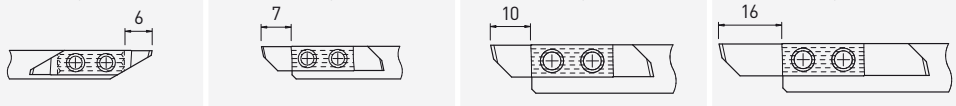


Gamme de produit
Produktserie
Product series

définit la compatibilité des plaquettes avec le porte-outils
definiert die Kompatibilität der Wendeschneidplatten mit dem Werkzeughalter
defines the compatibility between inserts and toolholders

L = 1, 3, 5, 7 (chiffre impair / ungerade Zahl / uneven number)
R = 2, 4, 6, 8 (chiffre pair / gerade Zahl / even number)

L 710	R 720	L 730	R 740	L 750	R 760	L 770	R 780



pour machines à cames
für kurvengesteuerte Maschinen
for cam driven machines

main series
small type

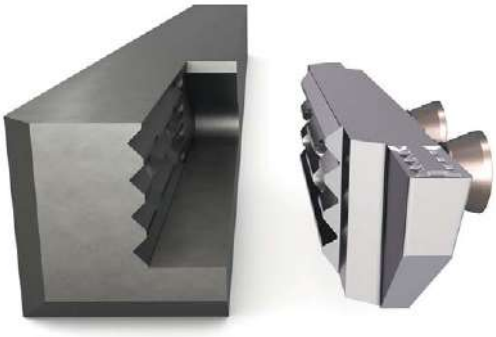
main series
large type

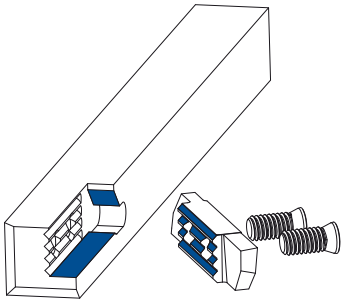
tronçonnage uniquement
nur für abstechen
only for parting off

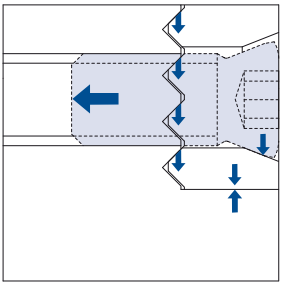
Applitec série 700 Système de serrage à denture décalée avec 2 vis de fixation
Applitec 700 Serie Spannsystem mit 2 Schrauben und verschobener Verzahnung
Applitec 700 series Shifted teeth clamping system with 2 screws

100 % rigid !

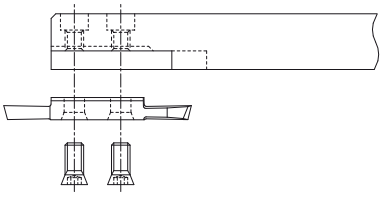
Système de serrage Applitec à denture décalée
Applitec-Spannsystem mit verschobener Verzahnung
Applitec clamping system with shifted teeth

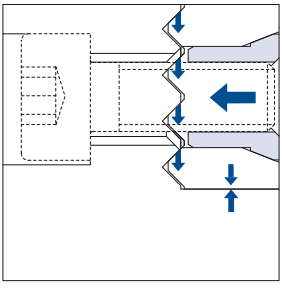






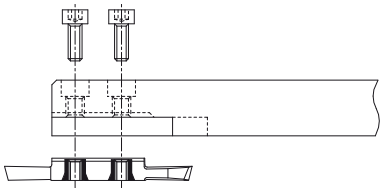
Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)





Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
-B nach der Artikelreferenz hinzufügen
add -B after the article number



Changement de la plaquette possible dans la machine, sans démontage du porte-outil
WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
The insert can be changed in the machine without removing the tool holder

* = sur demande / auf Anfrage / on request

TOP-Line

★ 1er choix / 1. Wahl / 1st choice

☆ Recommandé / Empfohlen / Recommended

Pour pièces fragiles de très petits diamètres / Für empfindliche und sehr kleine Werkstücke / For fragile and very small work pieces

Géométries de coupe Spanformgeometrien Cutting geometries		Arête de coupe Schneidkante Cutting edge	Series 710/720	730/740	750/760	770/780	7050/7060	P Acier de décolletage Automatenstahl Free-cutting steel	P Acier allié Stahl Alloyed steel	M Acier inoxydable Rostfreistahl Stainless steel
	0°		●	●	●	●	●	★	✓	✓
	0° PCD			●	●					
	X4°			●	●			★	★	★
	XF			●	●	●	●	☆	★	★
	X12°			●	●					☆
	X25°			●	●					☆
	U			●	●	●		☆	☆	☆
	ZU8				●			★	★	★
	X840				●					
	RAS				●			★	★	☆

Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations

Tronçonnage
Abstechen
Parting off

N					S	
Aluminium	Laiton, bronze Messing & Bronze Brass & bronze	Laiton sans plomb (CuZn42, ...) Bleifreies Messing Lead-free brass	Ecobrass	Cuivre Kupfer Copper	Titane Titan Titanium	Conseils et avantages Tipps und Vorteile Tips and benefits
✓	★		✓	✓	✓	Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding
☆	☆	☆	★	☆	☆	Durée de vie nettement prolongée Deutlich verlängerte Lebensdauer Significantly extended tool life
✓		☆		✓	✓	Réduit l'effort de coupe, réaffûtable Reduziert Schneidkräfte, nachschleifbar Decreases cutting force, allows regrinding
				☆		Pour matières difficiles (pointe renforcée) Für schwierige Werkstoffe (verstärkte Spitze) For difficult materials (reinforced tip)
★		☆		★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
★				☆	☆	Pour matières collantes faisant de très longs copeaux Für klebrige Werkstoffe mit sehr langen Spänen For sticky materials producing (very) long chips
						Pour resserer le copeau, réaffûtage aisé Für Spanverschmälerung, einfaches Nachschleifen To narrow the chips, easy regrinding
☆ <5 % Si	☆				☆	Géométrie laser avec une très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
☆ <5 % Si		★			☆	Pour l'usinage des matières sans plomb Bearbeitung bleifreier Werkstoffe Machining lead-free materials
					☆	Positif à 7°, réduit l'effort de coupe, réaffûtable Reduziert Schneidkräfte, nachschleifbar 7° positive, Reduces cutting force, allows regrinding

TOP-Line

★ 1er choix / 1. Wahl / 1st choice

☆ Recommandé / Empfohlen / Recommended

✓ Pour pièces fragiles de très petits diamètres / Für empfindliche und sehr kleine Werkstücke / For fragile and very small work pieces

Géométries de coupe / Spanformgeometrien / Cutting geometries		Arête de coupe / Schneidkante / Cutting edge	Series 710/720	Series 730/740	Series 750/760	P – Acier de décolletage / Automatenstahl / Free-cutting steel	P – Acier allié / Stahl / Alloyed steel	M – Acier inoxydable / Rostfreistahl / Stainless steel
	0°		•	•	•	★	✓	✓
	0° PCD			•				
	PX			•	•	★	☆	☆
	X			•	•	★	★	★
	X5-EP				•	★	★	☆
	X10-EP				•	☆	☆	★
	VS			•	•	☆		☆
	ZX10			•	•	★	★	★
	ZX17			•				☆
	ZX25				•			☆
	ZXB10				•	★	★	★
	ZXT				•	★	★	★
	ZF-X			•	•			
	VX-800				•	★	★	☆
	VUX				•	☆	☆	★

N					S	
Aluminium	Laiton, bronze Messing & Bronze Brass & bronze	Laiton sans plomb (CuZn42, ...) Bleifreies Messing Lead-free brass	Ecobrass	Cuivre Kupfer Copper	Titane Titan Titanium	Conseils et avantages Tipps und Vorteile Tips and benefits
✓	✓		✓	✓	✓	Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding
☆	☆	☆	★	☆	☆	Durée de vie nettement prolongée Deutlich verlängerte Lebensdauer Significantly extended tool life
✓		☆		☆	☆	Très bonne maîtrise du copeau (7°) Sehr gute Spankontrolle Very efficient chip control
★		☆		★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
						Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
☆					☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
✓				✓	✓	Brise-copeau pour usinage léger en finition Spanbrecher für leichte Schlichtbearbeitung Chip-breaker for light finishing operation
☆ <5 % Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
★ <5 % Si				★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
★ <5 % Si				★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
☆ <5 % Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
☆ <5 % Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
		★				Pour l'usinage des matières sans plomb Bearbeitung bleifreier Werkstoffe Machining lead-free materials
☆				☆	☆	Pour l'usinage des matières sans plomb Bearbeitung bleifreier Werkstoffe Machining lead-free materials
☆				☆	★	Roule-copeau bidirectionnel Bidirektionaler Spanroller Bi-directional chip-breaker

TOP-Line

★ 1er choix / 1. Wahl / 1st choice

☆ Recommandé / Empfohlen / Recommended

Pour pièces fragiles de très petits diamètres / Für empfindliche und sehr kleine Werkstücke / For fragile and very small work pieces

Géométries de coupe Spanformgeometrien Cutting geometries		Arête de coupe Schneidkante Cutting edge	Series 710/720	 730/740	 750/760	P Acier de décolletage Automatenstahl Free-cutting steel	 Acier allié Stahl Alloyed steel	M Acier inoxydable Rostfreistahl Stainless steel
	0°		•	•	•	★	✓	✓
	0° PCD			•				
	X			•	•	★	★	★
	VX-8°			•	•	★	★	☆
	VX-800			•	•	★	★	☆
	VX-15°			•	•	☆		☆
	VUX				•	☆	☆	★
	ZX10			•	•	★	★	★
	ZXB				•	★	★	★
	ZXT			•	•	★	★	★

N					S	
Aluminium	Laiton, bronze Messing & Bronze Brass & bronze	Laiton sans plomb (CuZn42, ...) Bleifreies Messing Lead-free brass	Ecobrass	Cuivre Kupfer Copper	Titane Titan Titanium	Conseils et avantages Tipps und Vorteile Tips and benefits
✓	✓		✓	✓	✓	Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding
☆	☆	☆	★	☆	☆	Durée de vie nettement prolongée Deutlich verlängerte Lebensdauer Significantly extended tool life
★		☆		★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
☆		☆		☆	☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
☆				☆	☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
★				★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
☆				☆	★	Roule-copeau bidirectionnel Bidirektionaler Spanroller Bi-directional chip breaker
☆ <5 % Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
☆ <5 % Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
☆ <5 % Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control

TiAlN

µK20



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- excellente nuance universelle
- 1er choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- erste Wahl von Stahl, rostfreiem Stahl und Titanlegierungen
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

TiAlX

µK20



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF **F** M E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

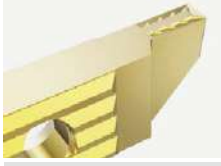
- nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant : chrome nickel, vanadium, molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend : Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade. Recommended for following material : Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing : Chrome-nickel, Vanadium, Molybdenum, ...

TiN

µK20



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF F **M** E

P ★★★★☆
M ★★★★☆
N ★★★☆☆
S ☆☆☆☆☆

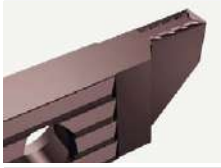
- nuance pour l'usinage des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Bearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden
- sehr geringer Reibwert
- für die Bearbeitung von Titan nicht geeignet

- grade for the machining of low resistance materials which causes edge build-up
- very low friction ratio
- not suitable for titanium machining

µK20

ST



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★★
S ★★★★★

- nuance résistante à la température, destinée à l'usinage des matières suivantes : inox, titane allié, alliages à base de nickel, chrome cobalt, les matières avec une dureté supérieure à > 50 HRC
- verschleissfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen : Inox, legiertes Titan, Nickellegierungen, Chrom-Kobalt, materialien härter als > 50 HRC
- wear and temperature-resistant grade. Recommended for following materials : Inox, titanium alloys, nickel-based alloys, chrome-cobalt, and materials harder than > 50 HRC

µK20

N



K20

Non revêtu
Unbeschichtet
Uncoated

P ★
M ★
N ★★★
S ★★★

- supporte les coupes interrompues et autres conditions d'usinage défavorables
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet
- suitable for interrupted cut and other unfavourable machining conditions

µK10 - µK20

KCR



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★★
S ★★★★½

- nuance spécifique aux matériaux non ferreux tels que cuivre, laiton, laiton sans plomb, bronze, maillechort
- réduit le collage. Alternative aux revêtements DLC pour certains domaines d'applications

- spezifische Sorte, für Nichteisenmetalle wie Kupfer, Messing, bleifreies Messing, Bronze, Neusilber
- Verringerung des Klebens. Alternative zu DLC-Beschichtungen in gewissen Einsatzbereichen

- specific grade for non-ferrous materials such as copper, brass, lead-free brass, bronze and nickel silver
- reduces sticking. Alternative to DLC coatings for certain applications

µK10 - µK20

KCRF



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF **F** M E

P ★★★★★
M ★★★★★
N ★★★★★
S ★★★★½

- nuance spécifique aux matériaux non ferreux tels que cuivre, laiton, laiton sans plomb, bronze, maillechort
- réduit le collage. Alternative aux revêtements DLC pour certains domaines d'applications

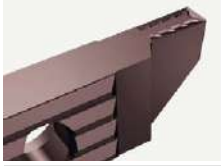
- spezifische Sorte, für Nichteisenmetalle wie Kupfer, Messing, bleifreies Messing, Bronze, Neusilber
- Verringerung des Klebens. Alternative zu DLC-Beschichtungen in gewissen Einsatzbereichen

- specific grade for non-ferrous materials such as copper, brass, lead-free brass, bronze and nickel silver
- reduces sticking. Alternative to DLC coatings for certain applications

K10 - K20

µK10 - µK20

KST



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★★

- nuance présentant d'excellentes propriétés de résistance à l'usure et ténacité, destinée à l'usinage des matières suivantes : inox, titane allié, alliages à base de nickel, chrome cobalt, les matières avec une dureté supérieure à > 50 HRC

- verschleissfeste und zähe Sorte. Für folgende Materialienempfohlen : Inox, legiertes Titan, Nickellegierungen, Chrom-Kobalt, materialien härter als > 50 HRC

- grade with excellent wear resistance and toughness properties. Recommended for following materials : Inox, titanium alloys, nickel-based alloys, chrome-cobalt, and materials harder than > 50 HRC

µK10 - µK20

KN



K10 - K20

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance micro-grain, alliant une très bonne résistance à l'usure et une bonne ténacité.
- recommandé pour l'usinage des matières ne nécessitant aucun revêtement, par exemple le titane pur.

- verschleißfeste Feinkornsorte, unbeschichtet, die eine sehr gute Verschleißfestigkeit mit guter Zähigkeit kombiniert.
- empfohlen für die Bearbeitung von Werkstoffen, die keine Beschichtung erfordern, wie zum Beispiel reines Titan.

- micro-grain grade, combining excellent wear resistance with good toughness.
- recommended for machining materials that do not require any coating, such as pure titanium.

µK10

HTA



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

µK10

HTAX



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF **F** M E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance très résistante à l'usure et à la température, pour l'usinage en finition avec faible avance de petites pièces. Recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox

- sehr verschleissfeste und temperaturbeständige Sorte, für Feinbearbeitung von kleinen Teilen mit geringer Vorschub. Für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox

- very wear and high temperature resistant grade, for light machining of small parts with low cutting feed. Recommended for following material : Inox 304, 316L, 317L, 904, Phynox

µK10

HCR-TF



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F M E

P ☆☆☆☆☆
M ☆☆☆☆☆
N ★★★★★
S ★★★★☆

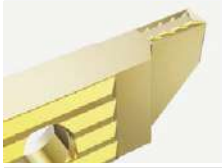
- nuance spécifique aux matériaux non ferreux tels que cuivre, laiton, laiton sans plomb, bronze, maillechort. Réduit le collage. Alternative aux revêtements DLC pour certains domaines d'applications

- spezifische Sorte, für Nichteisenmetalle wie Kupfer, Messing, bleifreies Messing, Bronze, Neusilber. Verringerung des Klebens. Alternative zu DLC-Beschichtungen in gewissen Einsatzbereichen

- specific grade for non-ferrous materials such as copper, brass, lead-free brass, bronze and nickel silver. Reduces sticking. Alternative to DLC coatings for certain applications

µK10

HTiN



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F **M** E

P ★★★★☆
M ★★★★☆
N ★★★☆☆
S ☆☆☆☆☆

- nuance pour l'usinage en finition des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Feinbearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden
- sehr geringer Reibwert
- für die Bearbeitung von Titan nicht geeignet

- grade for light machining of low resistance materials which causes edge build-up
- very low friction ratio
- not suitable for titanium machining

µK10

HAC



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F **M** E

P ☆☆☆☆☆
M ☆☆☆☆☆
N ★★★★★
S ★★★★★

- nuance pour métaux non ferreux
- très faible coefficient de frottement
- 1er choix pour l'usinage des aluminiums jusqu'à 5 % Si, des cuivres et titanes faiblement alliés

- Sorte für Nichteisenmetalle
- sehr geringer Reibwert
- erste Wahl von Aluminium bis 5 % Si, Kupfer und niedrigleigiertem Titan

- grade non-ferrous materials
- very low fiction ration
- first choice for aluminium up to 5 % Si, copper and low alloyed titanium

µK10

HN



K10

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue

- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		Tournage Drehen Turning			Tronçonnage Abstechen Parting off		
		VC	Prof. de passe Schnitttiefe Depth of cut	Avance Vorschub Feed	VC	Largeur de coupe Abstechbreite Cutting width	Avance Vorschub Feed
		(m/min)	(mm)	(mm/U)	(m/min)	(mm)	(mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	80 - 150	0.50 - 1.50 1.50 - 3.50	0.01 - 0.08 0.03 - 0.15
Acier Stahl Steel	< 600 N/mm² P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	70 - 120	0.50 - 1.50 1.50 - 3.50	0.01 - 0.06 0.03 - 0.12
Acier Stahl Steel	< 800 N/mm² P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20	60 - 100	0.50 - 1.50 1.50 - 3.50	0.01 - 0.05 0.03 - 0.10
Acier Stahl Steel	> 800 N/mm² P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	40 - 80	0.50 - 1.50 1.50 - 3.50	0.01 - 0.04 0.03 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	60 - 100	0.50 - 1.50 1.50 - 3.50	0.01 - 0.04 0.03 - 0.08
Aluminium Si <12%	N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	180 - 400	0.50 - 1.50 1.50 - 3.50	0.01 - 0.10 0.03 - 0.20
Aluminium Si >12%	N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	150 - 300	0.50 - 1.50 1.50 - 3.50	0.01 - 0.10 0.03 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35	100 - 300	0.50 - 1.50 1.50 - 3.50	0.01 - 0.10 0.03 - 0.20
Titane Titan Titanium	S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15	30 - 50	0.50 - 1.50 1.50 - 3.50	0.01 - 0.03 0.03 - 0.06

Ébauche Schruppen Roughing	Finition Schlichten Finishing
• vitesse de coupe moyenne • avance élevée	• vitesse de coupe élevée • avance faible
• durchschnittliche Schnittgeschwindigkeit • hoher Vorschub	• hohe Schnittgeschwindigkeit • niedriger Vorschub
• average cutting speed • high feed rate	• high cutting speed • low cutting feed

Remarques importantes
Wichtige Bemerkungen
Important remarks

- en raison des limites de la machine, il n'est souvent pas possible d'atteindre les vitesses de coupe préconisées
- les outils Applitec sont spécialement développés pour permettre de hautes performances, même dans des conditions de coupe défavorables
- des applications non préconisées dans le tableau ci-contre peuvent également s'avérer efficaces

- wegen begrenzter Maschinenleistung ist es oft nicht möglich, die vorgeschlagenen Schnittgeschwindigkeiten zu erreichen
- Applitec Werkzeuge sind besonders dazu entwickelt, um sogar bei ungünstigen Schnittdaten leistungsfähig zu sein
- die in der nebenstehender Tabelle nicht erwähnten Anwendungsfälle können sich auch effizient erweisen

- due to the limitations of the machine, it is often not possible to achieve the recommended cutting speeds
- Applitec tools are specially developed to deliver high performance, even in unfavorable cutting conditions
- applications not mentioned in the opposite table can also be efficient

PCD / PKD

PCD / PKD



Diamant polycristallin
Polykristalliner Diamant
Polycrystalline diamond

P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

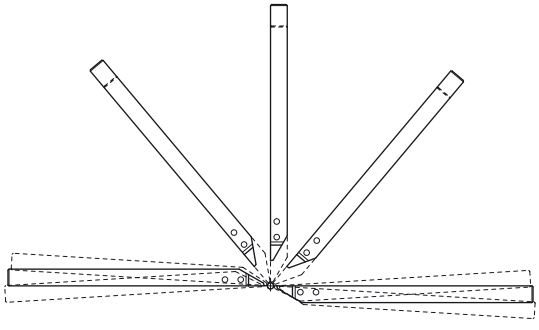
- le PCD est principalement utilisé pour l'usinage de matériaux non ferreux très abrasifs
- il offre une haute dureté, une faible friction et une excellente conductivité thermique, des caractéristiques qui permettent d'atteindre des vitesses de coupe élevées et d'augmenter la durée de vie des outils

- PKD wird hauptsächlich für die Zerspanung hochabrasiver, nicht eisenhaltiger Werkstoffe verwendet
- er zeichnet sich durch hohe Härte, geringe Reibung und exzellente Wärmeleitfähigkeit aus – Eigenschaften, die hohe Schnittgeschwindigkeiten ermöglichen und die Standzeit der Werkzeuge erhöhen

- PCD is primarily used for machining highly abrasive non-ferrous materials
- it features high hardness, low friction, and excellent thermal conductivity - characteristics that enable high cutting speeds and extend tool life

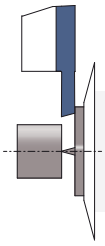
		Tournage et tronçonnage Drehen und Abstechen Turning and parting off		
Matière **Werkstoff** **Material**		VC (m/min)	Prof. de passe Schnitttiefe Depth of cut (mm)	Avance Vorschub Feed (mm/U)
Aluminium Si <12%	N	250 - 350	0.05 - 1.0 1.0 - 4.0	0.04 - 0.07 0.05 - 0.10
Aluminium Si >12%	N	180 - 250	0.05 - 1.0 1.0 - 4.0	0.10 - 0.25 0.12 - 0.36
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	350 - 450	0.05 - 1.0 1.0 - 4.0	0.04 - 0.08 0.05 - 0.11
Alliage de cuivre sans plomb (ECOBRASS) Kupferlegierung ohne Blei (ECOBRASS) Lead-free copper alloy (ECOBRASS)	N	320 - 420	0.05 - 1.0 1.0 - 4.0	0.03 - 0.07 0.04 - 0.09
Plastique renforcé de fibres de verre, graphite Glasfaserverstärkter Kunststoff, Graphit Glass fiber reinforced plastic, graphite	N	450 - 600	0.05 - 1.0 1.0 - 4.0	0.04 - 0.08 0.05 - 0.11
Thermoplastique renforcé de fibres de carbone, téflon Kohlenstofffaserverstärkter Thermoplast, Teflon Carbon fiber reinforced thermoplastic, Teflon	N	450 - 600	0.05 - 1.0 1.0 - 4.0	0.04 - 0.08 0.05 - 0.11
Or, argent et platine Gold, Silber und Platin Gold, silver and platinum	N	320 - 370	0.05 - 1.0 1.0 - 4.0	0.03 - 0.06 0.04 - 0.07

L		R	
Type	Page	**Type**	Page
710	1.24	720	1.24
710-NOVIBRA	1.25	721	1.26
711	1.26	721-EP	1.33
711-EP	1.33	722	1.27
712	1.27	723-30	1.28
713-30	1.28	723-45	1.29
713-45	1.29	723-60	1.30
713-60	1.30	724	1.31
714	1.31	726	1.32
716	1.32		

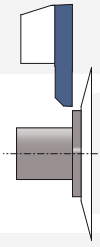


Porte-outils et plaquettes pour machines à cames
Halter und WSP für kurvengesteuerte Maschinen
Tool holders and inserts for cam driven machines

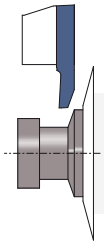
710 / 720
Porte-outils
Halter
Holders
> 1.24



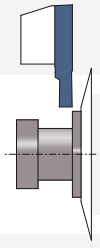
711 / 721
Tronçonnage
Abstechen
Parting off
> 1.26



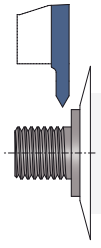
712 / 722
Tournage avant
Vorwärts drehen
Front turning
> 1.27



713 / 723
Tournage arrière
Rückwärts drehen
Back turning
> 1.28

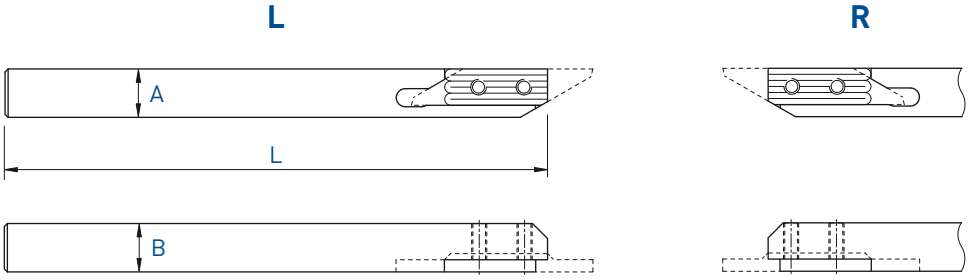


714 / 724
Fonçage-tournage
Einstechen und drehen
Grooving and turning
> 1.31



716 / 726
Filetage
Gewinde drehen
Threading
> 1.32

Plaquettes ébauches
WSP-Rohlinge
Blank inserts
> 1.33



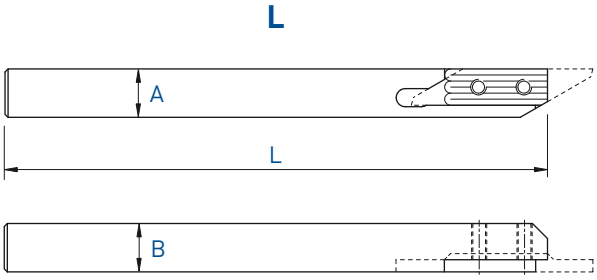


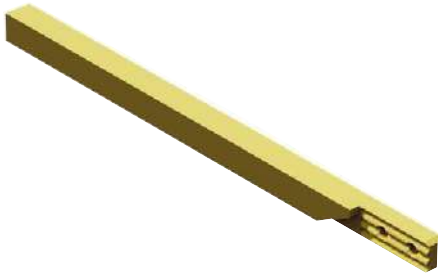
A x B	L	Serrage Spannsystem Clamping	L **Art. N°**	R **Art. N°**
6 x 6	115	A	**710-6**	**-**
7 x 7	115	A	**710-7**	**720-7**
8 x 8	115	A	**710-8**	**720-8**
8 x 8	140	A	**710-8-140**	**-**
10 x 10	115	A	**710-10**	**720-10**
12 x 12	130	A	**710-12**	**720-12**

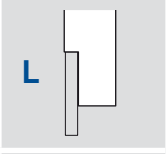
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils en métal lourd anti-vibratoire
Schwingungsdämpfende Schwermetallhalter
Low vibration heavy metal holders

710-NOVIBRA



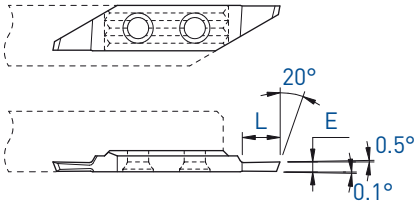




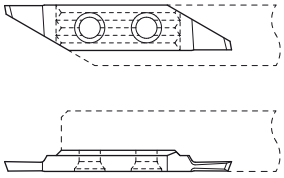
A x B	L	Serrage Spannsystem Clamping	Art. N°
6 x 6	115	A	**710-6-NOVIBRA**
7 x 7	115	A	**710-7-NOVIBRA**
8 x 8	115	A	**710-8-NOVIBRA**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

L



R

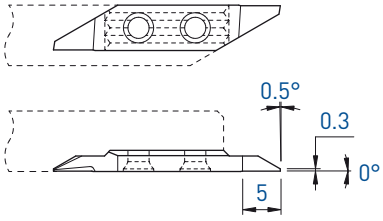




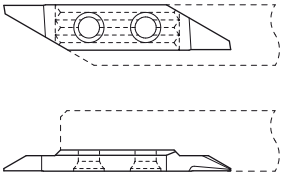
		L							R						
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
0.5	2	**711-0.5**	●	●	●	●		●	-						
0.8	3	**711-0.8**	●	●	●	●	●	●	**721-0.8**	●	●	●			
0.9	3	**711-0.9**	●	●	●	●	●	●	-						
1.0	4	**711-1.0**	●	●	●	●	●	●	**721-1.0**	●	●	●	●		●
1.1	4	**711-1.1**	●	●	●	●	●	●	-						
1.2	5	**711-1.2**	●	●	●	●	●	●	**721-1.2**	●	●	●	●		●
1.3	5	**711-1.3**	●	●	●	●	●	●	-						
1.4	5	**711-1.4**	●	●	●				-						
1.5	6.5	**711-1.5**	●	●	●	●	●	●	**721-1.5**	●	●	●	●		●
1.8	6.5	**711-1.8**	●	●	●	●		●	**721-1.8**	●	●	●			
2.0	6.5	**711-2.0**	●	●	●				**721-2.0**	●	●	●			

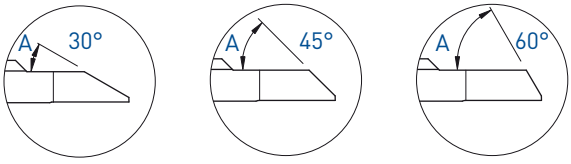
Tournage avant
Vorwärts drehen
Front turning

L



R





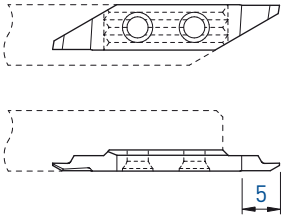


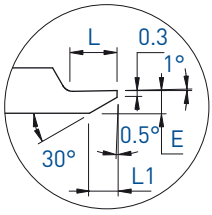
	L							R						
A	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
30°	712-30	●	●	●	●		●	722-30	●	●	●	●		●
45°	712-45	●	●	●	●	●	●	722-45	●	●	●	●		●
60°	712-60	●	●	●	●		●	722-60	●	●	●	●		●

713-30° / 723-30°

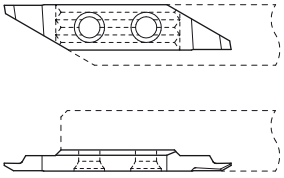
Tournage arrière
Rückwärts drehen
Back turning

L





R



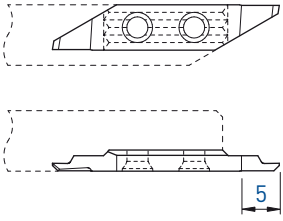


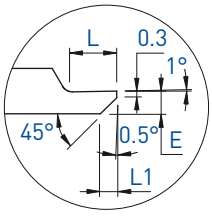
L										R								
E	L	L1	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.8	1.6	0.85	**713-30-0.8**	●	●	●				**723-30-0.8**	●	●	●	●		●
0.9	1.6	1.05	**713-30-0.9**	●	●	●				-						
1.0	2.0	1.2	**713-30-1.0**	●	●	●	●	●	●	**723-30-1.0**	●	●	●	●		●
1.1	2.0	1.4	**713-30-1.1**	●	●	●				-						
1.2	2.5	1.55	**713-30-1.2**	●	●	●				**723-30-1.2**	●	●	●			
1.3	2.5	1.7	**713-30-1.3**	●	●	●				-						
1.4	3.0	1.9	**713-30-1.4**	●	●	●				-						
1.5	3.0	2.1	**713-30-1.5**	●	●	●	●	●	●	**723-30-1.5**	●	●	●			
1.8	4.0	2.6	**713-30-1.8**	●	●	●				**723-30-1.8**	●	●	●			
2.0	4.0	2.9	**713-30-2.0**	●	●	●	●	●	●	**723-30-2.0**	●	●	●			

Tournage arrière
Rückwärts drehen
Back turning

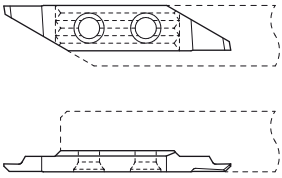
713-45° / 723-45°

L





R



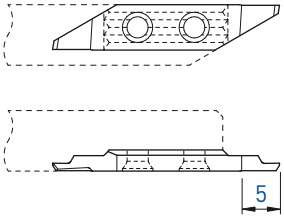


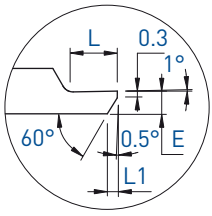
			L							R						
E	L	L1	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.8	1.6	0.5	**713-45-0.8**	●	●	●	●		●	**723-45-0.8**	●	●	●			
0.9	1.6	0.6	**713-45-0.9**	●	●	●				-						
1.0	2.0	0.7	**713-45-1.0**	●	●	●	●		●	**723-45-1.0**	●		●			
1.1	2.0	0.8	**713-45-1.1**	●	●	●				-						
1.2	2.5	0.9	**713-45-1.2**	●	●	●				**723-45-1.2**	●	●	●			
1.3	2.5	1.0	**713-45-1.3**	●	●	●				-						
1.4	3.0	1.1	**713-45-1.4**	●	●	●				-						
1.5	3.0	1.2	**713-45-1.5**	●	●	●	●	●	●	**723-45-1.5**	●	●	●			
1.8	4.0	1.5	**713-45-1.8**	●	●	●				**723-45-1.8**	●		●			
2.0	4.0	1.7	**713-45-2.0**	●	●	●				**723-45-2.0**	●	●	●			

713-60° / 723-60°

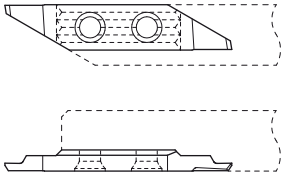
Tournage arrière
Rückwärts drehen
Back turning

L





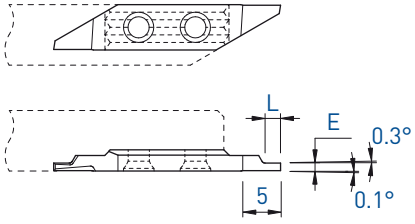
R



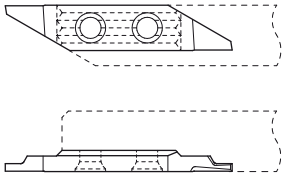


L							R			
E	L	L1	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)
0.8	1.6	0.3	**713-60-0.8**	●	●	●	**723-60-0.8**	●	●	●
0.9	1.6	0.35	**713-60-0.9**	●	●	●	-			
1.0	2.0	0.4	**713-60-1.0**	●	●	●	**723-60-1.0**	●		●
1.1	2.0	0.45	**713-60-1.1**	●	●	●	-			
1.2	2.5	0.5	**713-60-1.2**	●	●	●	**723-60-1.2**	●		●
1.3	2.5	0.6	**713-60-1.3**	●	●	●	-			
1.4	3.0	0.65	**713-60-1.4**	●	●	●	-			
1.5	3.0	0.7	**713-60-1.5**	●	●	●	**723-60-1.5**	●	●	●
1.8	4.0	0.9	**713-60-1.8**	●	●	●	**723-60-1.8**	●		●
2.0	4.0	1.0	**713-60-2.0**	●	●	●	**723-60-2.0**	●	●	●

L



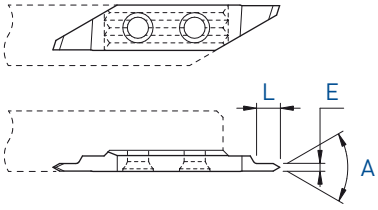
R



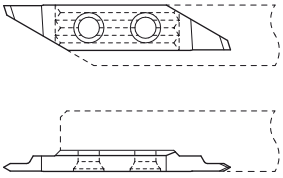


		L							R							
			P M N S	P M N	P S	P M N S	P M N	P N S		P M N S	P M N	P S	P M N S	P M N	P N S	
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	
0.5	1.0	**714-0.5**	●	●	●				**724-0.5**	●	●	●	●		●	
0.6	1.0	**714-0.6**	●	●	●				**724-0.6**	●	●	●				
0.7	1.5	**714-0.7**	●	●	●				**724-0.7**	●	●	●				
0.8	1.5	**714-0.8**	●	●	●	●	●	●	**724-0.8**	●	●	●				
0.9	2.0	**714-0.9**	●	●	●				**724-0.9**	●		●				
1.0	2.0	**714-1.0**	●	●	●	●	●	●	**724-1.0**	●	●	●				
1.1	2.0	**714-1.1**	●	●	●				**724-1.1**	●		●				
1.2	2.5	**714-1.2**	●	●	●				**724-1.2**	●		●				
1.3	2.5	**714-1.3**	●	●	●				**724-1.3**	●	●	●				
1.4	3.0	**714-1.4**	●	●	●				**724-1.4**	●		●				
1.5	3.0	**714-1.5**	●	●	●	●	●	●	**724-1.5**	●	●	●				

L



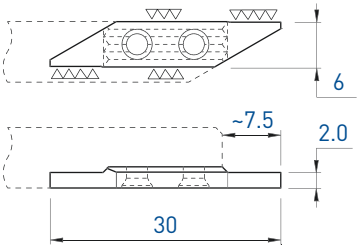
R



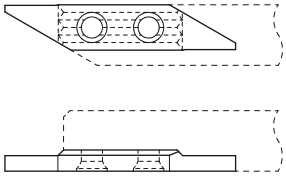


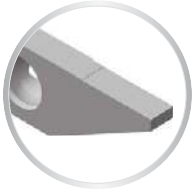
			L				**R**			
A	E	L	**Art. N°**	P M N S **TiAlN**	P M N **TiN**	P S **N (µK20)**	**Art. N°**	P M N S **TiAlN**	P M N **TiN**	P S **N (µK20)**
60°	1.0	3	**716-60-1.0**	●	●	●	**726-60-1.0**	●	●	●
60°	1.5	4	**716-60-1.5**	●	●	●	**726-60-1.5**	●	●	●
55°	1.0	3	**716-55-1.0**	●	●	●	**726-55-1.0**	●		●
55°	1.5	4	**716-55-1.5**	●	●	●	**726-55-1.5**	●		●

L



R





L							R						
Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
711-EP	●	●	●	●	●	●	721-EP	●		●	●		●

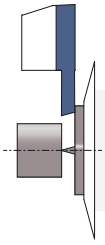
L

Type		Page
730	730	1.36
	730-JET	1.37
	730-NOVIBRA	1.40
	730RC	1.39
731	731	1.43
	731-E	1.88
	731-EP	1.89
	731N	1.49/1.57
	731R	1.51
	731R-PCD	1.58
	731RU	1.56
	731RX12	1.54
	731RX25	1.55
	731RX4	1.52
	731RXF	1.53
	731U	1.48
	731X12	1.46
	731X25	1.47
	731X4	1.44
	731XF	1.45
732	732	1.59
	732PX	1.60
	732X	1.61
733	733	1.65
	733P	1.73
	733VX-15°	1.70
	733VX-8°	1.68
	733VX-805	1.69
	733X	1.66
	733ZX	1.72
734	734	1.75
	734VS	1.76
	734X	1.77
	734ZX	1.78
735	735	1.82
	735X-90	1.83
736	736	1.84
	736-A60°	1.85
	736-M	1.86
737	737	1.87

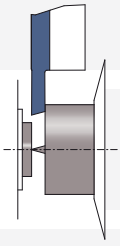
R

Type		Page
740	740	1.36
	740-C	1.38
	740-D-JET	1.42
	740-JET	1.37
	740-NOVIBRA	1.40
	740/730-D	1.41
741	741	1.43
	741-E	1.88
	741-EP	1.89
	741-PCD	1.50
	741L	1.51
	741LX12	1.54
	741LX25	1.55
	741LX4	1.52
	741LXF	1.53
	741N	1.49/1.57
	741U	1.48
	741X12	1.46
	741X25	1.47
	741X4	1.44
	741XF	1.45
742	742	1.59
	742-PCD	1.64
	742PX	1.60
	742VUX	1.62
	742X	1.61
	742ZF-X	1.63
743	743	1.65
	743-PCD	1.74
	743P	1.73
	743VX-15°	1.70
	743VX-8°	1.68
	743VX-805	1.69
	743VUX	1.71
	743VUX8	1.67
	743X	1.66
	743ZX	1.72
744	744	1.75
	744-PCD	1.81
	744VS	1.76
	744X	1.77
	744ZF-X	1.80
	744ZX	1.78
	744ZXT	1.79
745	745	1.82
	745X-90	1.83
746	746	1.84
	746-A60°	1.85
	746-M	1.86
747	747	1.87

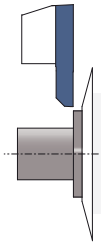
730 / 740
Porte-outils
Halter
Holders
> 1.36



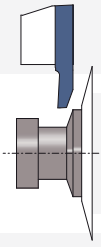
731 / 741
Tronçonnage
Abstechen
Parting off
> 1.43



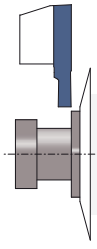
741L / 731R
Tronçonnage - coupe déportée
Abstechen - versetztes Schneiden
Parting off - cut off line
> 1.51



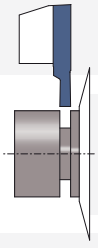
732 / 742
Tournage avant
Vorwärts drehen
Front turning
> 1.59



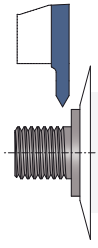
733 / 743
Tournage arrière
Rückwärts drehen
Back turning
> 1.65



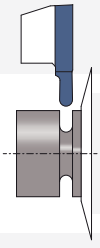
734 / 744
Fonçage-tournage
Einstechen und drehen
Grooving and turning
> 1.75



735 / 745
Gorges
Einstechen
Grooving
> 1.82

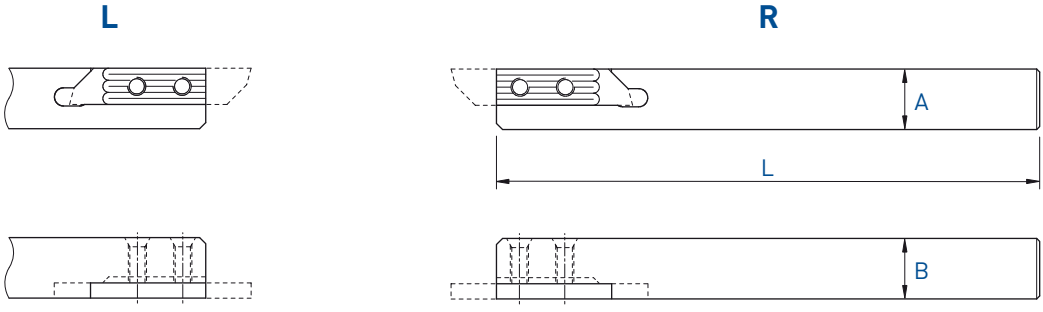


736 / 746
Filetage
Gewinde drehen
Threading
> 1.84



737 / 747
Plaquettes à rayon
Radius Wendeplatten
Radius inserts
> 1.87

Plaquettes ébauches
WSP-Rohlinge
Blank inserts
> 1.88

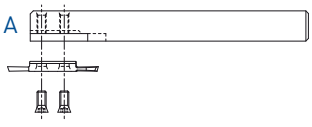




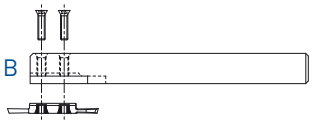
L	R

A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
7 x 7	115	A	**730-7**	**740-7**
8 x 8	115	A + B	**730-8**	**740-8**
8 x 8	140	A + B	**730-8-140**	-
9.52 x 9.52	115	A + B	**730-9.52**	**740-9.52**
10 x 10	115	A + B	**730-10**	**740-10**
10 x 10	50	A + B	**730-10-50**	**740-10-50**
12 x 12	130	A + B	**730-12**	**740-12**
12 x 12	90	A + B	**730-12-90**	**740-12-90**
12.7 x 12.7	130	A + B	**730-12.7**	**740-12.7**
16 x 16	130	A + B	**730-16**	**740-16**
16 x 16	75	A + B	**730-16-75**	**740-16-75**
20 x 20	120	A + B	**730-20**	**740-20**

Serrage standard A
Standard Spannsystem A
Standard clamping system A



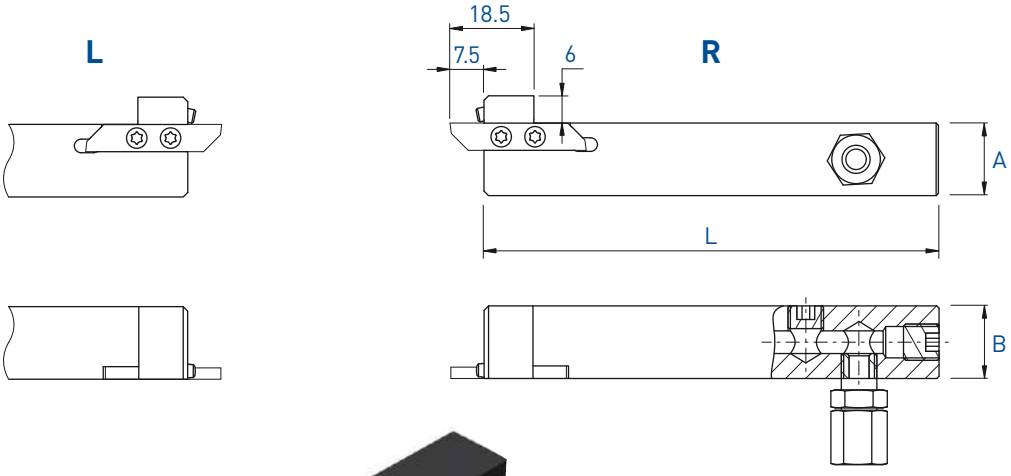
Serrage B
Spannsystem B
Clamping system B



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

730-JET / 740-JET





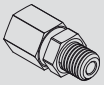
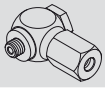
A x B	L	Serrage Spannsystem Clamping	L Art. N°	R Art. N°
8 x 10	100	A + B	-	**740-0810-JET**
10 x 12	100	A + B	**730-1012-JET**	**740-1012-JET**
10 x 12	80	A + B	-	**740-1012-80-JET**
12 x 12	100	A + B	**730-12-JET**	**740-12-JET**
12.7 x 12.7	100	A + B	**730-12.7-JET**	**740-12.7-JET**
16 x 16	100	A + B	**730-16-JET**	**740-16-JET**
20 x 20	100	A + B	**730-20-JET**	**740-20-JET**



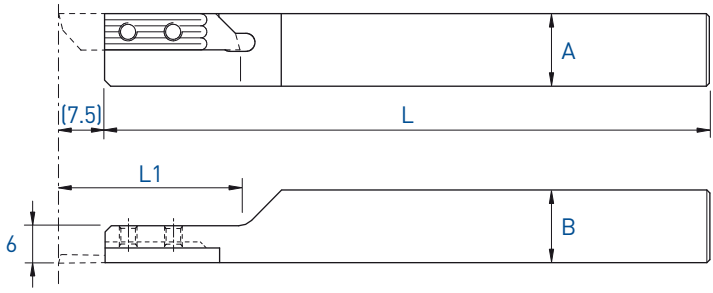
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.

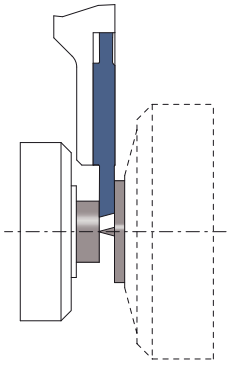
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

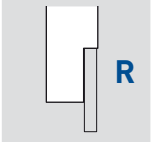
Each holder is supplied with one or more screws. The keys must be ordered separately.

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°	Buses Düsen Nozzles  Art. N°	Option  Art. N°
740-0810-JET	**J-M5-D5**	**JB-M5**	–	**JC-M5-D5**
730-JET / 740-JET	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**	–
				More option see JET-Line

R





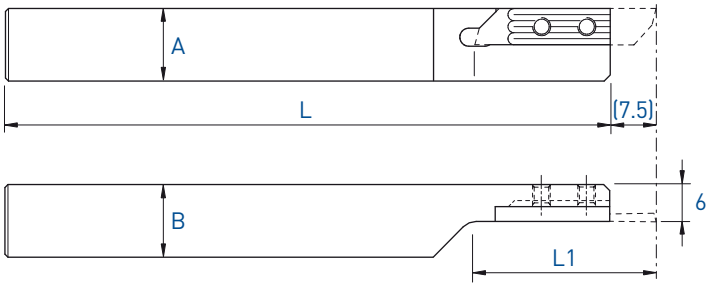


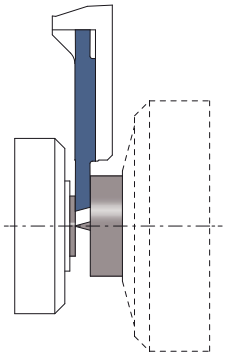
A x B	L	L1	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	24	A	**740-C-8**
10 x 10	115	24	A	**740-C-10**
12 x 12	130	30	A	**740-C-12**
12.7 x 12.7	130	30	A	**740-C-12.7**
16 x 16	130	40	A	**740-C-16**

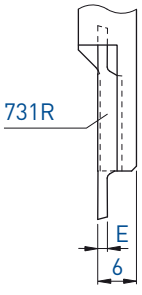
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Utiliser des plaquettes type 731R
WSP Typ 731R verwenden
Use inserts type 731R

Voir pages 1.51 - 1.58
Siehe Seiten 1.51 - 1.58
See pages 1.51 - 1.58







L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

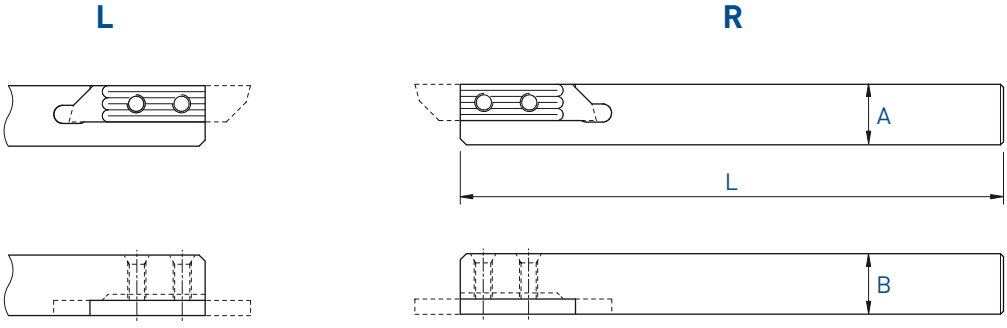


A x B	L	L1	Art. N°
8 x 8	115	24	**730RC-8**
10 x 10	115	24	**730RC-10**
12 x 12	130	30	**730RC-12**
12.7 x 12.7	130	30	**730RC-12.7**
16 x 16	130	40	**730RC-16**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

730-NOVIBRA
740-NOVIBRA

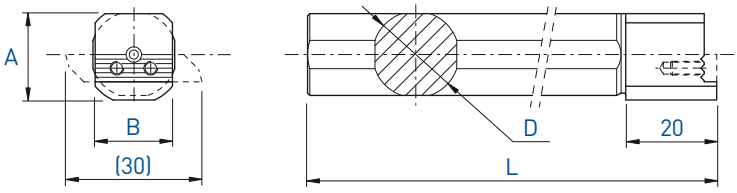
Porte-outils en métal lourd anti-vibratoire
Schwingungsdämpfende Schwermetallhalter
Low vibration heavy metal holders

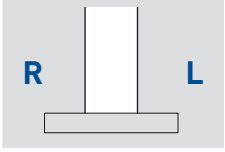




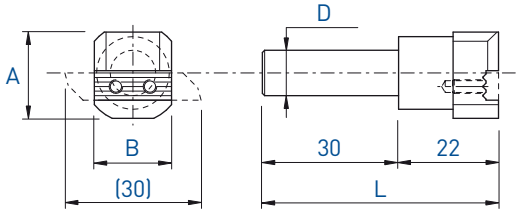
A x B	L	Serrage Spannsystem Clamping	L	R
			Art. N°	**Art. N°**
7 x 7	115	A	**730-7-NOVIBRA**	**740-7-NOVIBRA**
8 x 8	115	A + B	**730-8-NOVIBRA**	**740-8-NOVIBRA**
8 x 8	80	A + B	-	**740-8-80-NOVIBRA**
10 x 10	115	A + B	-	**740-10-NOVIBRA**
12 x 12	130	A + B	-	**740-12-NOVIBRA**

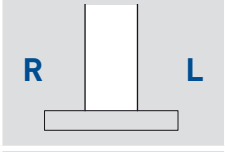
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.





A x B	L	D	Art. N°
19 x 17	160	16	**740/730-D16**
19 x 17	160	19.05	**740/730-D19.05**
19 x 17	110	19.05	**740/730-D19.05-S**
19.5 x 17	160	20	**740/730-D20**
20 x 17	110	22	**740/730-D22**
22 x 17	200	25	**740/730-D25**
22 x 17	200	25.4	**740/730-D25.4**



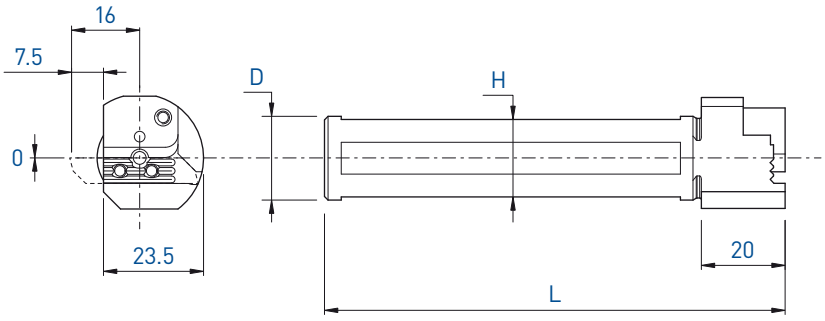


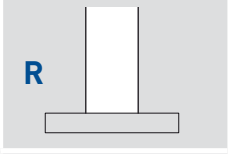
A x B	L	D	Art. N°
19 x 17	52	10	**740/730-D10**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

740-D-JET

Porte-outil frontal avec arrosage intégré
Frontaler Halter mit integrierter Kühlmittelzufuhr
Front holder with integrated coolant supply

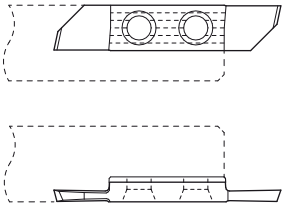




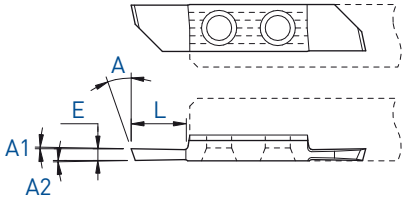
D	H	L	Art. N°
16	15	160	**740-D16-160-JET**
19.05	18	160	**740-D19.05-160-JET**
19.05	18	110	**740-D19.05-110-JET**
20	19	110	**740-D20-110-JET**
22	20	110	**740-D22-110-JET**
25	24	200	**740-D25-200-JET**
25.4	24	200	**740-D25.4-200-JET**

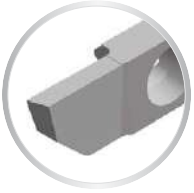
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

L



R





L												R									
E	A	A1	A2	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)
0.6	18°	2.5°	0.5°	3	**731-0.6**	●		●	●		●	**741-0.6**	●	●		●	●		●		
0.8	20°	0.3°	0.3°	5	**731-0.8**	●	●	●	●		●	**741-0.8**	●	●	●	●	●	●	●		
1.0	20°	0.3°	0.3°	5	**731-1.0**	●	●	●	●	●	●	**741-1.0**	●	●	●	●	●	●	●	●	●
1.2	20°	0.3°	0.3°	5	**731-1.2**	●	●	●	●		●	**741-1.2**	●	●	●	●	●	●	●		
1.5	20°	0.3°	0.3°	7	**731-1.5**	●	●	●	●	●	●	**741-1.5**	●	●	●	●	●	●	●	●	●
1.8	20°	0.3°	0.3°	7	**731-1.8**	●	●	●	●		●	**741-1.8**	●	●	●	●	●		●		
2.0	20°	0.3°	0.3°	7	**731-2.0**	●	●	●	●		●	**741-2.0**	●	●	●	●	●	●	●	●	●
2.5	20°	0.3°	0.3°	7	**731-2.5**	●	●	●				**741-2.5**		●	●	●	●		●		●

7XX-XX-B

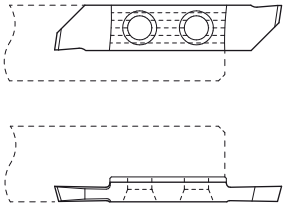


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

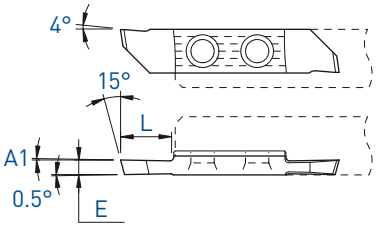
731X4 / 741X4

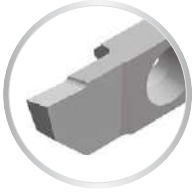
Tronçonnage
Abstechen
Parting off

L



R



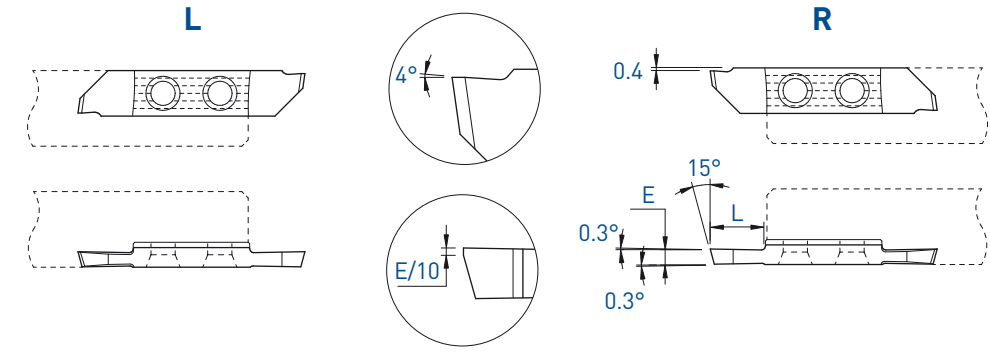


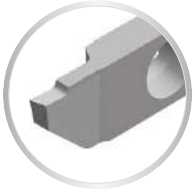
L										R										
E	A1	L	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiAlX	TiN	N (µK20)	HTA	HTiN	HN (µK10)	KST	KN (µK10-20)
0.6	2.5°	3	**731X4-0.6**	●		●	●		●	**741X4-0.6**	●	●		●	●		●		
0.8	0.5°	4	**-**							**741X4-0.8**					●		●		
1.0	0.5°	5	**731X4-1.0**	●	●	●				**741X4-1.0**	●	●	●	●	●		●	●	●
1.5	0.5°	7	**731X4-1.5**	●	●	●	●		●	**741X4-1.5**	●	●	●	●	●		●	●	●
2.0	0.5°	7	**731X4-2.0**	●	●	●				**741X4-2.0**	●	●	●	●					

7XX-XX-B

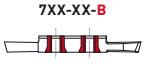


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





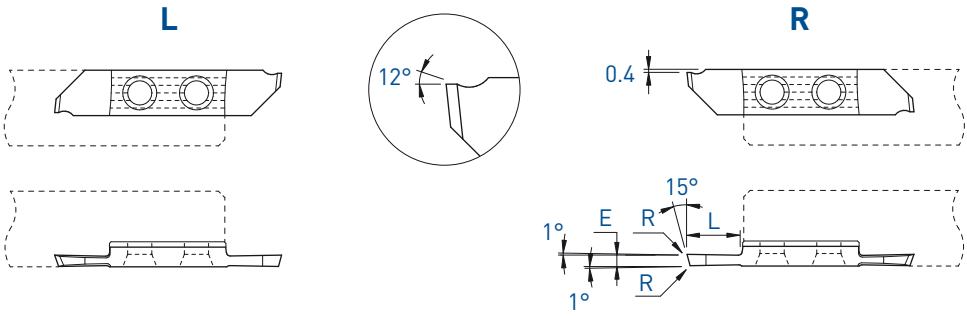
		L							R									
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)
1.2	5	-							741XF-1.2	●		●					
1.5	7	731XF-1.5	●	●	●	●	●	●	741XF-1.5	●	●	●	●	●	●	●	●
2.0	7	731XF-2.0	●	●	●				741XF-2.0	●	●	●	●	●	●	●	●
2.5	7	731XF-2.5	●	●	●				741XF-2.5	●	●	●					

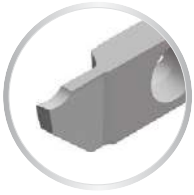


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

731X12 / 741X12

Tronçonnage
Abstechen
Parting off

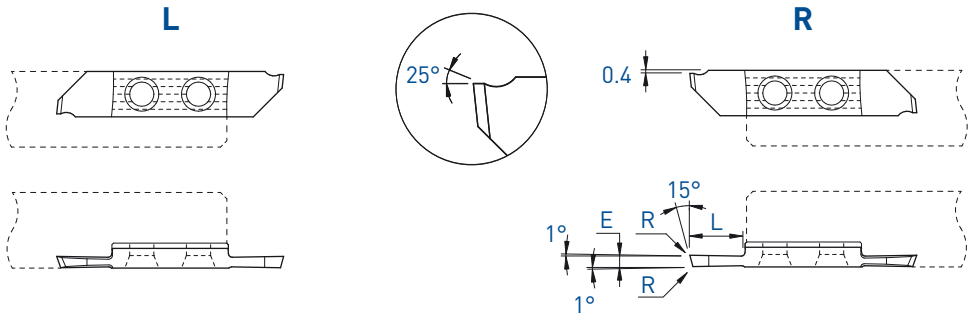


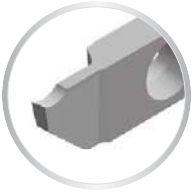


L									R									
E	L	R	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiAlX	TiN	N (µK20)	HTA	HTiN	HN (µK10)	KST	KN (µK10-20)
0.5	3	0.03	-							741X12-0.5					●		●		
1.0	5	0.03	731X12-1.0	●	●	●				741X12-1.0	●	●	●	●	●		●	●	●
1.5	7	0.03	731X12-1.5	●	●	●				741X12-1.5	●	●	●	●	●	●	●	●	●
2.0	7	0.03	731X12-2.0	●	●	●				741X12-2.0	●	●	●	●	●		●		



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





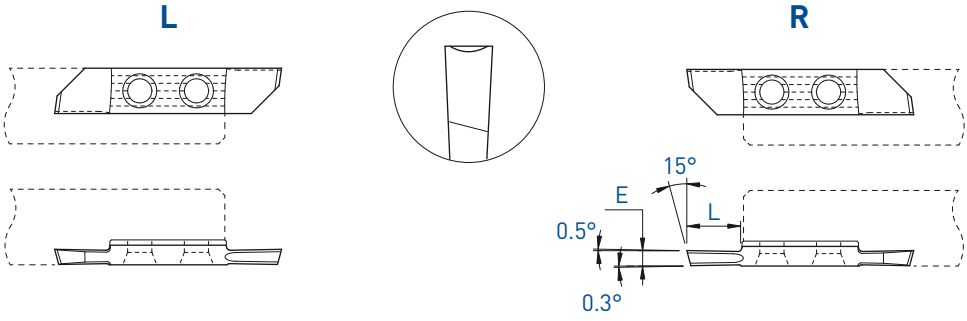
L									R								
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	**731X25-1.0**	●	●	●				**741X25-1.0**	●		●	●	●		●
1.5	7	**731X25-1.5**	●	●	●				**741X25-1.5**	●		●	●	●		●
2.0	7	**731X25-2.0**	●	●	●				**741X25-2.0**	●	●	●	●	●		●

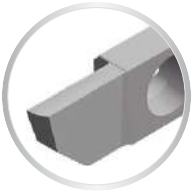
7XX-XX-B



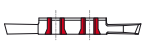
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

731U / 741U



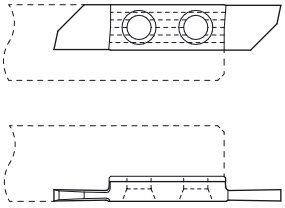


		L							R						
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
1.5	7	**731U-1.5**	●	●	●	●		●	**741U-1.5**	●	●	●	●	●	●
2.0	7	**731U-2.0**	●	●	●	●		●	**741U-2.0**	●	●	●	●		●

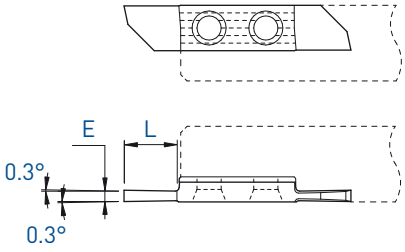


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R





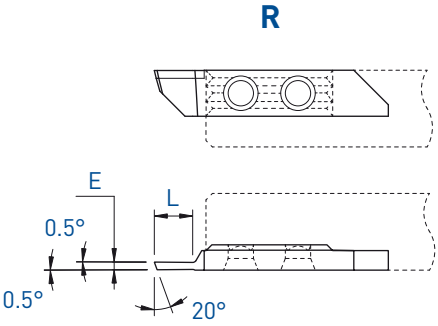
L										R							
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	
1.0	5	**731N-1.0**	●	●	●	●		●		**741N-1.0**	●	●	●	●		●	
1.5	7	**731N-1.5**	●	●	●	●		●		**741N-1.5**	●	●	●	●		●	

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

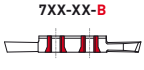
741-PCD





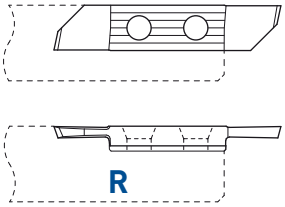
E	L	Art. N°	R PCD N
0.8	5	**741-0.8**	●
1.0	5	**741-1.0**	●
1.2	5	**741-1.2**	●
1.5	7	**741-1.5**	●
1.8	7	**741-1.8**	●
2.0	7	**741-2.0**	●
2.5	7	**741-2.5**	●

Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge

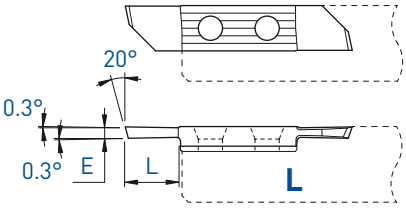


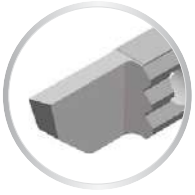
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Cut L



Cut R





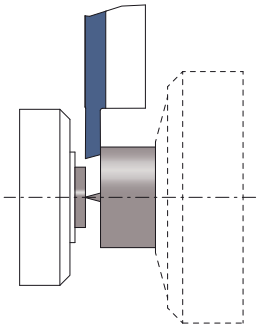
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	KST	KN (µK10-20)
1.0	5	**741L-1.0**	●	●	●	●		●	**731R-1.0**	●	●	●	●	●	●	●	●
1.2	5	**741L-1.2**	●	●	●	●		●	**731R-1.2**	●	●	●	●	●	●		
1.5	7	**741L-1.5**	●	●	●	●	●	●	**731R-1.5**	●	●	●	●	●	●	●	●
2.0	7	**741L-2.0**	●	●	●	●		●	**731R-2.0**	●	●	●	●		●	●	●
2.5	7	**741L-2.5**	●	●	●				**731R-2.5**	●	●	●					



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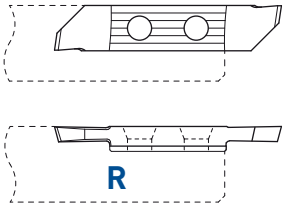
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

741LX4 / 731RX4

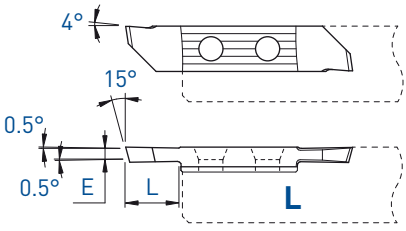
Coupe déportée
Versetztes Schneiden
Cut off line

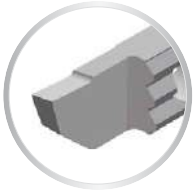
Tronçonnage
Abstechen
Parting off

Cut L



Cut R





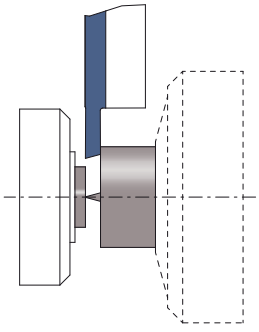
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

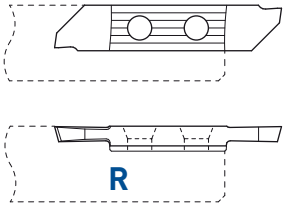
E	L	Art. N°	P M N S TiAlN	P M N S TiN	P S N (µK20)	P M N S HTA	P M N S HTiN	P N S HN (µK10)	Art. N°	P M N S TiAlN	P M N S TiN	P S N (µK20)	P M N S HTA	P M N S HTiN	P N S HN (µK10)
1.5	5	**741LX4-1.5**	●	●	●				**731RX4-1.5**	●	●	●	●	●	●

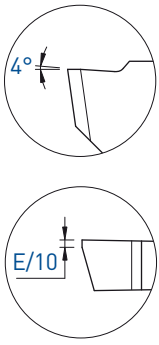




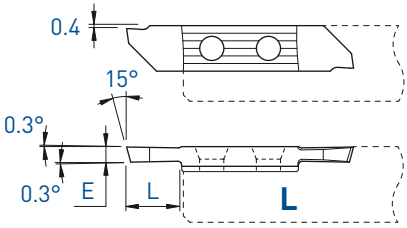
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

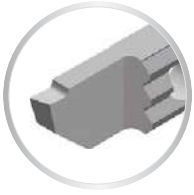
Cut L





Cut R





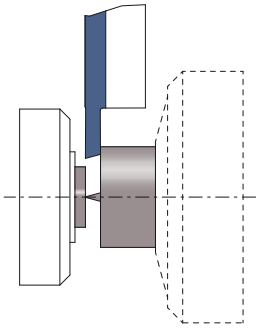
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

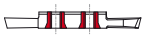
L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
1.5	7	**741LXF-1.5**	●	●	●				**731RXF-1.5**	●	●	●	●	●	●
2.0	7	**741LXF-2.0**	●	●	●				**731RXF-2.0**	●	●	●	●		●
2.5	7	**741LXF-2.5**	●	●	●				**731RXF-2.5**	●	●	●			



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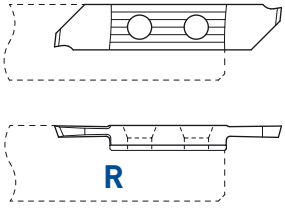
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

741LX12 / 731RX12

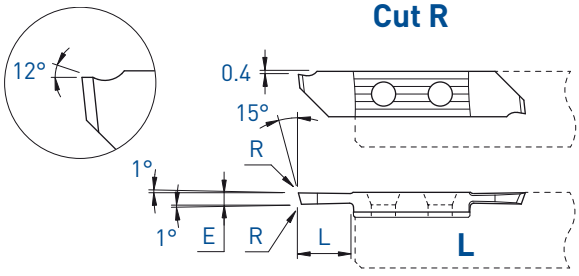
Coupe déportée
Versetztes Schneiden
Cut off line

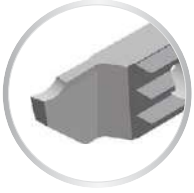
Tronçonnage
Abstechen
Parting off

Cut L



Cut R





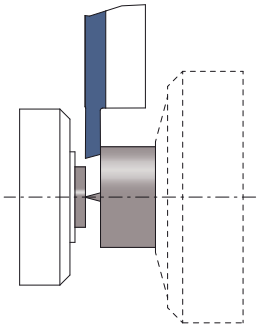
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

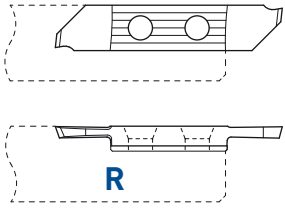
E	L	R	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)	P M N S HTA	P M N HTiN	P N S HN (µK10)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)	P M N S HTA	P M N HTiN	P N S HN (µK10)	P M N S KST	P M N S KN (µK10-20)
1.0	5	0.03	-							731RX12-1.0	●	●	●				●	●
1.5	7	0.03	741LX12-1.5	●	●	●				731RX12-1.5	●	●	●	●	●	●	●	●

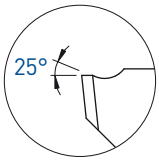




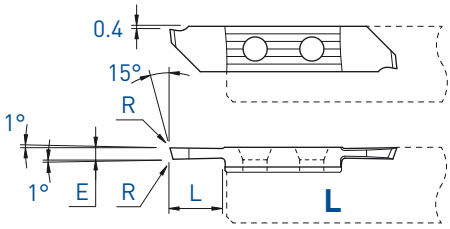
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

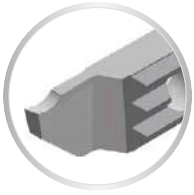
Cut L



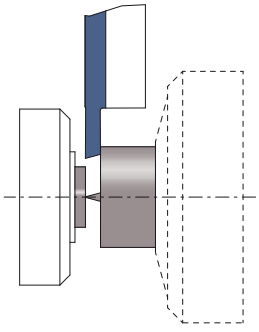


Cut R





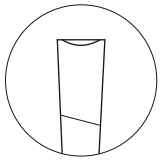
			R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
1.5	7	0.03	**741LX25-1.5**	●	●	●	**731RX25-1.5**	●	●	●

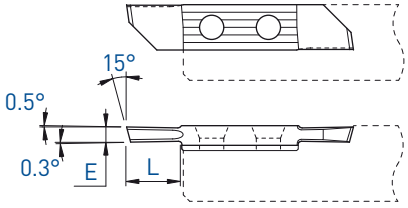


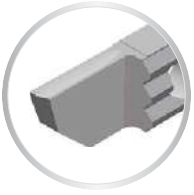


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Cut R



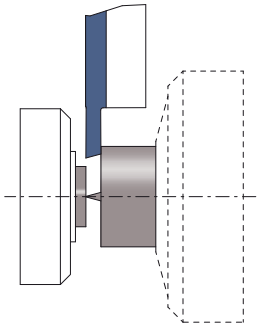




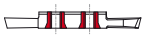
L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
			P M N S	P M N	P S	P M N S	P M N	P N S
1.0	5	**731RU-1.0**	●		●			
1.2	5	**731RU-1.2**	●		●			
1.5	7	**731RU-1.5**	●		●	●		●
2.0	7	**731RU-2.0**	●		●			

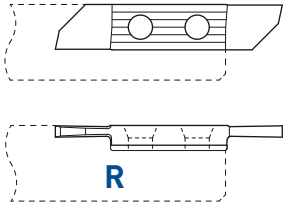


7XX-XX-B

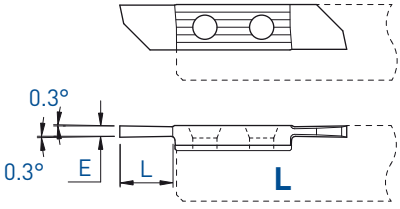


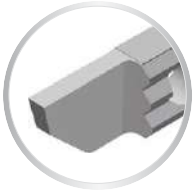
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Cut L

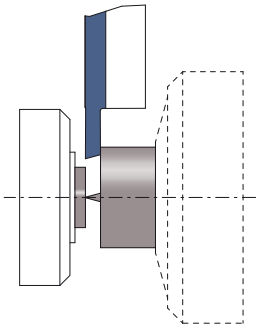


Cut R

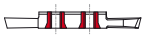




		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line							L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	**741N-1.0**	●	●	●	●		●	**731N-1.0**	●	●	●	●		●
1.5	7	**741N-1.5**	●	●	●	●		●	**731N-1.5**	●	●	●	●		●



7XX-XX-B



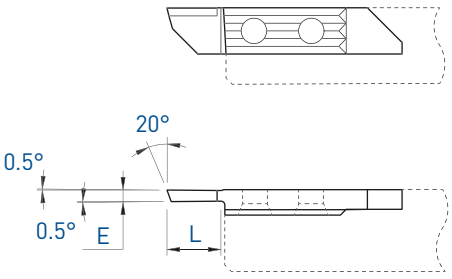
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

731R-PCD

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

Cut R



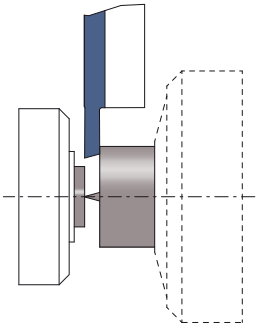


L (R)

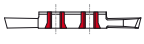
Coupe à droite déportée
Versetztes Linksschneiden
Left cut off line

E	L	Art. N°	PCD
0.8	5	**731R-0.8**	●
1.0	5	**731R-1.0**	●
1.2	5	**731R-1.2**	●
1.5	7	**731R-1.5**	●
2.0	7	**731R-2.0**	●
2.5	7	**731R-2.5**	●

Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge

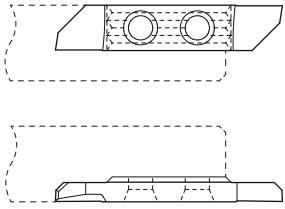


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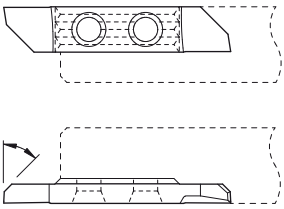


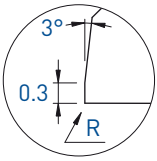
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

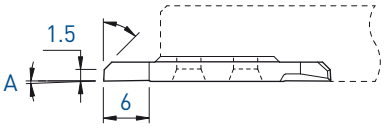
L



R



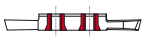






L									R									
A	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)
0°	0	**732**	●	●	●	●	●	●	**742**	●	●	●	●	●	●	●		
2°	0	**732-2°**	●	●	●	●		●	**742-2°**	●	●	●	●	●	●	●	●	●
2°	0								**742-2°-R08**	●	●	●	●	●	●	●		

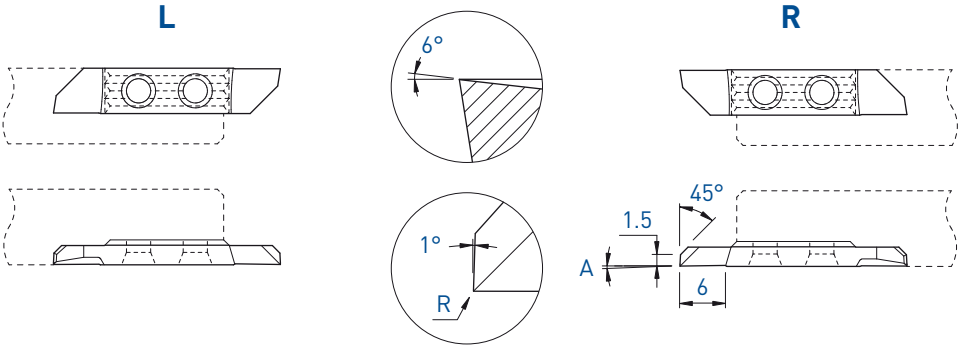
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

732PX / 742PX

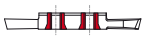
Tournage avant
Vorwärts drehen
Front turning





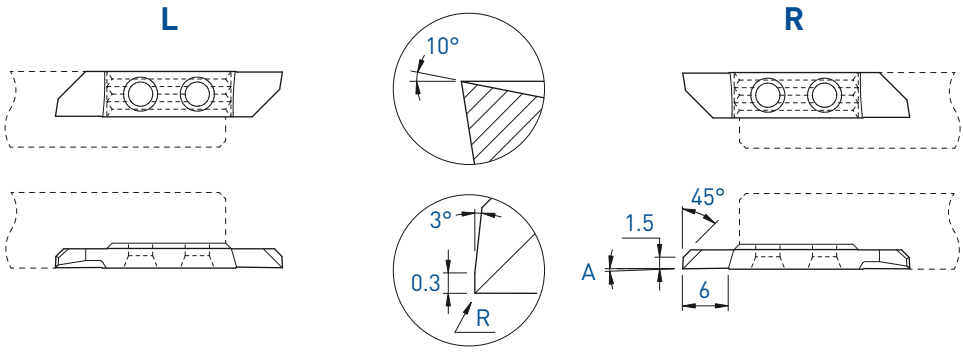
		L				R			
A	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
0°	0	732PX	●	●	●	742PX	●	●	●

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage avant
Vorwärts drehen
Front turning





A	R	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
0°	0	**732X**	●	●	●	●	●	●
2°	0							
2°	0.08							

L

Art. N°	P M N S TiAlN	P M S TiAlX	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	P M N S KST	P M N S KN (µk10-20)
742X	●	●	●	●	●	●	●	●	●
742X-2°	●	●	●	●	●	●	●		
742X-2°-R08	●	●	●	●	●	●	●		

R

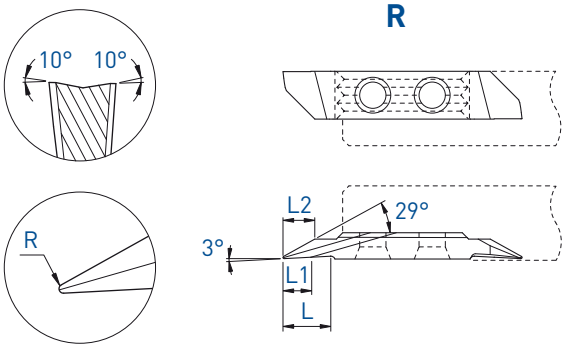
7XX-XX-B



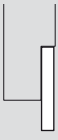
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

742VUX

Tournage avant
Vorwärts drehen
Front turning





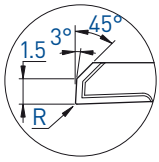


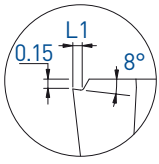
R

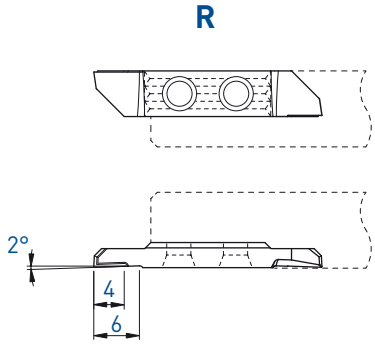
L	L1	L2	R	Art. N°	KST	KN (µk10-20)
6	3.5	4.2	0.08	**742VUX10-29°-R08**	●	●
6	3.5	4	0.15	**742VUX10-29°-R15**	●	●

7XX-XX-B

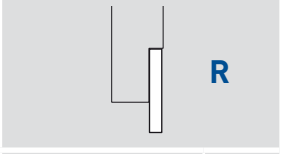
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05











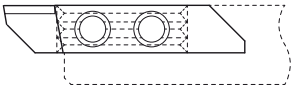
L1	R	Art. N°	KCRF N S	KN (μk10-20) P M N S
0.12	0.03	**742ZF-X812-R03**	●	●
0.24	0.03	**742ZF-X824-R03**	●	●
0.36	0.08	**742ZF-X836-R08**	●	●

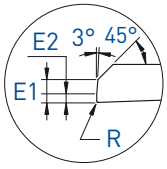
7XX-XX-B

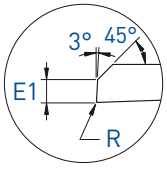


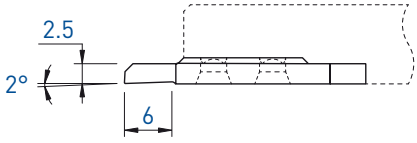
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

R

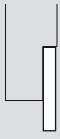








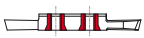




E1	E2	R	Art. N°	PCD
1.5	0.3	0	**742-2°**	●
1.5	-	0.08	**742-2°-R08**	●
1.5	-	0.15	**742-2°-R15**	●
1.5	-	0.20	**742-2°-R20**	●

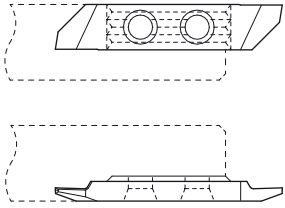
Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge

7XX-XX-B

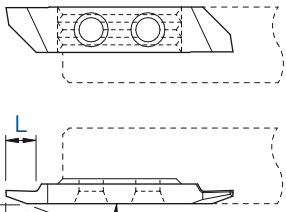


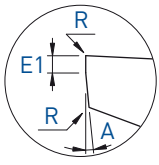
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

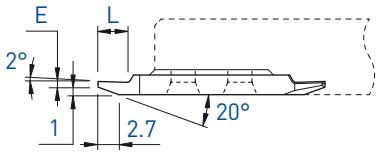
L

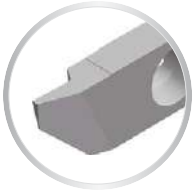


R









L											R								
E	E1	A	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	0.25	3°	3	0	**733-0.5**	●	●	●	●		●	**743-0.5**	●	●	●	●	●	●	●
0.5	-	2°	3	0.08	**733-0.5-R08**	●	●	●	●		●	**743-0.5-R08**	●		●	●	●		●
0.8	0.30	3°	4	0	**733-0.8**	●	●	●				**743-0.8**	●	●	●	●	●		●
1.0	0.40	3°	4	0	**733-1.0**	●	●	●	●		●	**743-1.0**	●		●	●	●		●
1.2	0.50	3°	5	0	**733-1.2**	●	●	●	●		●	**743-1.2**	●		●	●	●		●
1.5	0.50	3°	6	0	**733-1.5**	●	●	●	●		●	**743-1.5**	●		●	●	●		●

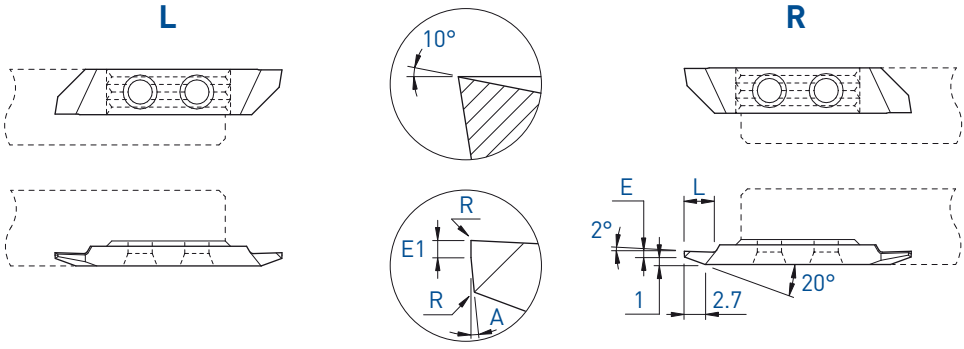
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

733X / 743X

Tournage arrière
Rückwärts drehen
Back turning



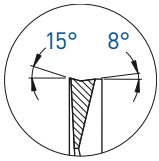


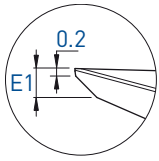
L											R								
E	E1	A	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTAX	HTiN	HN (µk10)
0.5	0.25	3°	3	0	**733X-0.5**	●	●	●	●		●	**743X-0.5**	●	●	●	●	●	●	●	●
0.5	-	2°	3	0.08	**733X-0.5-R08**	●	●	●				**743X-0.5-R08**	●	●	●	●	●			●
0.8	0.30	3°	4	0	**733X-0.8**	●	●	●				**743X-0.8**	●		●	●	●		●	●
1.0	0.40	3°	4	0	**733X-1.0**	●	●	●				**743X-1.0**	●		●	●	●			●
1.2	0.50	3°	5	0	**733X-1.2**	●	●	●				**743X-1.2**	●		●	●	●			●
1.5	0.50	3°	6	0	**733X-1.5**	●	●	●				**743X-1.5**	●		●	●	●			●



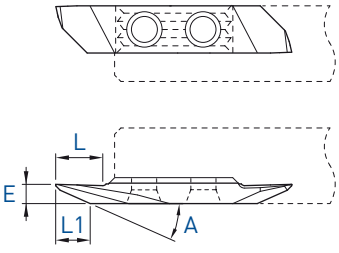
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning





R







R

E	E1	A	L	L1	Art. N°	P M N S TiAlN	P M S TiAlX	P M N TiN	P S N (µK20)	P M N S HTA	P M S HTAX	P M N HTiN	P N S HN (µK10)	P M N S KST	P M N S KN (µK10-20)
1.5	0.75	24°	3	2.3	**743VUX8-0.2-1.5**	●	●		●	●	●		●	●	●
2.5	0.75	24°	6	4.4	**743VUX8-0.2-2.5**	●	●		●	●	●		●	●	●

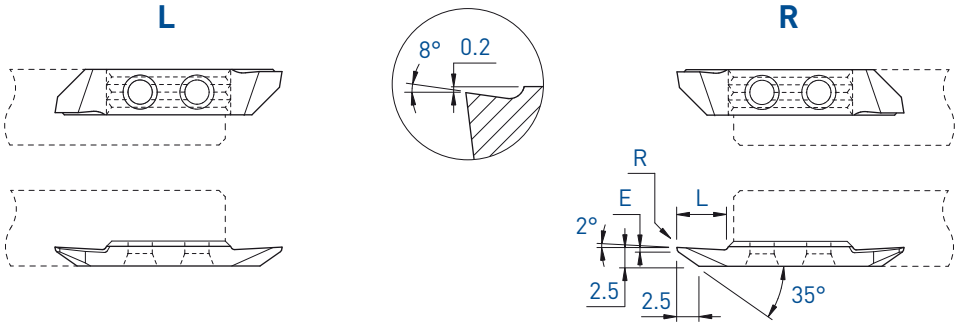
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

733VX-8° / 743VX-8°

Tournage arrière
Rückwärts drehen
Back turning





			L							R									
				P M N S	P M N	P S	P M N S	P M N	P N S		P M N S	P M N	P S	P M N S	P M N	P N S	P M N S	P M N S	
E	L	R	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	KST	KN (µK10-20)	
1.0	6.5	0	**733VX-8°**	●	●	●	●	●	●	**743VX-8°**	●	●	●	●	●	●			
1.0	6.5	0.08	**733VX-8°-R08**	●	●	●	●		●	**743VX-8°-R08**	●	●	●	●		●	●	●	

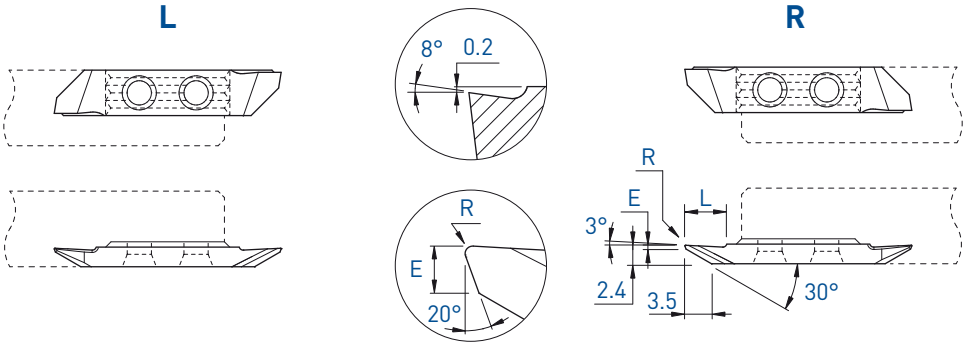
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning

733VX-805 / 743VX-805





L										R									
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)
0.5	6	0.08	**733VX-805-R08**	●		●	●		●	**743VX-805-R08**	●	●	●	●		●	●	●

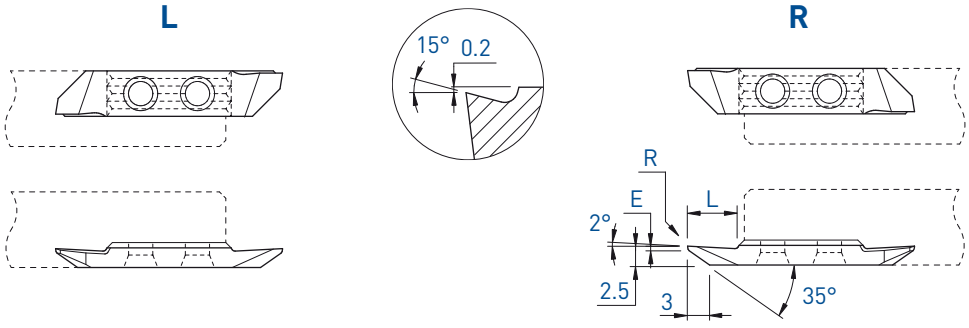
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

733VX-15° / 743VX-15°

Tournage arrière
Rückwärts drehen
Back turning

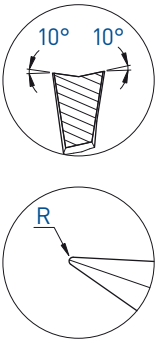


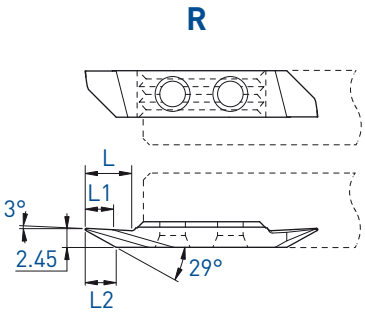


L										R								
E	L	R	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N TiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N TiN	P N S HN (µk10)
0.6	6.5	0	**733VX-15°**	●	●	●	●		●	**743VX-15°**	●	●	●	●		●
0.6	6.5	0.08	**733VX-15°-R08**	●	●	●				**743VX-15°-R08**	●	●	●	●		●

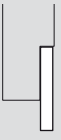
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05









R

L	L1	L2	R	Art. N°	KST	KN (µk10-20)
6	3.5	4	0.08	**743VUX10-29°-R08**	●	●
6	3.5	4	0.15	**743VUX10-29°-R15**	●	●

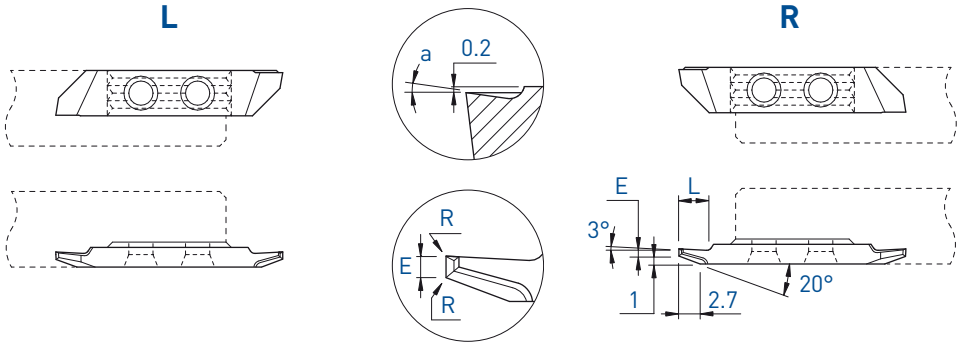
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

733ZX / 743ZX

Tournage arrière
Rückwärts drehen
Back turning





Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

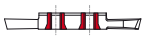
a	E	L	R	Art. N°	P M N S	P M N	P S	P M N S	P M N	P N S	Art. N°	P M N S	P M N	P S	P M N S	P M N	P N S
				L							**R**						
					TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
10°	1.0	4	0.01	**733ZX10-1.0**	●						**743ZX10-1.0**	●			●		
	1.0	4	0.08	**733ZX10-1.0-R08**	●						**743ZX10-1.0-R08**	●			●		



Arête de coupe honée
Gehonte Schneidkante
Honed edge

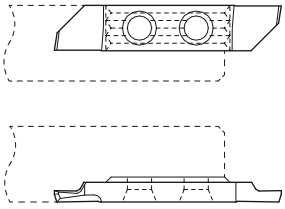
f min: 0.02 mm/U

7XX-XX-B

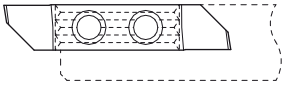


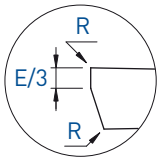
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

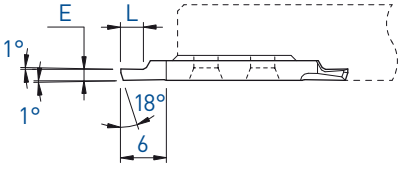
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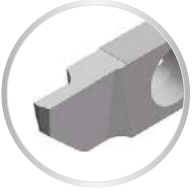


R









			L							R						
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.8	2	0	**733P-0.8**	●	●	●				**743P-0.8**	●	●	●	●		●
1.0	2	0	**733P-1.0**	●	●	●				**743P-1.0**	●	●	●			
1.2	2.5	0	**733P-1.2**	●	●	●				**743P-1.2**	●	●	●			
1.5	3	0	**733P-1.5**	●	●	●				**743P-1.5**	●	●	●			

7XX-XX-B

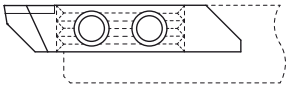


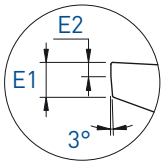
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

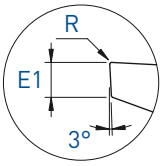
743-PCD

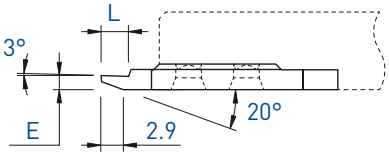
Tournage arrière
Rückwärts drehen
Back turning

R

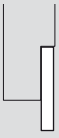












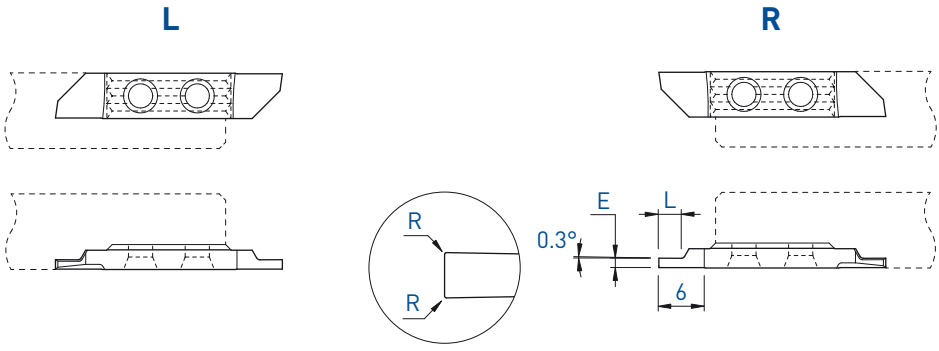
R

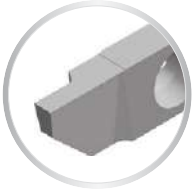
E	E1	E2	L	R	Art. N°	PCD
1.5	0.5	0.15	3	0	**743-0.5**	●
1.5	0.5	-	3	0.08	**743-0.5-R08**	●
1.8	0.8	0.25	4	0	**743-0.8**	●
1.8	0.8	-	4	0.08	**743-0.8-R08**	●
2.0	1	0.30	4	0	**743-1.0**	●
2.0	1	-	4	0.08	**743-1.0-R08**	●
2.2	1.2	0.35	5	0	**743-1.2**	●
2.2	1.2	-	5	0.08	**743-1.2-R08**	●
2.5	1.5	0.45	6	0	**743-1.5**	●
2.5	1.5	-	6	0.08	**743-1.5-R08**	●

Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge



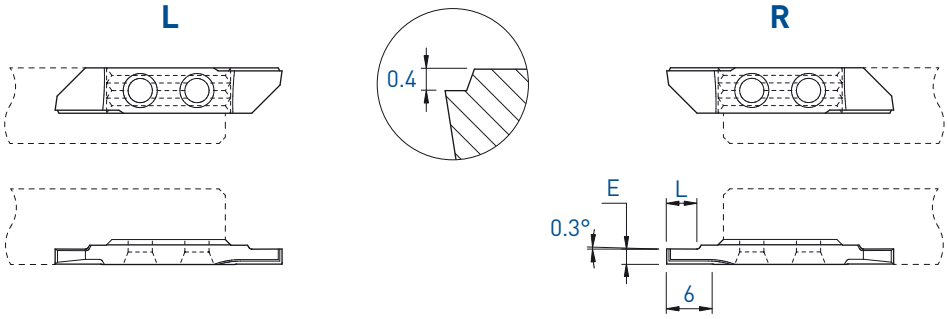
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





L											R										
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTAX	HTiN	HN (µk10)	KST	KN (µk10-20)
0.5	1.5	0	**734-0.5**	●	●	●	●		●		**744-0.5**	●	●	●	●	●	●	●	●	●	●
0.6	1.8	0	**734-0.6**	●	●	●	●		●		**744-0.6**	●	●	●	●	●	●	●	●	●	●
0.75	2	0	**734-0.75**	●	●	●					**744-0.75**	●	●	●	●	●	●	●	●	●	●
0.8	2	0	**734-0.8**	●	●	●	●		●		**744-0.8**	●	●	●	●	●	●	●	●	●	●
0.8	2	0.08	-								**744-0.8-R08**	●	●	●	●	●	●		●	●	●
0.9	2.5	0	-								**744-0.9**	●	●	●	●	●	●		●		
0.95	3	0	**734-0.95**	●	●	●					**744-0.95**	●	●	●	●	●	●		●		
1.0	2.5	0	**734-1.0**	●	●	●	●	●	●		**744-1.0**	●	●	●	●	●	●	●	●	●	●
1.0	2.5	0.08	**734-1.0-R08**	●	●	●	●	●	●		**744-1.0-R08**	●	●	●	●	●	●		●		
1.2	3	0	**734-1.2**	●	●	●	●		●		**744-1.2**	●	●	●	●	●	●	●	●		
1.5	3	0	**734-1.5**	●	●	●	●	●	●		**744-1.5**	●	●	●	●	●	●	●	●	●	●
1.5	3	0.08	**734-1.5-R08**	●	●	●	●		●		**744-1.5-R08**	●	●	●	●	●	●	●	●	●	●
1.5	3	0.15	-								**744-1.5-R15**	●	●		●	●	●		●		
1.5	3	0.20	-								**744-1.5-R20**	●	●	●	●	●	●		●		
1.8	4	0	**734-1.8**	●	●	●	●		●		**744-1.8**	●	●	●	●	●	●		●		
2.0	4	0	**734-2.0**	●	●	●	●		●		**744-2.0**	●	●	●	●	●	●		●		
2.0	4	0.08	**734-2.0-R08**	●	●	●	●		●		**744-2.0-R08**	●	●	●	●	●	●		●		
2.0	4	0.15	-								**744-2.0-R15**	●	●		●	●	●		●		
2.0	4	0.20	-								**744-2.0-R20**	●	●	●	●	●	●		●		
2.5	6	0	**734-2.5**	●	●	●					**744-2.5**		●	●	●	●	●		●		

734VS / 744VS

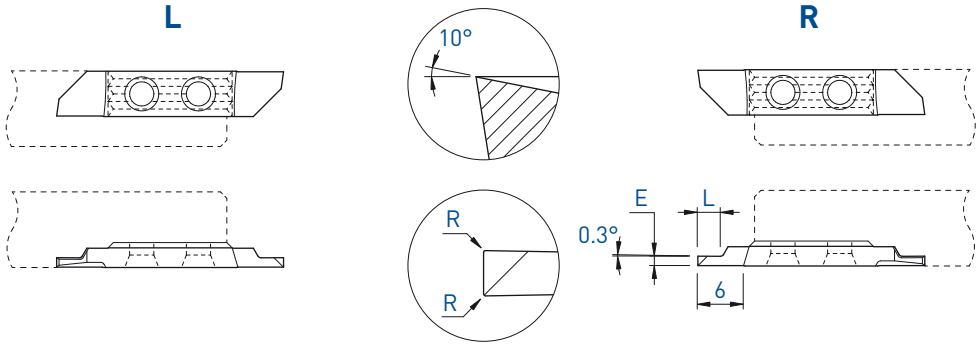


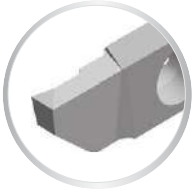


		L							R						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	2	**734VS-1.0**	●	●	●	●	●	●	**744VS-1.0**	●	●	●	●		●
1.2	2.5	**734VS-1.2**	●	●	●	●	●	●	**744VS-1.2**	●	●	●	●		●
1.5	3	**734VS-1.5**	●	●	●	●	●	●	**744VS-1.5**	●	●	●	●		●
1.8	4	**734VS-1.8**	●	●	●	●	●	●	**744VS-1.8**	●	●	●			
2.0	4	**734VS-2.0**	●	●	●	●	●	●	**744VS-2.0**	●	●	●	●		●
2.5	6	**734VS-2.5**	●	●	●	●	●	●	**744VS-2.5**	●	●	●			

7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





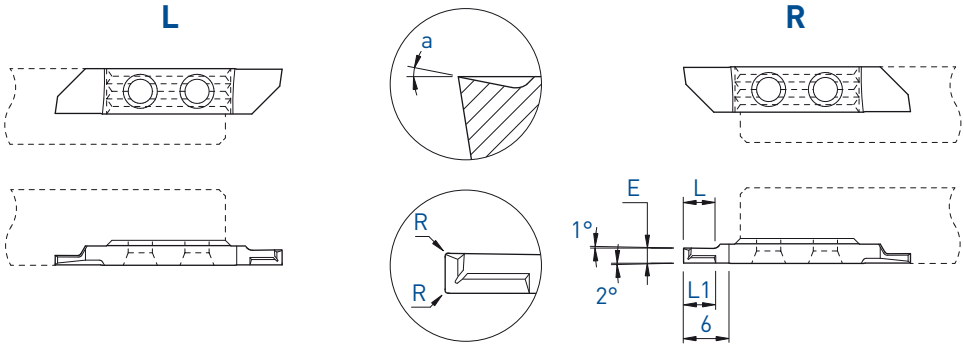
				L							R										
E	L	R	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	ST	TiAlN	TiAlX	TiN	N (µK20)	HTA	HTAX	HTiN	HN (µK10)	KST	KN (µK10-20)
0.5	2	0								744X-0.5										●	●
0.8	2	0	734X-0.8	●	●	●	●		●	744X-0.8		●	●	●	●	●	●	●	●	●	●
1.0	2.5	0	734X-1.0	●	●	●	●		●	744X-1.0		●	●	●	●	●	●	●	●	●	●
1.0	2.5	0.08	734X-1.0-R08	●	●	●	●		●	744X-1.0-R08	●	●	●	●	●	●	●		●	●	●
1.2	3	0	734X-1.2	●	●	●	●		●	744X-1.2		●	●	●	●	●	●		●	●	●
1.5	3	0	734X-1.5	●	●	●	●	●	●	744X-1.5		●	●	●	●	●	●	●	●	●	●
1.5	3	0.08	734X-1.5-R08	●	●	●	●		●	744X-1.5-R08	●	●	●	●	●	●	●		●	●	●
1.5	3	0.15	-							744X-1.5-R15	●	●	●	●	●	●	●	●	●		
1.5	3	0.20	-							744X-1.5-R20	●	●	●	●	●	●	●		●		
1.8	4	0	734X-1.8	●	●	●				744X-1.8		●	●	●	●	●	●		●		
2.0	4	0	734X-2.0	●	●	●	●		●	744X-2.0		●	●	●	●	●	●	●	●	●	●
2.0	4	0.08	734X-2.0-R08	●	●	●	●		●	744X-2.0-R08	●	●	●	●	●	●	●	●	●		
2.0	4	0.15	-							744X-2.0-R15	●	●	●	●	●	●	●		●		
2.0	4	0.20	734X-2.0-R20	●	●	●	●	●	●	744X-2.0-R20	●	●	●	●	●	●	●		●	●	●
2.5	6	0	734X-2.5	●	●	●	●		●	744X-2.5			●	●	●	●			●		●

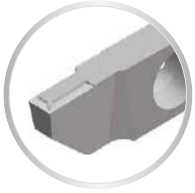
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

734ZX / 744ZX

Fonçage-tournage
Einstechen und drehen
Grooving and turning





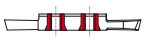
Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

a	E	L	L1	R	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HAC	HN (µK10)	Art. N°	TiAlN	TiAlX	TiN	N (µK20)	HTA	HTiN	HAC	HN (µK10)
						L								**R**							
10°	1.0	2.5	3	0.01	**734ZX10-1.0**	●	●						**744ZX10-1.0**	●	●	●		●			
	1.5	4	4	0.01	**734ZX10-1.5**	●	●						**744ZX10-1.5**	●	●			●	●		
	1.5	4	4	0.08	**734ZX10-1.5-R08**	●	●						**744ZX10-1.5-R08**	●	●	●		●			
	2.0	4	4	0.01	**734ZX10-2.0**	●	●						**744ZX10-2.0**	●	●			●			
	2.0	4	4	0.08	**734ZX10-2.0-R08**	●	●						**744ZX10-2.0-R08**	●	●			●			
	2.5	6	4	0.01	**734ZX10-2.5**	●	●						**744ZX10-2.5**	●	●			●			
	2.5	6	4	0.08	-								**744ZX10-2.5-R08**	●	●			●			
17°	1.0	2.5	3	0.01	-								**744ZX17-1.0**					●		●	

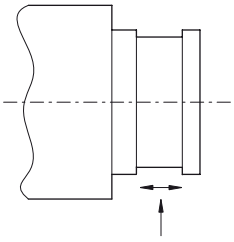


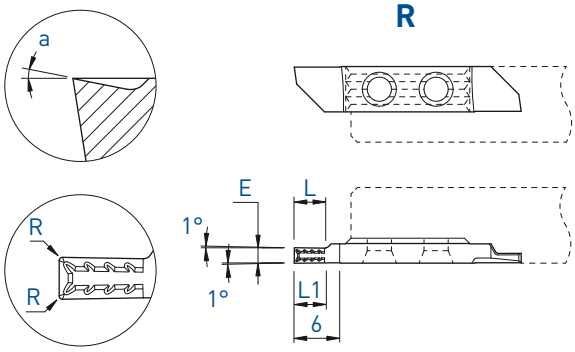
Arête de coupe honée
Gehonte Schneidkante
Honed edge

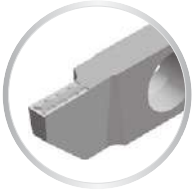
f min: 0.02 mm/U



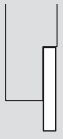
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05







Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



R

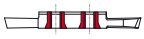
a	E	L	L1	R	Art. N°	ST	TiAlN	TiAlX	TiN	N (µK20)	HTA	HTiN	HN (µK10)	KST	KN (µK10-20)
	1.0	2.5	2.5	0.01	**744ZXT10-1.0**	●	●	●	●		●			●	●
	1.5	4	4	0.01	**744ZXT10-1.5**	●	●	●			●			●	●
	1.5	4	4	0.08	**744ZXT10-1.5-R08**	●	●	●	●		●			●	●
10°	2.0	4	4	0.01	**744ZXT10-2.0**	●	●	●			●			●	●
	2.0	4	4	0.08	**744ZXT10-2.0-R08**	●	●	●			●			●	●
	2.5	5	5	0.01	**744ZXT10-2.5**	●	●	●			●			●	●
	2.5	5	5	0.08	**744ZXT10-2.5-R08**	●	●	●			●			●	●



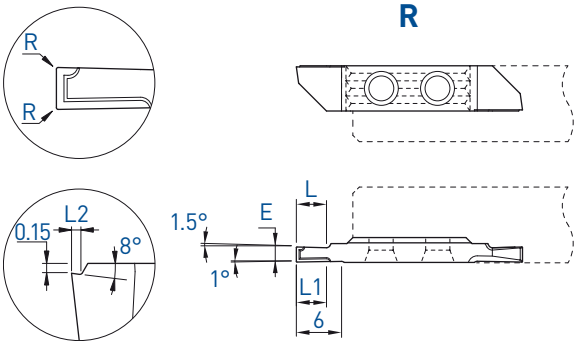
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



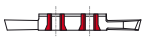




R

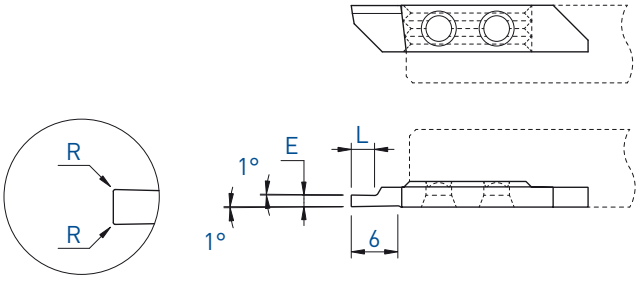
E	L	L1	L2	R	Art. N°	KCRF N S	KN (µk10-20) P M N S
1.0	2.5	2	0.12	0.03	**744ZF-X812-1.0-R03**	●	●
	2.5	2	0.24	0.03	**744ZF-X824-1.0-R03**	●	●
1.5	3	2.5	0.12	0.03	**744ZF-X812-1.5-R03**	●	●
	3	2.5	0.24	0.03	**744ZF-X824-1.5-R03**	●	●
	3	2.5	0.36	0.08	**744ZF-X836-1.5-R08**	●	●
2.0	4	3	0.24	0.03	**744ZF-X812-1.5-R03**	●	●
	4	3	0.36	0.08	**744ZF-X824-1.5-R03**	●	●
	4	3	0.36	0.15	**744ZF-X836-1.5-R08**	●	●
2.5	6	4	0.24	0.03	**744ZF-X824-2.5-R03**	●	●
	6	4	0.36	0.08	**744ZF-X836-2.5-R08**	●	●
	6	4	0.36	0.15	**744ZF-X836-2.5-R15**	●	●

7XX-XX-B

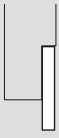


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

R







R

E	L	R	Art. N°	PCD
0.8	2	0	**744-0.8**	●
0.8	2	0.08	**744-0.8-R08**	●
1.0	2.5	0	**744-1.0**	●
1.0	2.5	0.08	**744-1.0-R08**	●
1.5	3	0	**744-1.5**	●
1.5	3	0.08	**744-1.5-R08**	●
1.5	3	0.15	**744-1.5-R15**	●
1.5	3	0.20	**744-1.5-R20**	●
2.0	4	0	**744-2.0**	●
2.0	4	0.08	**744-2.0-R08**	●
2.0	4	0.15	**744-2.0-R15**	●
2.0	4	0.20	**744-2.0-R20**	●
2.5	6	0	**744-2.5**	●
2.5	6	0.08	**744-2.5-R08**	●
2.5	6	0.15	**744-2.5-R15**	●
2.5	6	0.20	**744-2.5-R20**	●

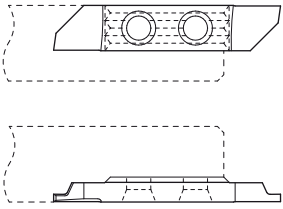
Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge

7XX-XX-B

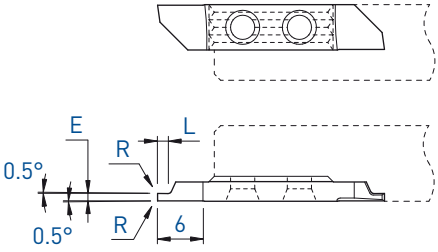


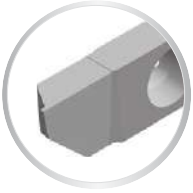
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R



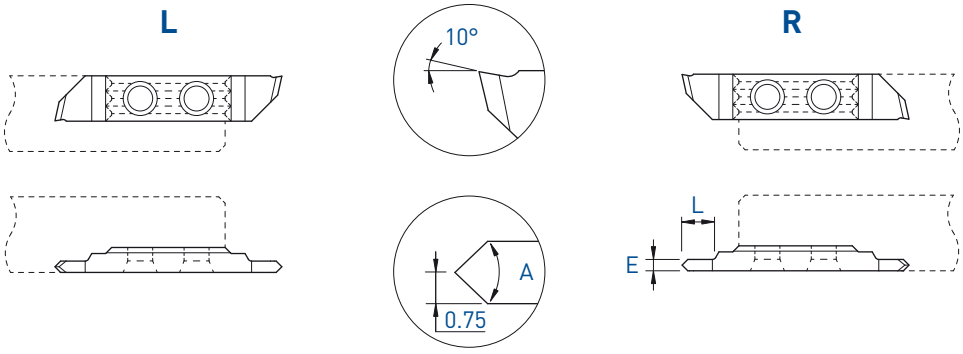


L										R									
E ± 0.01	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.2	0.2	0	**735-0202**	●	●	●				**745-0202**	●	●	●	●		●
0.3	0.3	0	**735-0303**	●	●	●				**745-0303**	●	●	●	●		●
0.4	0.4	0	**735-0404**	●	●	●				**745-0404**	●	●	●	●		●

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



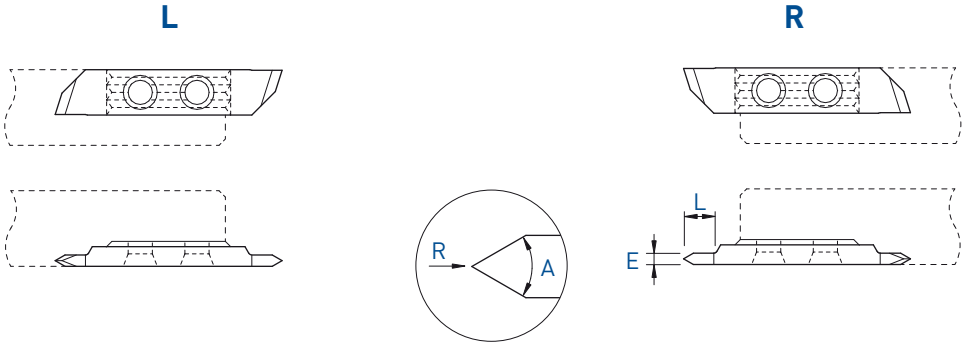


			L				R			
A	E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)
90°	1.5	4	**735X-90-1.5**	●		●	**745X-90-1.5**	●		●

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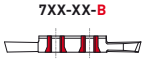
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





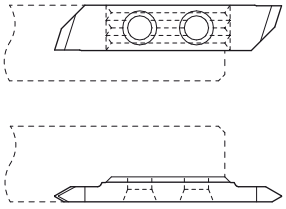
Profil partiel
Teilprofil
Partial profile

L											R									
A	E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)
60°	1.5	4	0	**736-60-1.5**	●	●	●				**746-60-1.5**	●	●	●				●	●
60°	1.5	4	0.02	**736-60-1.5-R02**	●	●	●	●	●	●	**746-60-1.5-R02**	●	●	●	●		●	●	●
60°	2.0	6	0	**736-60-2.0**	●	●	●				**746-60-2.0**	●	●	●				●	●
60°	2.0	6	0.02	**736-60-2.0-R02**	●	●	●	●	●	●	**746-60-2.0-R02**	●	●	●	●	●	●		
55°	1.5	4	0	**736-55-1.5**	●	●	●				**746-55-1.5**	●	●	●					
55°	1.5	4	0.02	**736-55-1.5-R02**	●	●	●				**746-55-1.5-R02**	●	●	●					
55°	2.0	6	0	**736-55-2.0**	●	●	●				**746-55-2.0**	●	●	●					
55°	2.0	6	0.02	**736-55-2.0-R02**	●	●	●				**746-55-2.0-R02**		●	●					●

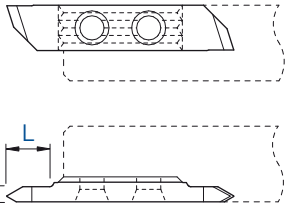


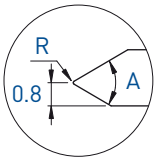
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

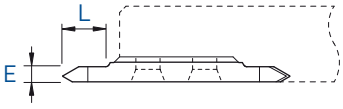
L



R







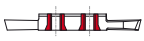


Profil partiel
Teilprofil
Partial profile

L											R						
A	E	L	R	Pas Steigung Pitch P	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)
60°	2.0	6	0.06	0.50-1.50	**736-A60°**	●	●	●				**746-A60°**	●	●	●	●		●

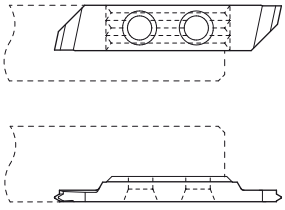
Plaquettes de filetage avec coupe positive 2°, voir page 1.157
WSP Gewindedrehen mit positivem Schnitt 2°, siehe Seite 1.157
Threading inserts with positive cut 2°, see page 1.157

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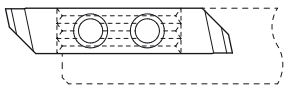


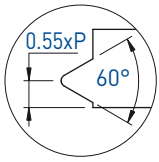
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

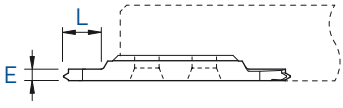
L

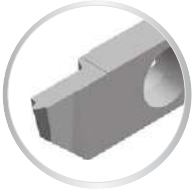


R







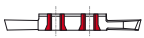


Profil complet métrique
Metrisches Vollprofil
Metric full profile

L							R				
Pas Steigung Pitch P	E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)
0.25	1.0	3	**736-M-0.25**	●	●	●	**746-M-0.25**	●	●	●
0.30	1.0	3	**736-M-0.30**	●	●	●	**746-M-0.30**	●	●	●
0.35	1.0	3	**736-M-0.35**	●	●	●	**746-M-0.35**	●	●	●
0.40	1.0	3	**736-M-0.40**	●	●	●	**746-M-0.40**	●	●	●
0.45	1.0	3	**736-M-0.45**	●	●	●	**746-M-0.45**	●	●	●
0.50	1.0	3	**736-M-0.50**	●	●	●	**746-M-0.50**	●	●	●
0.60	1.0	3	**736-M-0.60**	●	●	●	**746-M-0.60**	●	●	●
0.70	1.0	3	**736-M-0.70**	●	●	●	**746-M-0.70**	●	●	●
0.75	1.0	3	**736-M-0.75**	●	●	●	**746-M-0.75**	●	●	●
0.80	1.5	4.5	**736-M-0.80**	●	●	●	**746-M-0.80**	●	●	●
1.00	1.5	4.5	**736-M-1.00**	●	●	●	**746-M-1.00**	●	●	●
1.25	1.5	4.5	**736-M-1.25**	●	●	●	**746-M-1.25**	●	●	●
1.50	2.0	6	**736-M-1.50**	●	●	●	**746-M-1.50**	●	●	●
1.75	2.0	6	**736-M-1.75**	●	●	●	**746-M-1.75**	●	●	●

Plaquettes de filetage avec coupe positive 2°, voir page 1.158
WSP Gewindedrehen mit positivem Schnitt 2°, siehe Seite 1.158
Threading inserts with positive cut 2°, see page 1.158

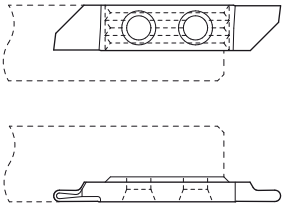
7XX-XX-B



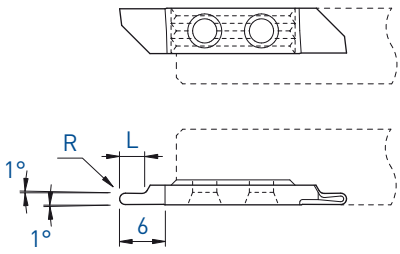
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

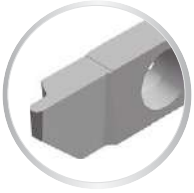
Plaquettes à rayon
Radius Wendeplatten
Radius inserts

L



R





		L				R			
R	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)
0.25	1.5	-				747-R0.25	●	●	●
0.40	2	-				747-R0.4	●	●	●
0.50	2.5	737-R0.5	●	●	●	747-R0.5	●	●	●
0.60	2.5	737-R0.6	●	●	●	747-R0.6	●	●	●
0.75	3	737-R0.75	●	●	●	747-R0.75	●	●	●
0.80	3	737-R0.8	●	●	●	747-R0.8	●	●	●
1.00	4	737-R1.0	●	●	●	747-R1.0	●	●	●

7XX-XX-B

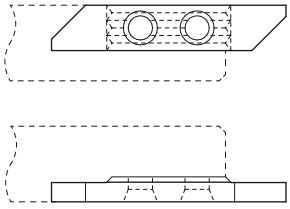


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

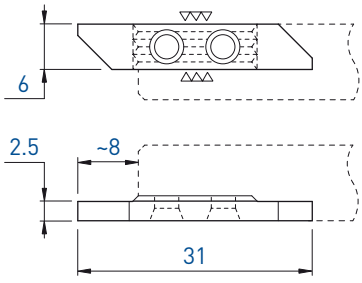
731-E / 741-E

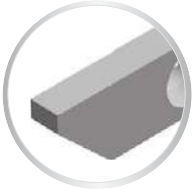
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

L



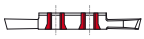
R





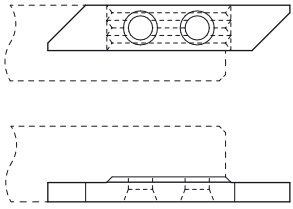
L			R		
Art. N°	N (µk20)	HN (µk10)	Art. N°	N (µk20)	HN (µk10)
731-E	●	●	741-E	●	●

7XX-XX-B

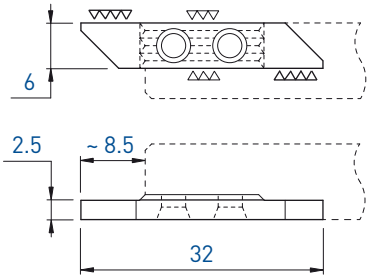


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R





Face de coupe polie
Polierte Schneidfläche
Polished cutting face

L									R								
Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)
731-EP	●	●	●	●	●	●	●	●	741-EP	●	●	●	●		●	●	●

7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

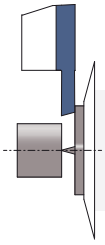
L

Type		Page
750	750	1.92
	750-JET	1.93
	750RC	1.94
751	751	1.101
	751-E	1.162
	751-EP	1.163
	751-R05	1.103
	751NX840	1.104
	751NXF	1.112/1.124
	751R	1.114
	751R-PCD	1.127
	751R-R05	1.116
	751RAS	1.126
	751RD	1.125
	751RS	1.115
	751RU	1.122
	751RZU	1.123
	751RX12	1.119
	751RX25	1.120
	751RX4	1.117
	751RX840	1.121
	751RXF	1.118
	751S	1.102
	751U	1.110
	751X12	1.107
	751X25	1.108
	751X4	1.105
	751XF	1.106
752	752	1.128
	752PX	1.129
	752S	1.135
	752X	1.130
753	753	1.137
	753P	1.146
	753S	1.136
	753VX-15°	1.143
	753VX-8°	1.140
	753VX-805	1.141
	753X	1.138
	753XS	1.139
	753ZX	1.145
754	754	1.147
	754VS	1.148
	754X	1.149
	754ZX	1.152
	754ZXT	1.154
756	756	1.156
	756-AG60°	1.157
	756-G60°	1.157
	756-M	1.158
757	757	1.160
	757ZX	1.161

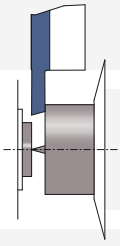
R

Type		Page
760	760	1.92
	760-D-JET	1.99
	760-JET	1.93
	760-NOVIBRA	1.96
	760/750-D	1.97/1.98
	760/750-AX	1.100
	760LC	1.95
761	761	1.101
	761-E	1.162
	761-EP	1.163
	761-PCD	1.113
	761-R05	1.103
	761L	1.114
	761L-R05	1.116
	761LD	1.125
	761LS	1.115
	761LX12	1.119
	761LX25	1.120
	761LX4	1.117
	761LXF	1.118
	761NXF	1.112/1.124
	761NX840	1.104
	761S	1.102
	761U	1.110
	761ZU	1.111
	761X12	1.107
	761X25	1.108
	761X4	1.105
	761X840	1.109
	761XF	1.106
	761ZU	1.111
762	762	1.128
	762PX	1.129
	762S	1.135
	762X	1.130
	762VUX	1.132
	762VX-800	1.131
	762ZF-X	1.134
	762ZX	1.133
763	763	1.137
	763P	1.146
	763S	1.136
	763VUX	1.144
	763VX-15°	1.143
	763VX-8°	1.140
	763VX-800	1.142
	763VX-805	1.141
	763X	1.138
	763XS	1.139
	763ZX	1.145
764	764	1.147
	764VS	1.148
	764X	1.149
	764X5-EP	1.150
	764X10-EP	1.151
	764ZF-X	1.155
	764ZX	1.152
	764ZXB	1.153
	764ZXT	1.154
766	766	1.156
	766-AG60°	1.157
	766-G60°	1.157
	766-M	1.158
	766ZX	1.159
767	767	1.160
	767ZX	1.161

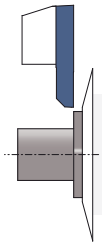
750 / 760
Porte-outils
Halter
Holders
> 1.92



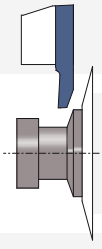
751 / 761
Tronçonnage
Abstechen
Parting off
> 1.101



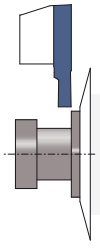
761L / 751R
Tronçonnage - coupe déportée
Abstechen - versetztes Schneiden
Parting off - cut off line
> 1.114



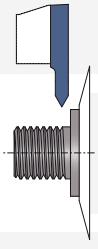
752 / 762
Tournage avant
Vorwärts drehen
Front turning
> 1.128



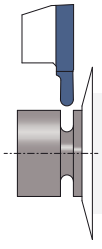
753 / 763
Tournage arrière
Rückwärts drehen
Back turning
> 1.137



754 / 764
Fonçage-tournage
Einstechen und drehen
Grooving and turning
> 1.147

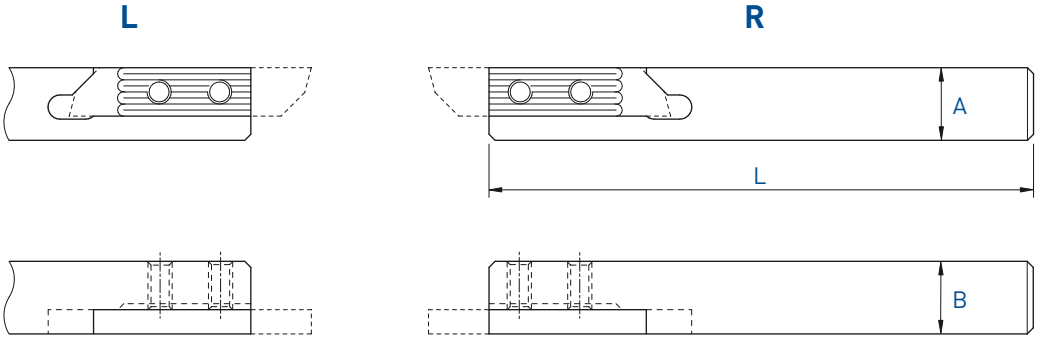


756 / 766
Filetage
Gewinde drehen
Threading
> 1.156



757 / 767
Plaquettes à rayon
Radius Wendeplatten
Radius inserts
> 1.160

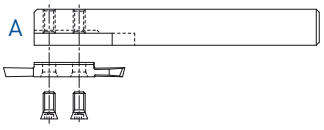
Plaquettes ébauches
WSP-Rohlinge
Blank inserts
> 1.162



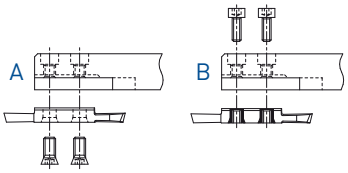


A x B	L	Serrage Spannsystem Clamping	L Art. N°	R Art. N°
10 x 10	115	A	**750-10**	**760-10**
10 x 10	115	A + B	**750-10-AB**	**760-10-AB**
10 x 10	50	A	**750-10-50**	**760-10-50**
12 x 12	130	A	**750-12**	**760-12**
12 x 12	130	A + B	**750-12-AB**	**760-12-AB**
12 x 12	90	A	**750-12-90**	**760-12-90**
12 x 12	90	A + B	**750-12-90-AB**	**760-12-90-AB**
12.7 x 12.7	130	A + B	**750-12.7**	**760-12.7**
14 x 14	130	A + B	**750-14**	**760-14**
16 x 16	130	A + B	**750-16**	**760-16**
16 x 16	75	A + B	**750-16-75**	**760-16-75**
20 x 20	120	A + B	**750-20**	**760-20**
25 x 25	140	A	**760/750-25**	

Serrage standard A
Standard Spannsystem A
Standard clamping system A



Serrage A + B
Spannsystem A + B
Clamping system A + B



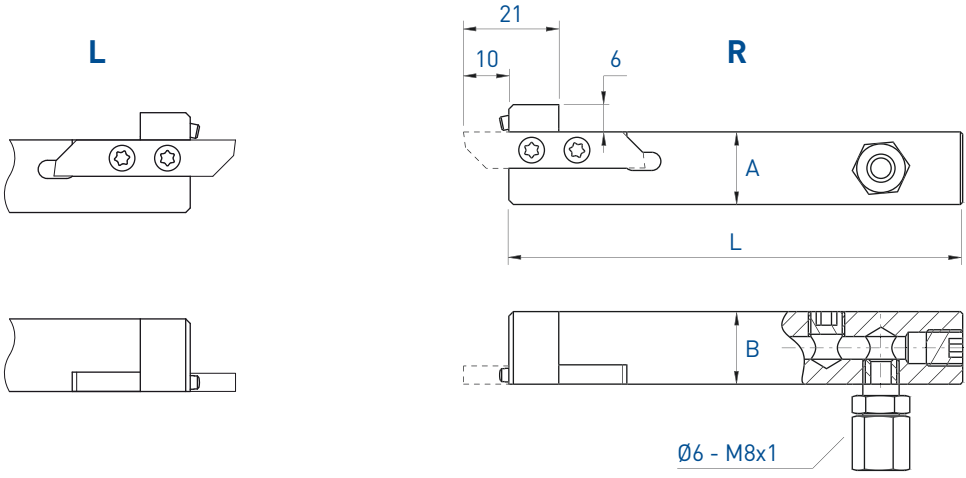
760/750-25
R + L

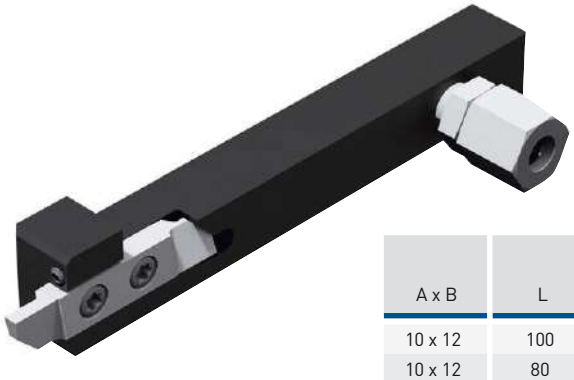


Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

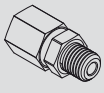
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

750-JET / 760-JET





A x B	L	Serrage Spannsystem Clamping	L Art. N°	R Art. N°
10 x 12	100	A + B	**750-1012-JET**	**760-1012-JET**
10 x 12	80	A + B	**-**	**760-1012-80-JET**
12 x 12	100	A + B	**750-12-JET**	**760-12-JET**
12.7 x 12.7	100	A + B	**750-12.7-JET**	**760-12.7-JET**
16 x 16	100	A + B	**750-16-JET**	**760-16-JET**
20 x 20	100	A + B	**750-20-JET**	**760-20-JET**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°	Buses Düsen Nozzles Art. N°
750-JET / 760-JET	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5** More option see JET-Line

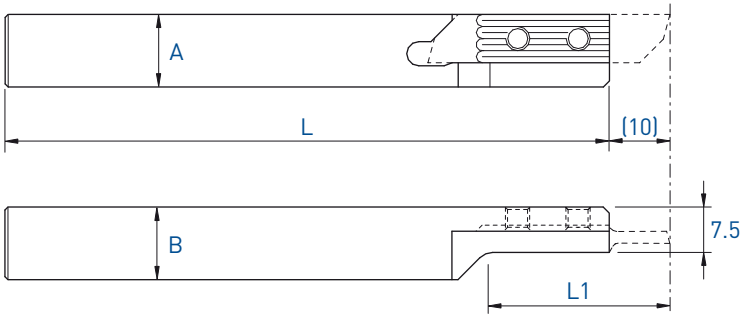
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

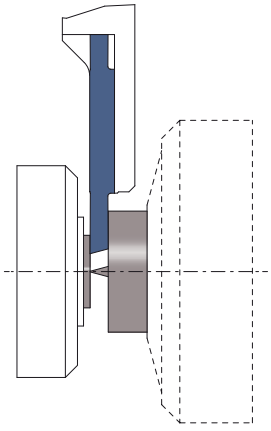
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

Utiliser des plaquettes type 751R
WSP Typ 751R verwenden
Use inserts type 751R

Voir pages 1.114 - 1.127
Siehe Seiten 1.114 - 1.127
See pages 1.114 - 1.127



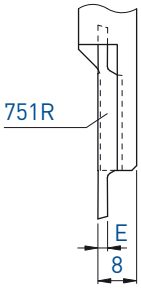


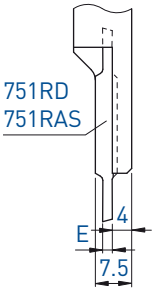


L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

A x B	L	L1	Art. N°
12 x 12	130	30	**750RC-12**
12.7 x 12.7	130	30	**750RC-12.7**
16 x 16	130	40	**750RC-16**



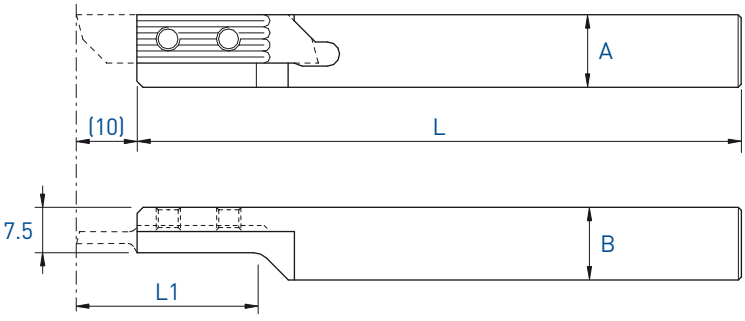


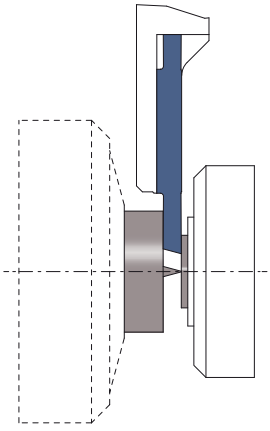
(p. 1.114 + 1.125 + 1.126)

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Utiliser des plaquettes type 761L
WSP Typ 761L verwenden
Use insets type 761L

Voir pages 1.114 - 1.120 + 1.125
Siehe Seiten 1.114 - 1.120 + 1.125
See pages 1.114 - 1.120 + 1.125

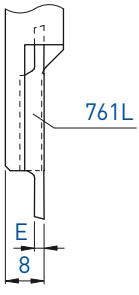


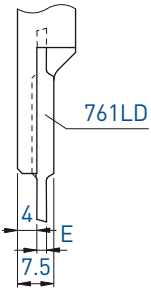


R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

A x B	L	L1	Art. N°
16 x 16	130	40	**760LC-16**





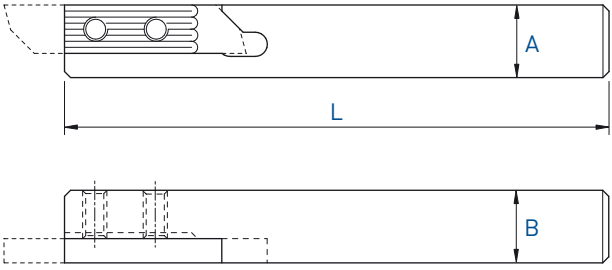
(p. 1.114)

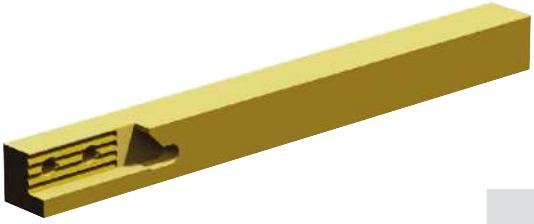
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

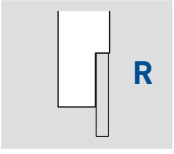
760-NOVIBRA

Porte-outils en métal lourd anti-vibratoire
Schwingungsdämpfende Schwermetallhalter
Low vibration heavy metal holders

R

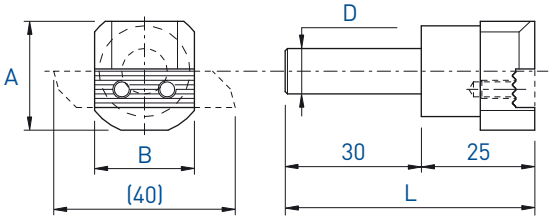


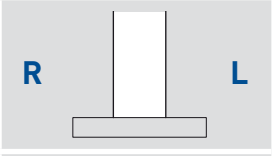




A x B	L	Serrage Spannsystem Clamping	Art. N°
10 x 10	115	A	**760-10-NOVIBRA**
12 x 12	115	A	**760-12-NOVIBRA**

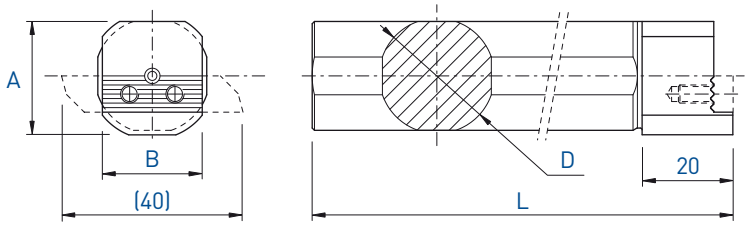
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

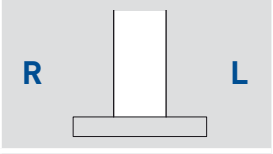




A x B	L	D	Art. N°
24 x 22	55	10	**760/750-D10**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.



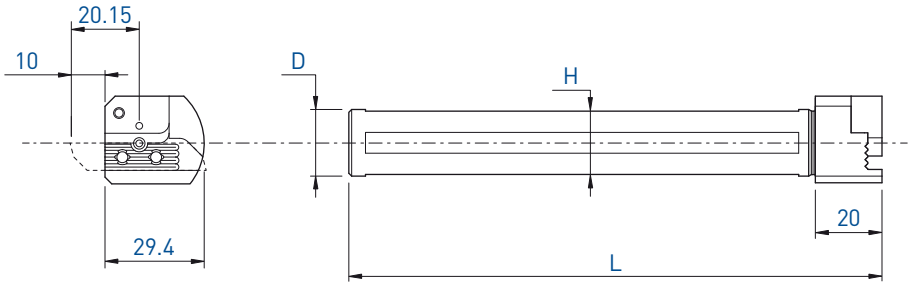


A x B	L	D	Art. N°
25 x 22	160	16	**760/750-D16**
25 x 22	160	19.05	**760/750-D19.05**
25 x 22	110	19.05	**760/750-D19.05-S**
25 x 22	160	20	**760/750-D20**
25 x 22	110	22	**760/750-D22**
25 x 22	200	25	**760/750-D25**
25 x 22	200	25.4	**760/750-D25.4**
25 x 22	125	25.4	**760/750-D25.4-S**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils frontal avec arrosage intégré
Frontaler Halter mit integrierter Kühlmittelzufuhr
Front holder with integrated coolant supply

760-D-JET

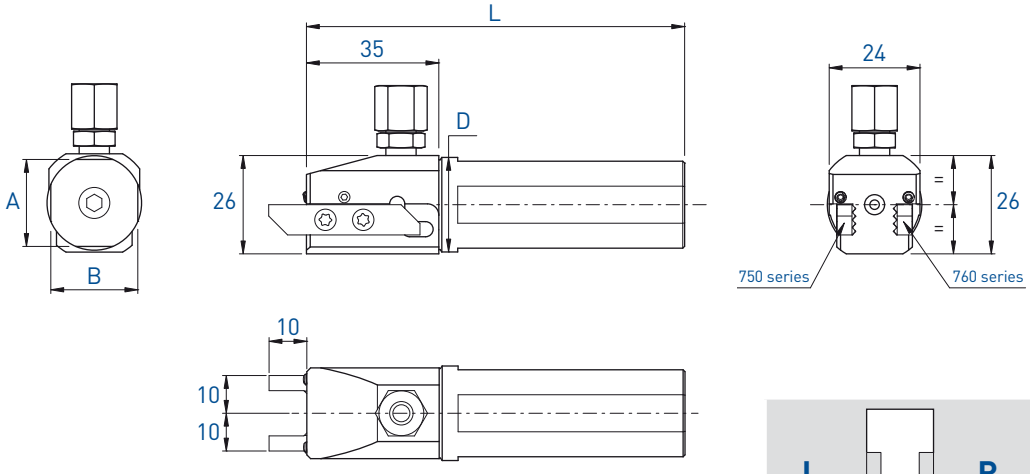


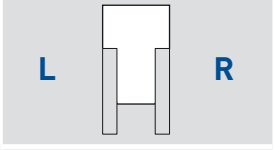
R

D	H	L	Art. N°
16	15	160	**760-D16-160-JET**
19.05	18	160	**760-D19.05-160-JET**
19.05	18	110	**760-D19.05-110-JET**
20	19	160	**760-D20-160-JET**
22	20	110	**760-D22-110-JET**
25	24	200	**760-D25-200-JET**
25.4	24	200	**760-D25.4-200-JET**
25.4	24	125	**760-D25.4-125-JET**

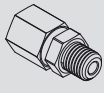
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

760 / 750-AX-JET





A x B	L	D	Art. N°
23 x 23	100	25	**760/750-AX-D25-JET**
23 x 23	100	25.4	**760/750-AX-D25.4-JET**

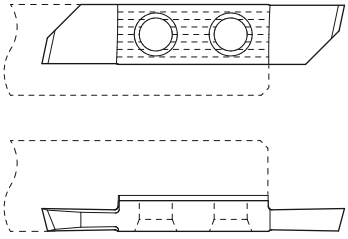
Pièces de rechange Ersatzteile Spare parts			Buses Düsen Nozzles 
	Art. N°	**Art. N°**	**Art. N°**
760/750-AX	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**
			More option see JET-Line

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

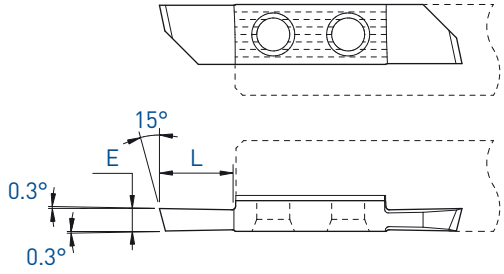
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

L



R





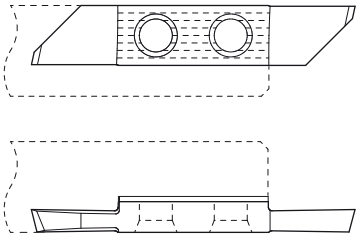
L									R								
E	L	Art. N°	TiAlN	TiN	N (μk20)	HTA	HTiN	HN (μk10)	Art. N°	TiAlN	TiAlX	TiN	N (μk20)	HTA	HTiN	HN (μk10)
1.0	5	**751-1.0**	●	●	●	●	●	●	**761-1.0**	●	●	●	●	●	●	●
1.2	5	**751-1.2**	●	●	●				**761-1.2**	●	●	●	●	●		●
1.5	7.5	**751-1.5**	●	●	●	●		●	**761-1.5**	●	●	●	●	●	●	●
1.8	7.5	**751-1.8**	●	●	●				**761-1.8**	●	●	●	●	●		●
2.0	10	**751-2.0**	●	●	●	●	●	●	**761-2.0**	●	●	●	●	●	●	●
2.2	10	**751-2.2**	●	●	●				**761-2.2**	●	●	●	●	●		●
2.5	10	**751-2.5**	●	●	●	●		●	**761-2.5**	●	●	●	●	●	●	●
3.0	10	**751-3.0**	●	●	●				**761-3.0**	●	●	●	●	●		●

7XX-XX-B

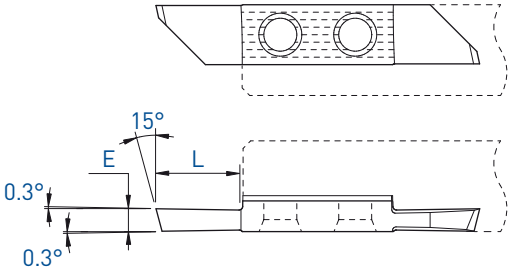


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R





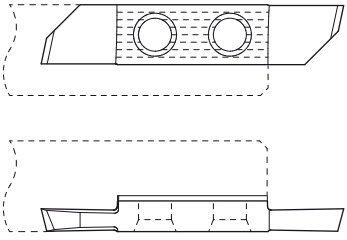
L									R								
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M S TiAlX	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
2.0	11.5	**751S-2.0**	●	●	●	●		●	**761S-2.0**	●	●	●	●	●		●
2.2	11.5	**751S-2.2**	●	●	●				**761S-2.2**	●	●	●	●	●		●
2.5	11.5	**751S-2.5**	●	●	●	●		●	**761S-2.5**	●	●	●	●	●		●
3.0	11.5	**751S-3.0**	●	●	●				**761S-3.0**	●	●	●	●	●		●

7XX-XX-B

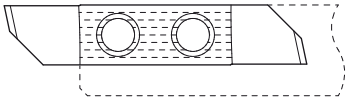


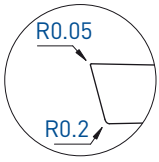
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

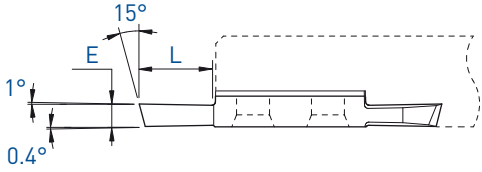
L

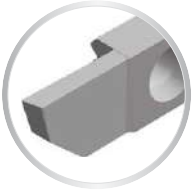


R









L									R								
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	**751-1.5-R05**	●	●	●				**761-1.5-R05**	●	●	●	●	●		●
2.0	10	**751-2.0-R05**	●	●	●				**761-2.0-R05**	●	●	●	●	●		●
2.5	10	**751-2.5-R05**	●	●	●				**761-2.5-R05**	●	●	●	●			

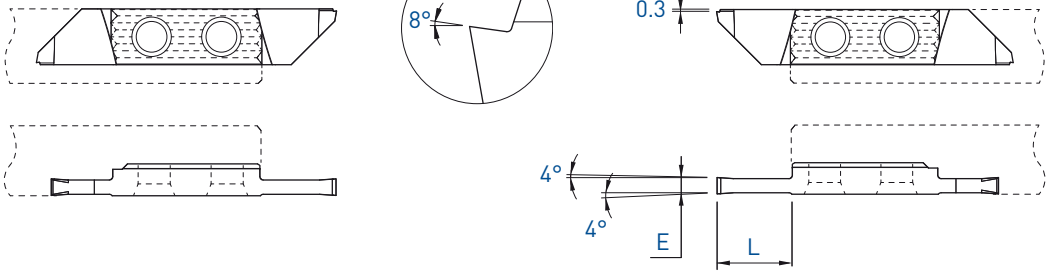
7XX-XX-B

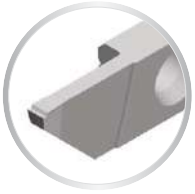


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

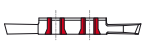
751NX840 / 761NX840

Tronçonnage
Abstechen
Parting off

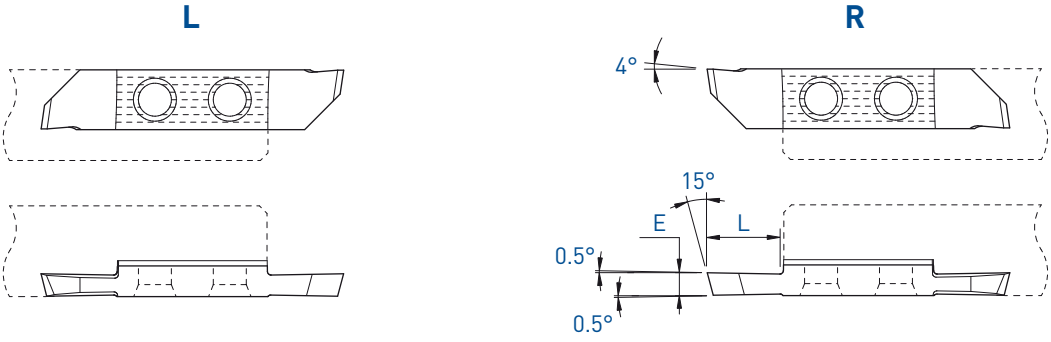


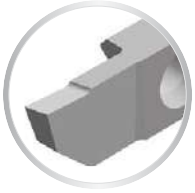


		L			R		
E	L	Art. N°	HCR-TF	HN (µk10)	Art. N°	HCR-TF	HN (µk10)
1.5	10	**751NX840-1.5**	●	●	**761NX840-1.5**	●	●
2.0	11	**751NX840-2.0**	●	●	**761NX840-2.0**	●	●
2.5	11	**751NX840-2.5**	●	●	**761NX840-2.5**	●	●



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





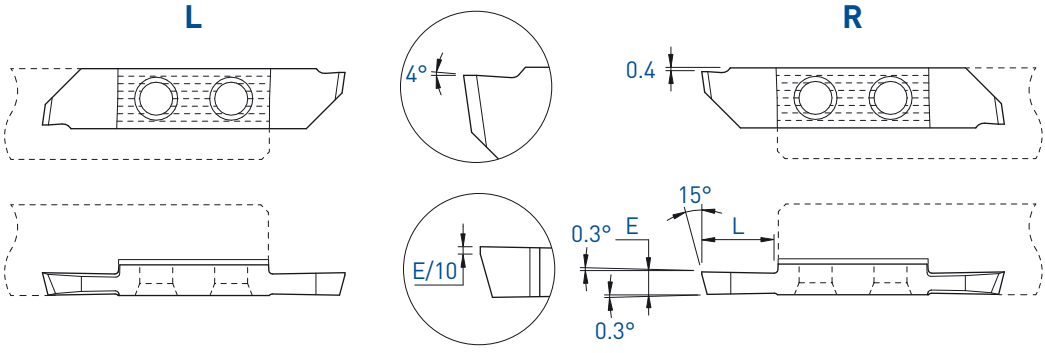
L									R							
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
1.5	7.5	-							761X4-1.5	●	●	●			
2.0	10	751X4-2.0	●	●	●	●		●	761X4-2.0	●	●	●	●		●
2.5	10	-							761X4-2.5	●	●	●			

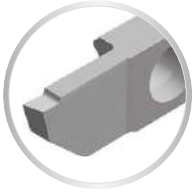


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

751XF / 761XF

Tronçonnage
Abstechen
Parting off



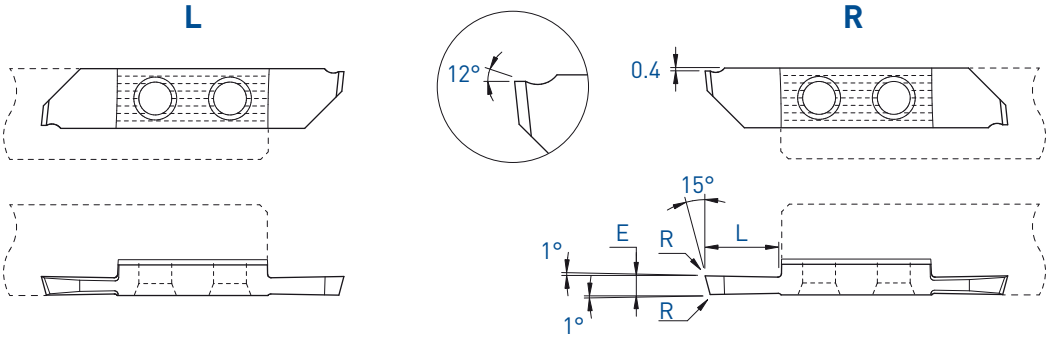


L									R							
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	**751XF-1.5**	●	●	●	●		●	**761XF-1.5**	●	●	●	●		●
2.0	10	**751XF-2.0**	●	●	●	●	●	●	**761XF-2.0**	●	●	●	●	●	●
2.2	10	**751XF-2.2**	●	●	●				**761XF-2.2**	●	●	●			
2.5	10	**751XF-2.5**	●	●	●	●		●	**761XF-2.5**	●	●	●			
3.0	10	**751XF-3.0**	●	●	●				**761XF-3.0**	●	●	●	●		●

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





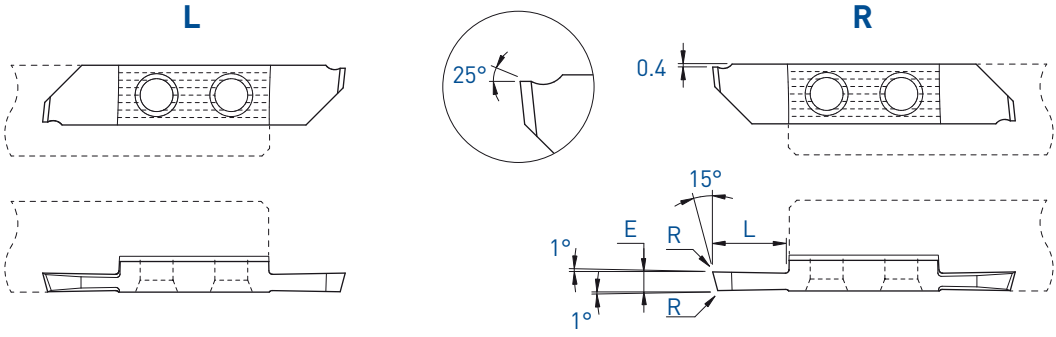
L										R									
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
				P M N S	P M N	P S	P M N S	P M N	P N S		P M N S	P M N	P S	P M N S	P M N	P N S
1.5	7.5	0.03	**751X12-1.5**	●	●	●	●		●	**761X12-1.5**	●	●	●	●		●
2.0	10	0.03	**751X12-2.0**	●	●	●	●		●	**761X12-2.0**	●	●	●	●		●
2.5	10	0.03	**751X12-2.5**	●	●	●				**761X12-2.5**	●	●	●	●		●

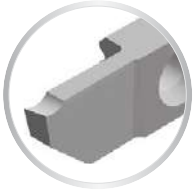
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

751X25 / 761X25

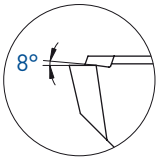


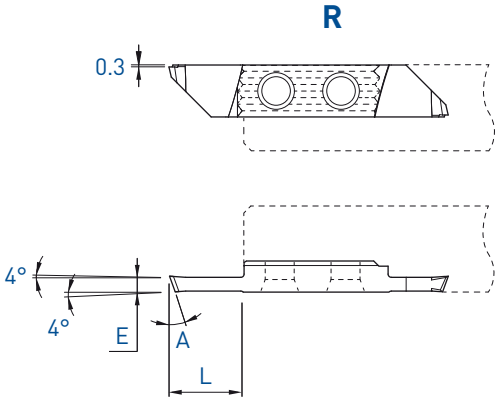


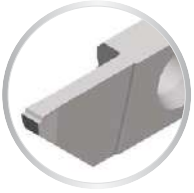
			L							R						
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	0.03	**751X25-1.5**	●	●	●	●		●	**761X25-1.5**	●	●	●			
2.0	10	0.03	**751X25-2.0**	●	●	●				**761X25-2.0**	●	●	●	●		●
2.5	10	0.03	**751X25-2.5**	●	●	●				**761X25-2.5**	●	●	●	●		●

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



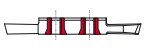






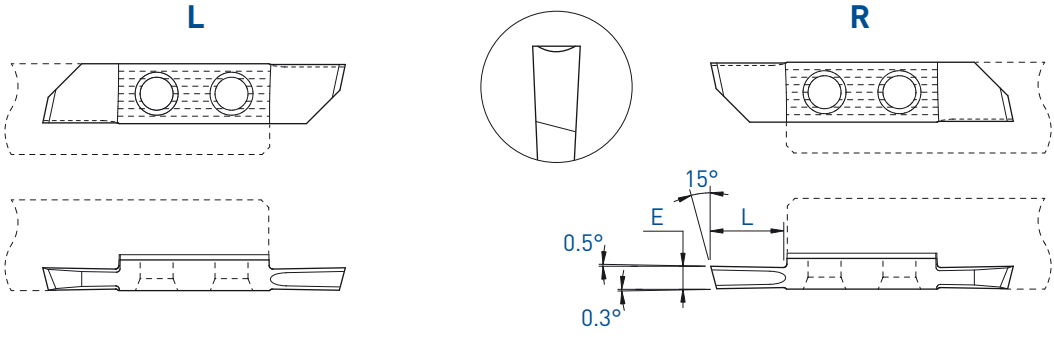
R

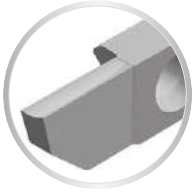
E	L	A	Art. N°	HCR-TF	HN (µk10)
				N S	P N S
1.4	10	20°	**761X840-1.4-20**	●	●
2	11	5°	**761X840-2.0-5**	●	●
2.5	11	5°	**761X840-2.5-5**	●	●
1.9	11	20°	**761X840-1.9-20**	●	●
2.4	11	20°	**761X840-2.4-20**	●	●



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

751U / 761U

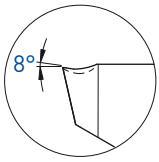


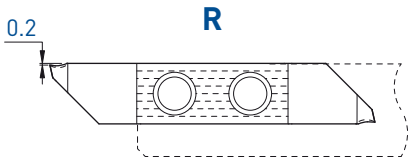


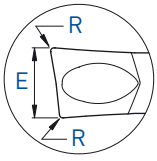
		L							R						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	-							**761U-1.5**	●	●	●	●		●
2.0	10	**751U-2.0**	●	●	●				**761U-2.0**	●	●	●			●

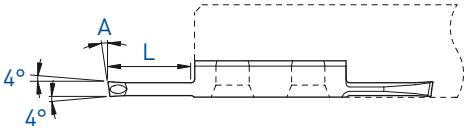
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05













R

E	A	L	R	Art. N°	TiAlN	N (µK20)
2.0	0°	11	0.10	**761ZU8-2.0-R10**	●	
2.0	8°	11	0.10	**761ZU8-2.0-8°-R10**	●	



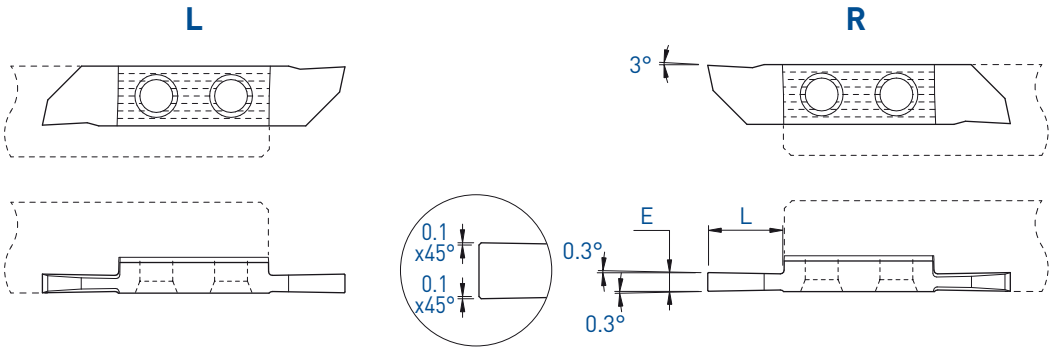
Arête de coupe honée
Gehonte Schneidkante
Honed edge

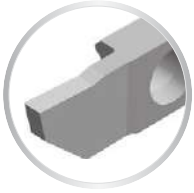
f min: 0.02 mm/U



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

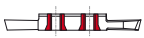
751NXF / 761NXF





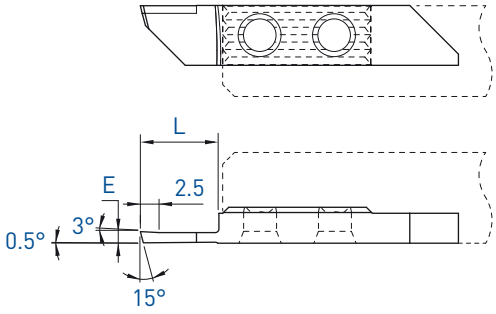
L										R							
E	L	Art. N°	P M N S	P M N	P S	P M N S	P M N	P N S	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	P M N S	P M N	P S	P M N S	P M N	P N S
2.0	10	**751NXF-2.0**	●	●	●	●		●							**761NXF-2.0**	●	●	●	●	●	●
2.5	10	**751NXF-2.5**	●	●	●										**761NXF-2.5**	●	●	●			
3.0	10	**751NXF-3.0**	●	●	●										**761NXF-3.0**	●	●	●			

7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

R





		R	
E	L	Art. N°	PCD
1.5	10	**761-1.5-PCD**	●
2	11	**761-2.0-PCD**	●
2.5	11	**761-2.5-PCD**	●

7XX-XX-B

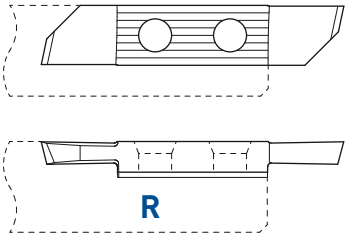
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

761L / 751R

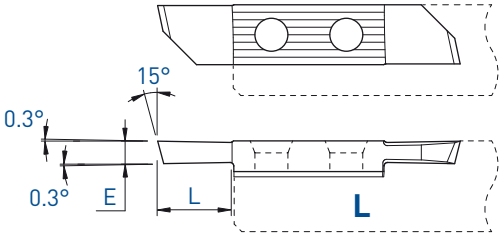
Coupe déportée
Versetztes Schneiden
Cut off line

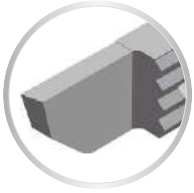
Tronçonnage
Abstechen
Parting off

Cut L



Cut R





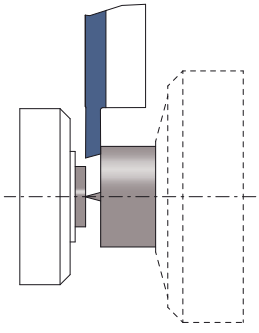
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M S TiAlX	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
1.0	5	**761L-1.0**	●	●	●	●		●	**751R-1.0**	●	●	●	●	●		●
1.5	7.5	**761L-1.5**	●	●	●	●		●	**751R-1.5**	●	●	●	●	●		●
1.8	7.5	**761L-1.8**	●	●	●				**751R-1.8**	●	●	●	●	●		●
2.0	10	**761L-2.0**	●	●	●	●		●	**751R-2.0**	●	●	●	●	●	●	●
2.2	10	**761L-2.2**	●	●	●				**751R-2.2**	●	●	●	●			
2.5	10	**761L-2.5**	●	●	●	●		●	**751R-2.5**	●	●	●	●	●	●	●
3.0	10	**761L-3.0**	●	●	●				**751R-3.0**	●	●	●	●	●		●

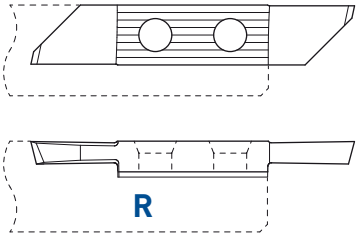


Tronçonnage
Abstechen
Parting off

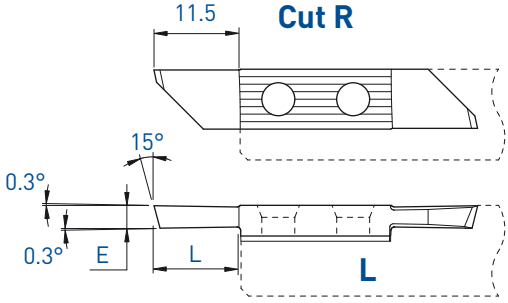
Coupe déportée
Versetztes Schneiden
Cut off line

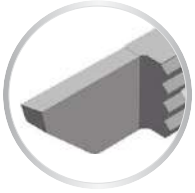
761LS / 751RS

Cut L

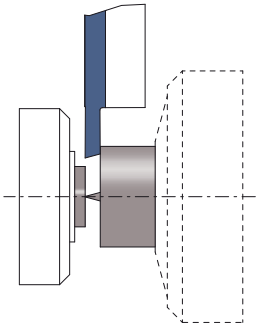


Cut R





R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line										L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line									
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)		
1.0	5.5	**761LS-1.0**	●	●	●	●		●		**751RS-1.0**	●	●	●	●	●		●		
1.5	8	**761LS-1.5**	●	●	●	●		●		**751RS-1.5**	●	●	●	●	●		●		
2.0	11.5	**761LS-2.0**	●	●	●					**751RS-2.0**	●	●	●	●	●	●	●		
2.2	11.5	**761LS-2.2**	●	●	●					**751RS-2.2**	●	●	●	●	●		●		
2.5	11.5	**761LS-2.5**	●	●	●					**751RS-2.5**	●	●	●	●	●	●	●		
3.0	11.5	**761LS-3.0**	●	●	●					**751RS-3.0**	●	●	●	●	●		●		

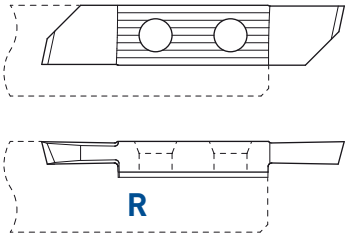


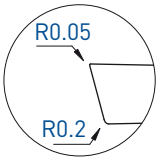
761L-R05 / 751R-R05

Coupe déportée
Versetztes Schneiden
Cut off line

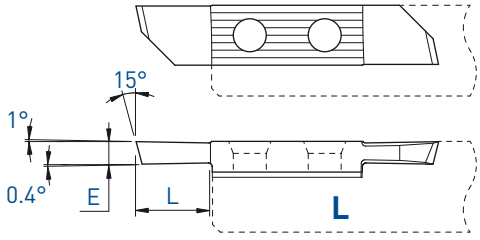
Tronçonnage
Abstechen
Parting off

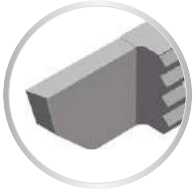
Cut L





Cut R





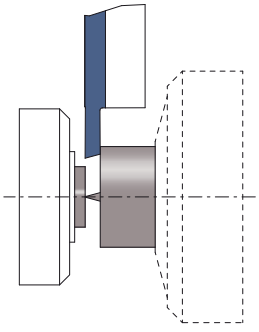
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
			P M N S	P M N	P M S	P M N S	P M N	P M N S		P M N S	P M S	P M N	P S	P M N S	P M N	P M N S
1.5	7.5	**761L-1.5-R05**	●	●	●				**751R-1.5-R05**	●	●	●	●	●		●
2.0	10	**761L-2.0-R05**	●	●	●				**751R-2.0-R05**	●	●	●	●			

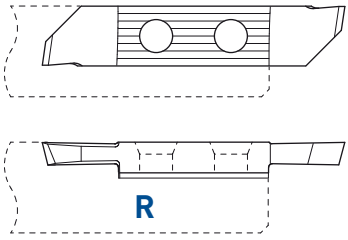


Tronçonnage
Abstechen
Parting off

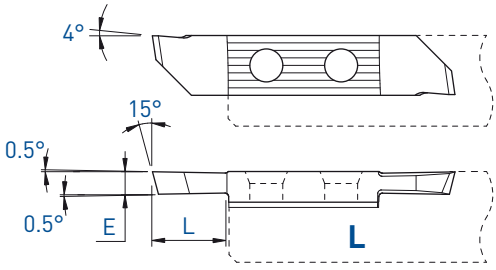
Coupe déportée
Versetztes Schneiden
Cut off line

761LX4 / 751RX4

Cut L

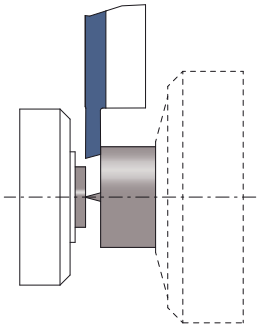


Cut R





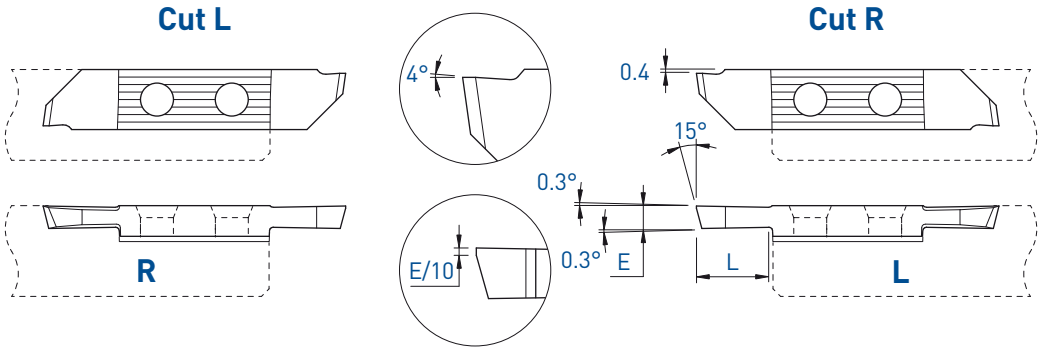
		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line							L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	-							**751RX4-1.5**	●	●	●	●	●	●
2.0	10	**761LX4-2.0**	●	●	●				**751RX4-2.0**	●	●	●	●	●	●
2.5	10	-							**751RX4-2.5**	●	●	●			



761LXF / 751RXF

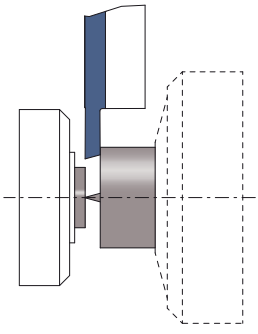
Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off





		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line							L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	-							751RXF-1.5	●	●	●	●		●
2.0	10	761LXF-2.0	●	●	●				751RXF-2.0	●	●	●	●	●	●
2.5	10	761LXF-2.5	●	●	●				751RXF-2.5	●	●	●	●		●
3.0	10	761LXF-3.0	●	●	●				751RXF-3.0	●	●	●	●		●

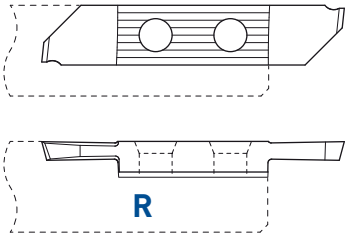


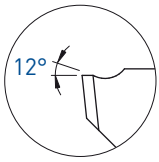
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

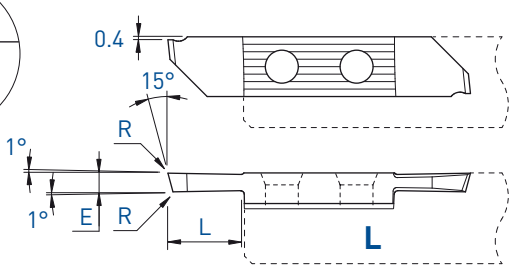
761LX12 / 751RX12

Cut L



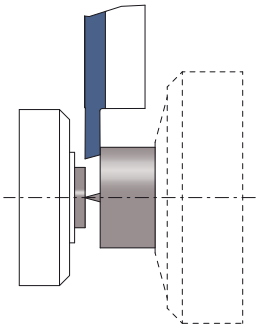


Cut R





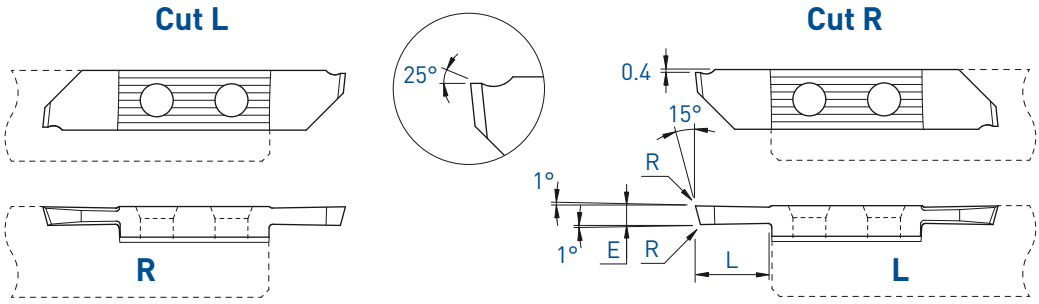
			R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line							L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line						
E	L	R	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
1.5	7.5	0.03	-							**751RX12-1.5**	●	●	●			
2.0	10	0.03	**761LX12-2.0**	●	●	●				**751RX12-2.0**	●	●	●	●	●	●

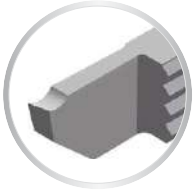


761LX25 / 751RX25

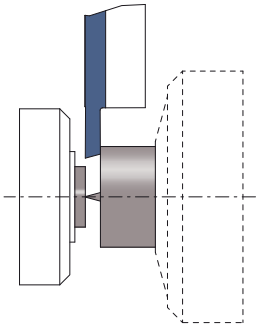
Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

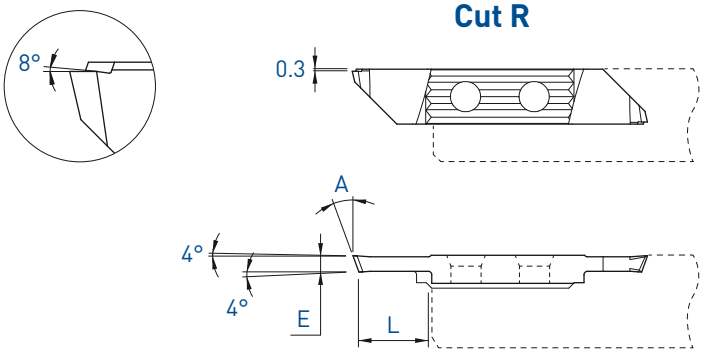


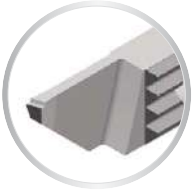


			R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.0	10	0.03	**761LX25-2.0**	●	●	●	**751RX25-2.0**	●	●	●



Cut R





L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

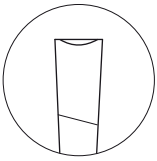
E	L	A	Art. N°	HCR-TF	HN (µk10)
1.4	10	20°	**751RX840-1.4-20**	●	●
1.5	10	5°	**751RX840-1.5-5**	●	●
2	11	5°	**751RX840-2.0-5**	●	●
2.5	11	5°	**751RX840-2.5-5**	●	●
1.9	11	20°	**751RX840-1.9-20**	●	●
2.4	11	20°	**751RX840-2.4-20**	●	●

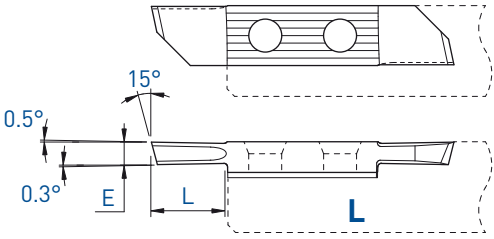
751RU

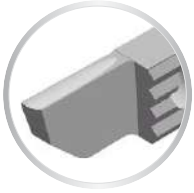
Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

Cut R





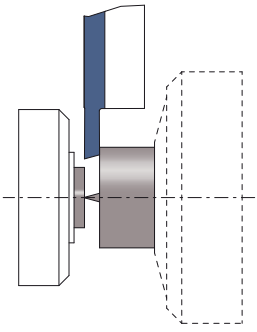


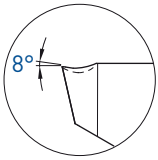


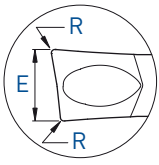
L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

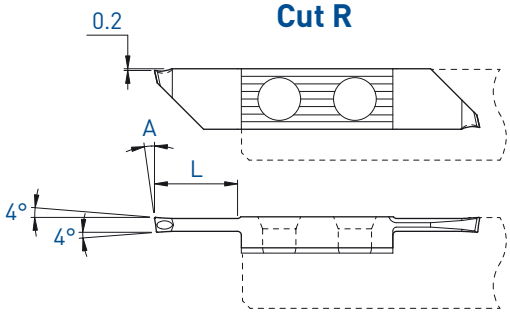
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)
1.5	7.5	**751RU-1.5**	●	●	●
2.0	10	**751RU-2.0**	●	●	●







Cut R





R (L)



Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

E	A	L	R	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)
2.0	8°	11.0	0.10	**751RZU8-2.0-8°-R10**	●		



Arête de coupe honée
Gehonte Schneidkante
Honed edge

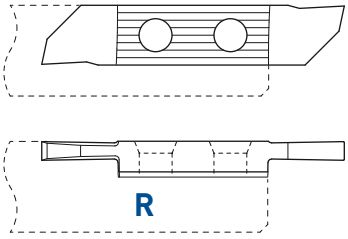
f min: 0.02 mm/U

761NXF / 751NXF

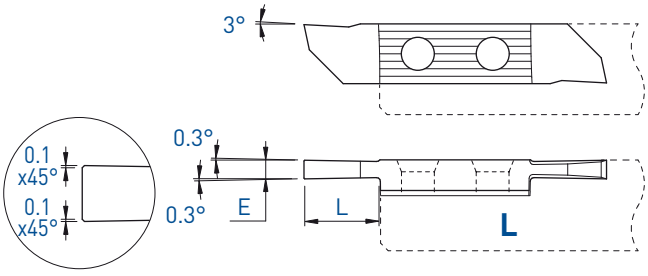
Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

Cut L

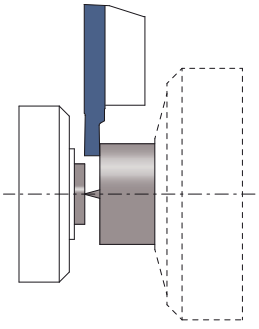


Cut R





R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line										L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line									
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)			
2.0	10	**761NXF-2.0**	●	●	●	●		●		**751NXF-2.0**	●	●	●	●		●			
2.5	10	**761NXF-2.5**	●	●	●					**751NXF-2.5**	●	●	●						
3.0	10	**761NXF-3.0**	●	●	●					**751NXF-3.0**	●	●	●						

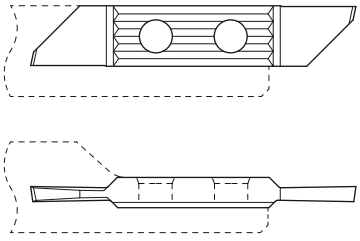


Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

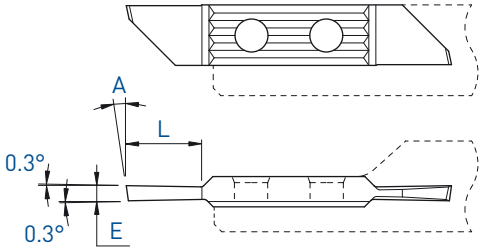
761LD / 751RD

Cut L

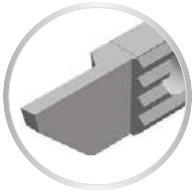


R

Cut R



L



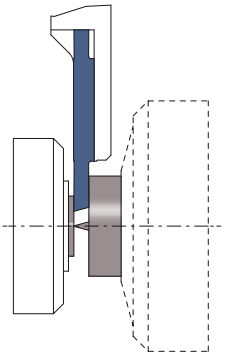
R (L)

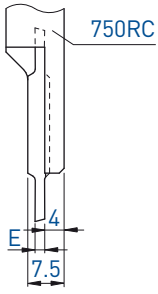
Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
				P M N S	P M N	P S	P M N S	P M N	P N S		P M N S	P M N	P S	P M N S	P M N	P N S
1.0	8°	5	**761LD-1.0-8°**	●	●	●	●		●	**751RD-1.0-8°**	●	●	●	●		●
1.0	15°	5	**761LD-1.0-15°**	●	●	●	●		●	**751RD-1.0-15°**	●	●	●	●		●
1.2	8°	5	**761LD-1.2-8°**	●	●	●				**751RD-1.2-8°**	●	●	●	●	●	●
1.5	8°	8	**761LD-1.5-8°**	●	●	●				**751RD-1.5-8°**	●	●	●	●	●	●
1.5	15°	8	**761LD-1.5-15°**	●	●	●				**751RD-1.5-15°**	●	●	●	●		●
1.6	8°	8	**761LD-1.6-8°**	●	●	●				**751RD-1.6-8°**	●	●	●			
1.8	8°	10	**761LD-1.8-8°**	●	●	●				**751RD-1.8-8°**	●	●	●	●		●
2.0	8°	10	**761LD-2.0-8°**	●	●	●				**751RD-2.0-8°**	●	●	●	●		●
2.0	15°	10	**761LD-2.0-15°**	●	●	●	●		●	**751RD-2.0-15°**	●	●	●	●		●
2.5	8°	10	-							**751RD-2.5-8°**	●	●	●	●		●



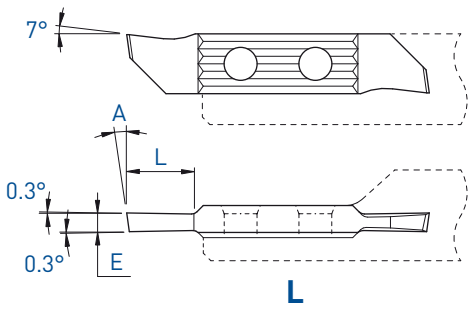


751RAS

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

Cut R

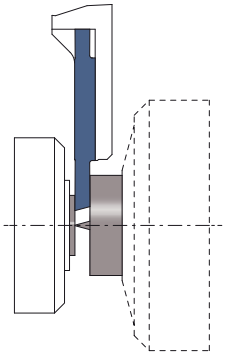


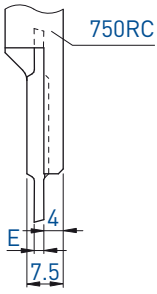


L (R)

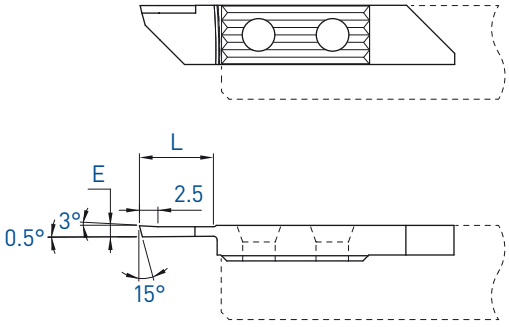
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

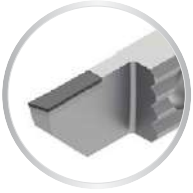
E	A	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
				P M N S	P M N	P S	P M N S	P M N	P N S
1.6	8°	7.5	**751RAS-1.6-8°**	●	●	●			
1.6	15°	7.5	**751RAS-1.6-15°**	●	●	●	●		●
2.0	8°	9	**751RAS-2.0-8°**	●	●	●	●		●
2.0	15°	9	**751RAS-2.0-15°**	●	●	●			
2.5	8°	9	**751RAS-2.5-8°**	●	●	●			
2.5	15°	9	**751RAS-2.5-15°**	●	●	●			





Cut R







L (R)

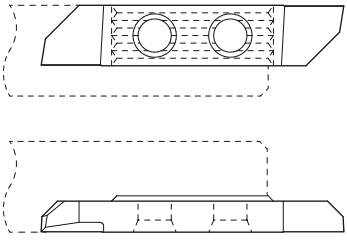
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	PCD
1.5	10	**751R-1.5-PCD**	●
2	11	**751R-2.0-PCD**	●
2.5	11	**751R-2.5-PCD**	●

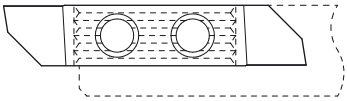
752 / 762

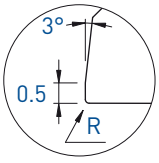
Tournage avant
Vorwärts drehen
Front turning

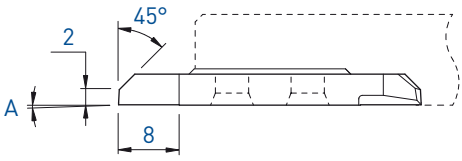
L



R









		L							R						
A	R	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)
0°	0	**752**	●	●	●	●		●	**762**	●	●	●	●		●
0°	0.20	**-**							**762-R20**	●	●	●	●		●
3°	0	**752-3°**	●	●	●	●		●	**762-3°**	●	●	●	●		●
3°	0.20	**-**							**762-3°-R20**	●	●	●	●	●	●

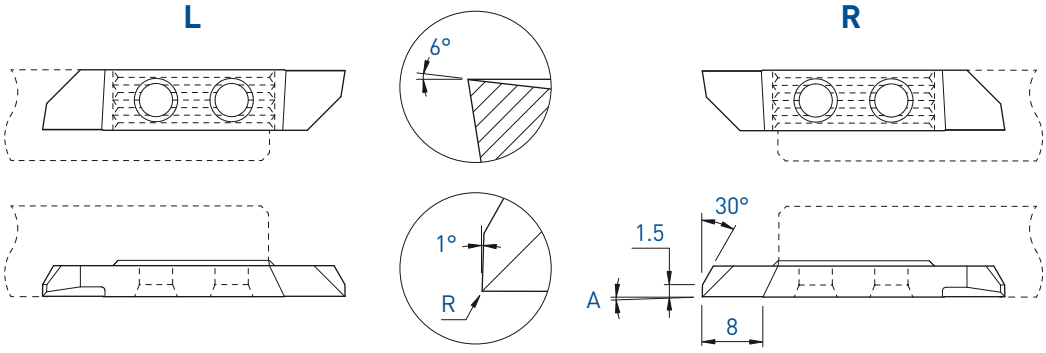
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage avant
Vorwärts drehen
Front turning

752PX / 762PX





		L				R			
A	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
0°	0	752PX	●	●	●	762PX	●	●	●

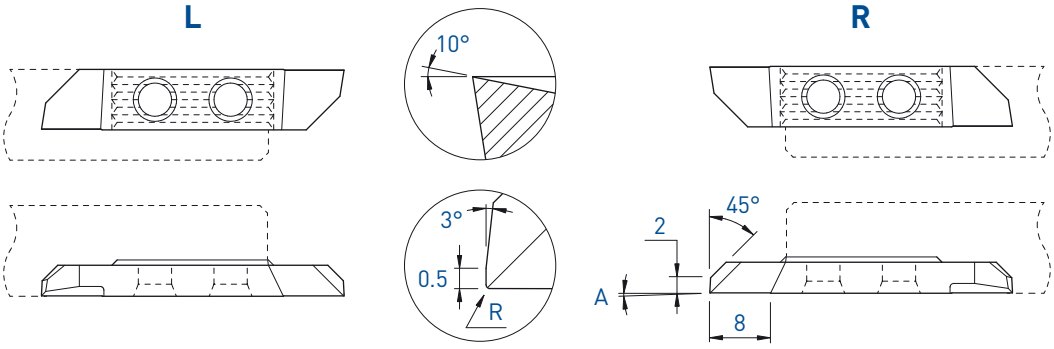
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

752X / 762X

Tournage avant
Vorwärts drehen
Front turning



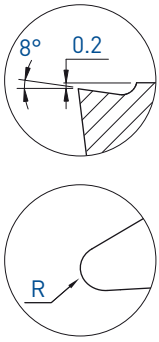


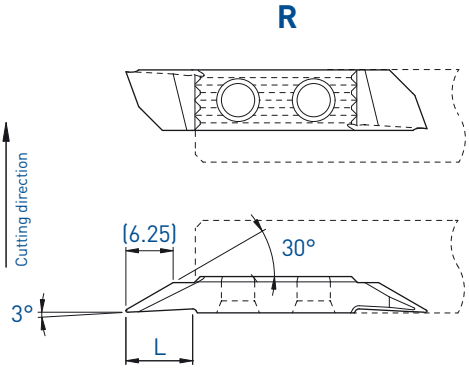
		L							R						
A	R	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)
0°	0	752X	●	●	●	●	●	●	762X	●	●	●	●	●	●
0°	0.20	752X-R20	●	●	●				762X-R20	●	●	●	●	●	●
3°	0	-							762X-3°	●	●	●	●	●	●
3°	0.20	-							762X-3°-R20	●	●	●	●	●	●



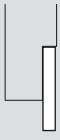
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage avant
Vorwärts drehen
Front turning









R

L	R	Art. N°	HTA	HTiN	HN (µk10)
			P M N S	P M N	P N S
9	0.15	**762VX-800-R15**	●		●

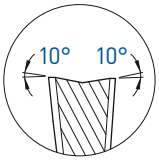
7XX-XX-B

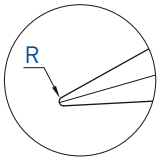


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

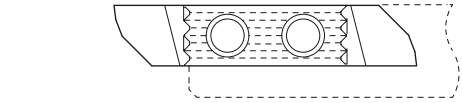
762VUX

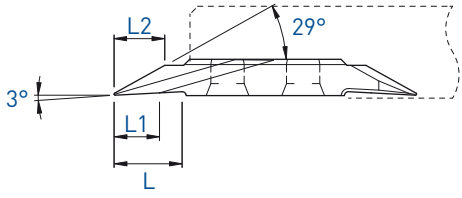
Tournage avant
Vorwärts drehen
Front turning



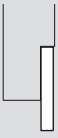


R





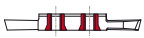




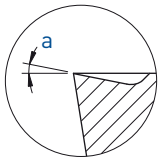
R

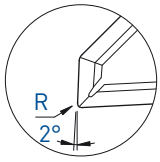
L	L1	L2	R	Art. N°	TiAlN	N (μk20)	HTA	HN (μk10)
9	6	6.9	0.08	**762VUX10-29°-R08**	●	●	●	●
9	6	6.7	0.15	**762VUX10-29°-R15**	●	●	●	●
9	6	6.1	0.35	**762VUX10-29°-R35**	●	●	●	●
9	6	4.9	0.75	**762VUX10-29°-R75**	●	●	●	●

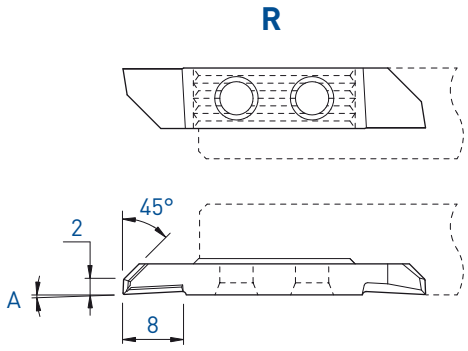
7XX-XX-B



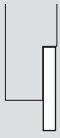
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05











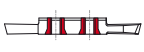
R

a	A	R	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)
10°	3°	0.08	**762ZX10-R08**	●		
	3°	0.20	**762ZX10-R20**	●	●	

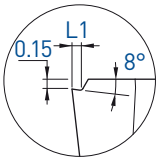


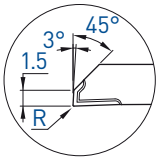
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

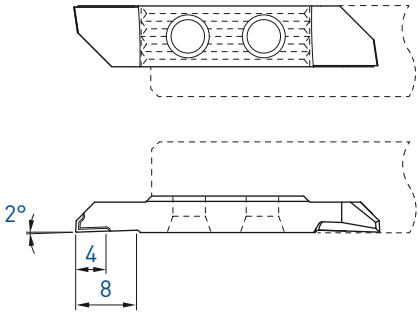


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

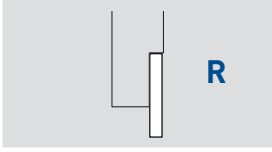




R



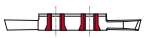




R

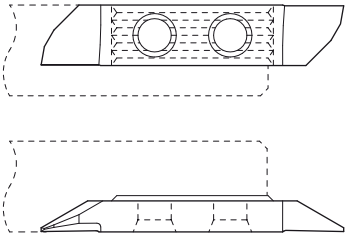
L1	R	Art . N°	KCR	KN (µk10-20)
			N S	P M N S
0.24	0.03	**762ZF-X824-R03**	●	●
0.36	0.08	**762ZF-X836-R08**	●	●
0.48	0.08	**762ZF-X848-R08**	●	●

7XX-XX-B

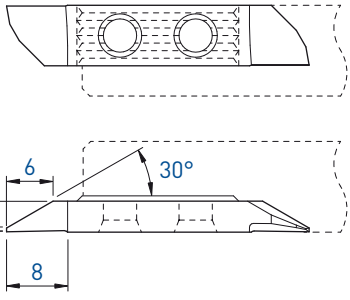


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R





Tournage avant
Vorwärts drehen
Front turning

L							R							
Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
	P M N S	P M N	P S	P M N S	P M N	P N S		P M N S	P M S	P M N	P S	P M N S	P M N	P N S
752S05	●	●	●	●		●	762S05	●	●	●	●	●	●	●

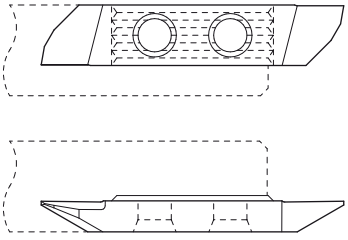
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

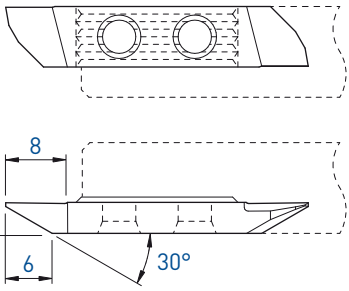
753S / 763S

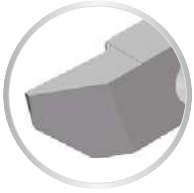
Tournage multifonction
Mehrzweck Drehen
Multifunction turning

L



R





Tournage arrière
Rückwärts drehen
Back turning

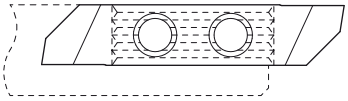
L							R									
Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiAlX	TiN	N (µK20)	HTA	HTiN	HN (µK10)
753S05	●	●	●	●	●	●	763S05	●	●	●	●	●	●	●

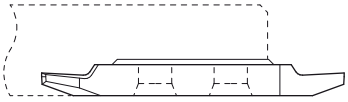
7XX-XX-B



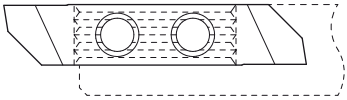
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

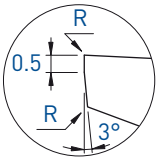
L

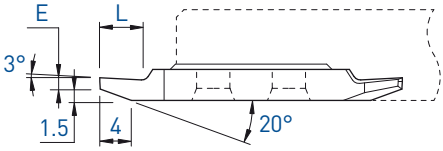


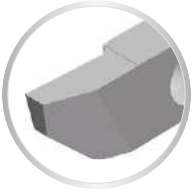


R









L										R									
E	L	R	Art. N°	P M N S	P M N	P N S	P M N S	P M N	P M N S	Art. N°	P M N S	P M N	P N S	P M N S	P M N	P M N S	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	0	**753-1.0**	●	●	●	●		●	**763-1.0**	●	●	●	●	●	●			
1.0	5	0.08	**753-1.0-R08**	●	●	●				**763-1.0-R08**	●	●	●	●		●			
1.5	6	0	**753-1.5**	●	●	●				**763-1.5**	●	●	●	●		●			
2.0	7.5	0	**753-2.0**	●	●	●				**763-2.0**	●	●	●	●		●			
2.5	9	0	**753-2.5**	●	●	●				**763-2.5**	●	●	●	●		●			

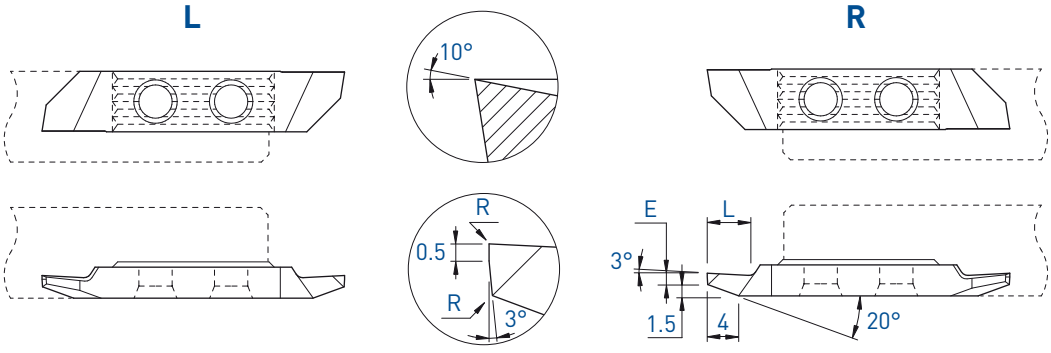
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

753X / 763X

Tournage arrière
Rückwärts drehen
Back turning

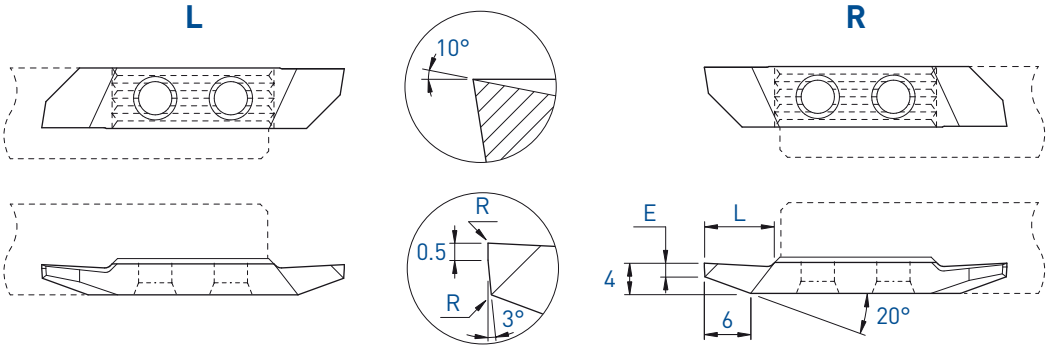




L										R								
E	L	R	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)
1.0	5	0	**753X-1.0**	●	●	●				**763X-1.0**	●	●	●	●		●
1.0	5	0.08	**753X-1.0-R08**	●	●	●	●		●	**763X-1.0-R08**	●	●	●	●		●
1.0	5	0.20	**753X-1.0-R20**	●	●	●				**763X-1.0-R20**	●	●	●			
1.5	6	0	**753X-1.5**	●	●	●				**763X-1.5**	●	●	●	●		●
1.5	6	0.20	**753X-1.5-R20**	●	●	●				**763X-1.5-R20**	●	●	●			
2.0	7.5	0	**753X-2.0**	●	●	●				**763X-2.0**	●	●	●			
2.0	7.5	0.20	**753X-2.0-R20**	●	●	●				**763X-2.0-R20**	●	●	●			
2.5	9	0	**753X-2.5**	●	●	●				**763X-2.5**	●	●	●			
2.5	9	0.20	**753X-2.5-R20**	●	●	●				**763X-2.5-R20**	●	●	●			

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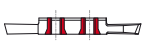
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





L										R								
E	L	R	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
1.8	9	0	**753XS-1.8**	●	●	●				**763XS-1.8**	●	●	●	●		●
1.8	9	0.20	**753XS-1.8-R20**	●	●	●				**763XS-1.8-R20**	●	●	●			

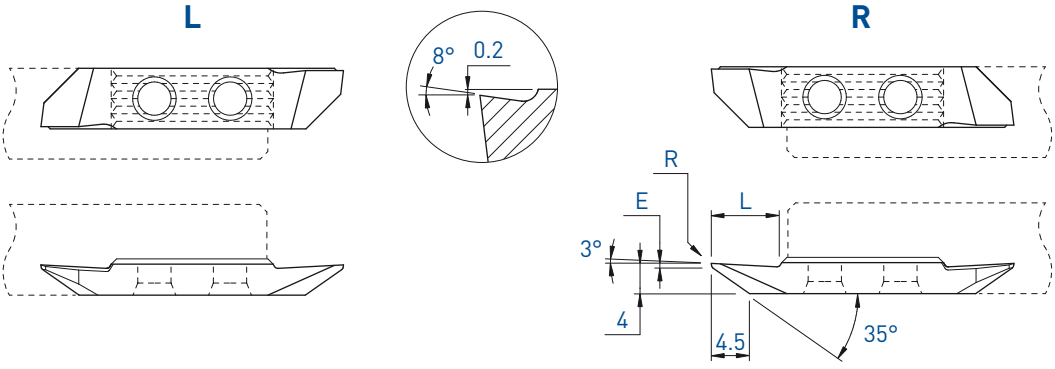
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

753VX-8° / 763VX-8°

Tournage arrière
Rückwärts drehen
Back turning





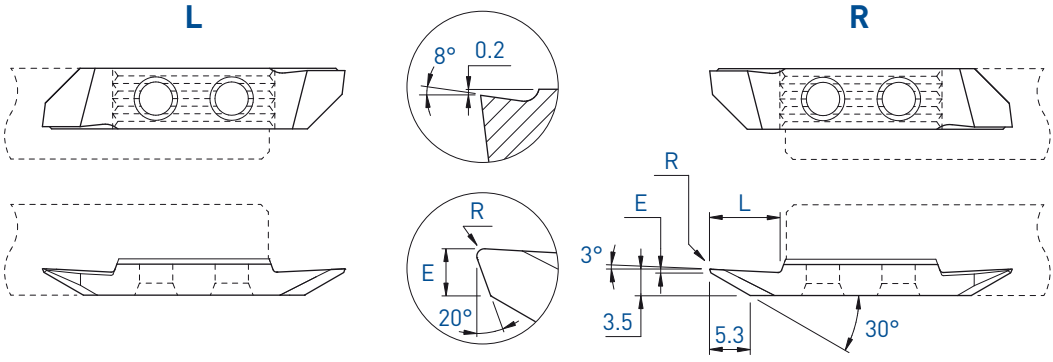
L										R								
E	L	R	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	P M N S HTA	P M N HTiN	P N S HN (µk10)
1.0	9	0	**753VX-8°**	●	●	●				**763VX-8°**	●	●	●	●	●	●
1.0	9	0.08	**753VX-8°-R08**	●	●	●				**763VX-8°-R08**	●	●	●	●		●
1.0	9	0.20	-							**763VX-8°-R20**	●	●	●			

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning

753VX-805 / 763VX-805





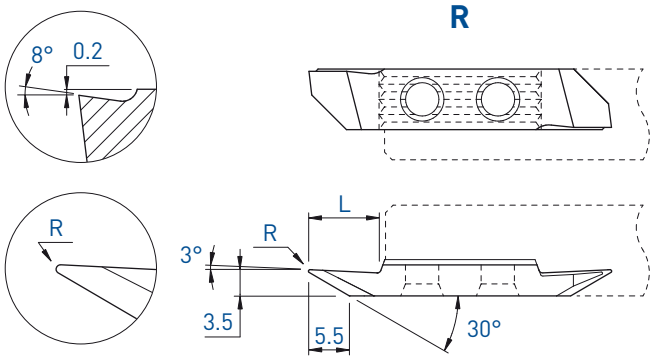
			L							R						
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	9	0.08	**753VX-805-R08**	●	●	●	●		●	**763VX-805-R08**	●	●	●	●		●

7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

763VX-800

Tournage arrière
Rückwärts drehen
Back turning





R

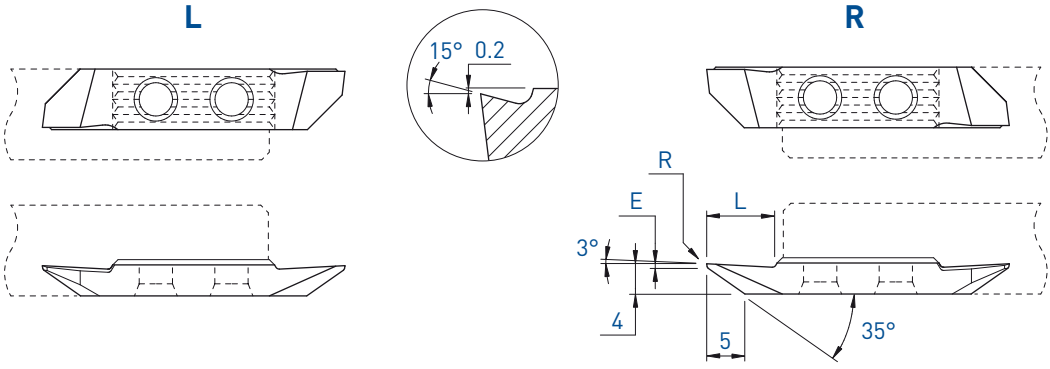
L	R	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)
			P M N S	P M N	P S	P M N S	P M N	P N S
9	0.08	**763VX-800-R08**	●	●	●	●		●
9	0.20	**763VX-800-R20**	●	●	●	●		●

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning

753VX-15° / 763VX-15°





			L							R						
				P M N S	P M N	P S	P M N S	P M N	P N S		P M N S	P M N	P S	P M N S	P M N	P N S	
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	
0.6	9	0	**753VX-15°**	●	●	●				**763VX-15°**	●	●	●	●		●	
0.6	9	0.08	**753VX-15°-R08**	●	●	●				**763VX-15°-R08**	●	●	●	●		●	

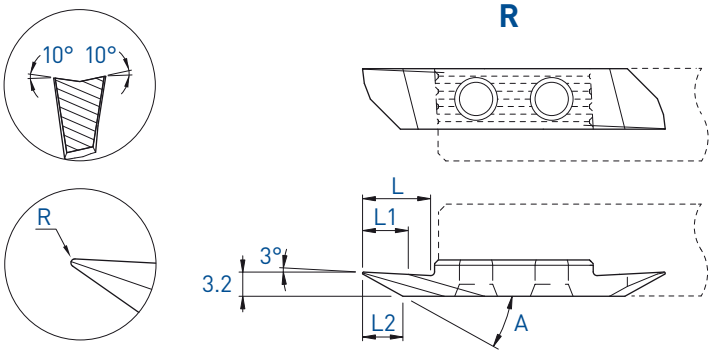
7XX-XX-B



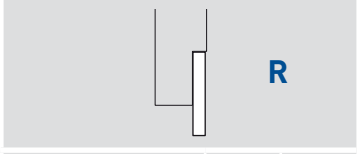
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

763VUX

Tournage arrière
Rückwärts drehen
Back turning

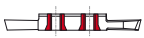




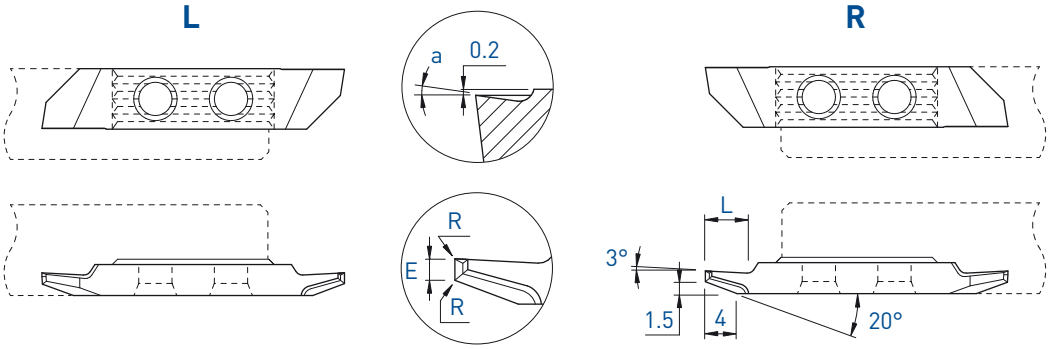


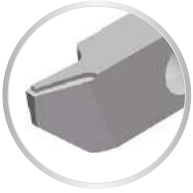
L	L1	L2	A	R	Art. N°	P M N S TiAlN	P S N (µk20)	P M N S HTA	P N S HN (µk10)
9	6	5.6	29°	0.05	**763VUX10-29°-R05**	●	●	●	●
9	6	5.5	29°	0.08	**763VUX10-29°-R08**	●	●	●	●
9	6	5.3	29°	0.15	**763VUX10-29°-R15**	●	●	●	●
9	6	4.7	29°	0.35	**763VUX10-29°-R35**	●	●	●	●
9	6	3.6	29°	0.75	**763VUX10-29°-R75**	●	●	●	●
9	6	4.2	35°	0.15	**763VUX10-35°-R15**	●	●	●	●
9	6	3.8	35°	0.35	**763VUX10-35°-R35**	●	●	●	●

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

a	E	L	R	L Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	R Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)
10°	1.0	5	0.01	**753ZX10-1.0**	●			**763ZX10-1.0**	●	●	
	1.0	5	0.08	-				**763ZX10-1.0-R08**	●	●	
	1.0	5	0.20	-				**763ZX10-1.0-R20**	●	●	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

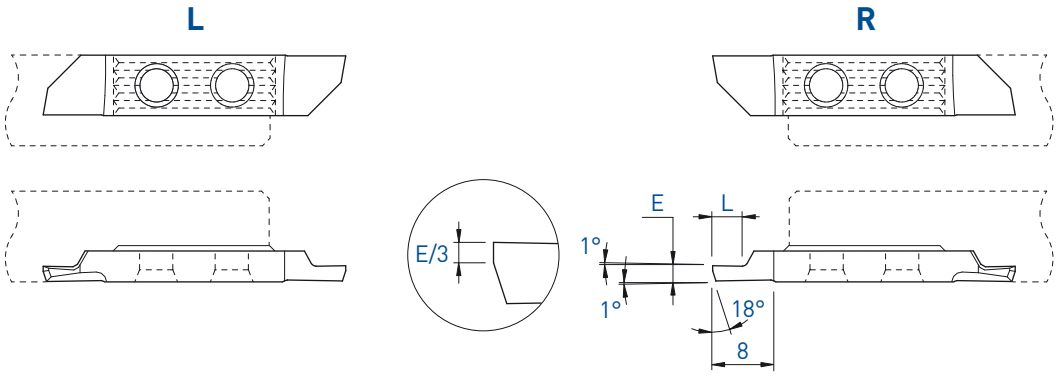
f min: 0.02 mm/U



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

753P / 763P

Tournage arrière / pré-coupe
Rückwärts drehen / vorstechen
Back turning / pre-parting off



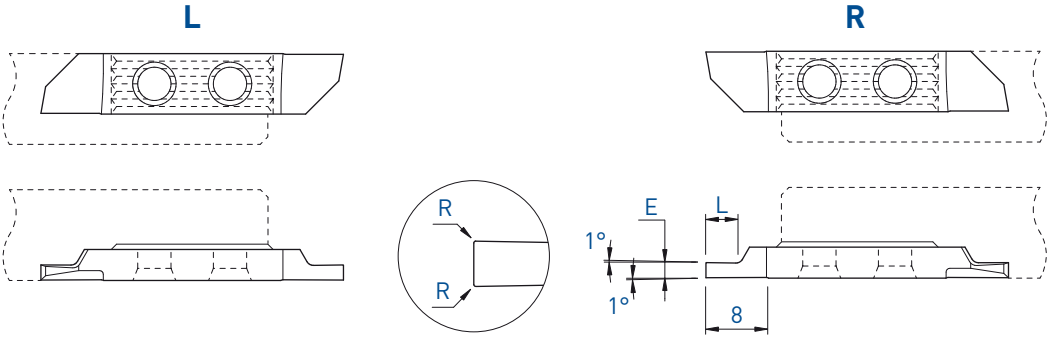


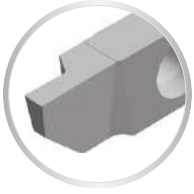
		L				R			
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
1.5	3	**753P-1.5**	●	●	●	**763P-1.5**	●	●	●
1.8	3.5	**753P-1.8**	●	●	●	**763P-1.8**	●	●	●
2.0	4	**753P-2.0**	●	●	●	**763P-2.0**	●	●	●
2.2	5	**753P-2.2**	●	●	●	**763P-2.2**	●	●	●
2.5	6	**753P-2.5**	●	●	●	**763P-2.5**	●	●	●
3.0	6	**753P-3.0**	●	●	●	**763P-3.0**	●	●	●

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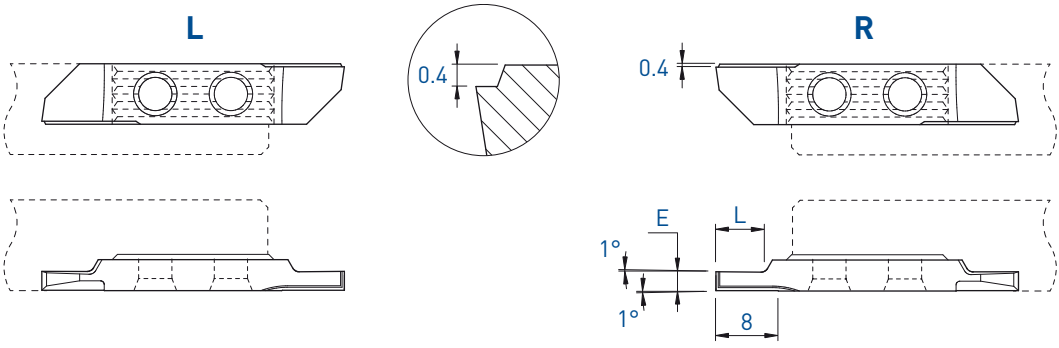
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





L										R								
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	1.5	0	**754-0.5**	●	●	●				**764-0.5**	●	●	●	●	●	●	●
0.75	2	0	**754-0.75**	●	●	●				**764-0.75**	●	●	●	●			
0.8	2	0	-							**764-0.8**	●	●	●	●	●		●
0.95	3	0	**754-0.95**	●	●	●	●		●	**764-0.95**	●	●	●	●			
1.0	2.5	0	**754-1.0**	●	●	●	●		●	**764-1.0**	●	●	●	●	●	●	●
1.0	2.5	0.08	**754-1.0-R08**	●	●	●				**764-1.0-R08**	●	●	●	●	●		●
1.2	3	0	**754-1.2**	●	●	●				**764-1.2**	●	●	●	●	●		●
1.5	3	0	**754-1.5**	●	●	●	●		●	**764-1.5**	●	●	●	●	●	●	●
1.5	3	0.08	**754-1.5-R08**	●	●	●	●		●	**764-1.5-R08**	●	●	●	●	●		●
1.5	3	0.15	-							**764-1.5-R15**	●	●		●	●		●
1.5	3	0.20	-							**764-1.5-R20**	●	●	●	●	●	●	●
1.8	4	0	**754-1.8**	●	●	●				**764-1.8**	●	●	●	●			
2.0	4	0	**754-2.0**	●	●	●	●	●	●	**764-2.0**	●	●	●	●	●	●	●
2.0	4	0.08	**754-2.0-R08**	●	●	●	●		●	**764-2.0-R08**	●	●	●	●	●		●
2.0	4	0.15	-							**764-2.0-R15**	●	●		●	●		●
2.0	4	0.20	**754-2.0-R20**	●	●	●				**764-2.0-R20**	●	●	●	●	●	●	●
2.5	6	0	**754-2.5**	●	●	●				**764-2.5**	●	●	●	●	●		●
2.5	6	0.15	-							**764-2.5-R15**	●	●		●	●		●
2.5	6	0.20	-							**764-2.5-R20**	●	●	●	●	●		●
3.0	6	0	**754-3.0**	●	●	●	●		●	**764-3.0**	●	●	●	●	●		●
3.0	6	0.08	**754-3.0-R08**	●	●	●				**764-3.0-R08**	●	●	●	●	●		●
3.0	6	0.15	-							**764-3.0-R15**	●	●		●	●		●
3.0	6	0.20	**754-3.0-R20**	●	●	●	●		●	**764-3.0-R20**	●	●	●	●			
4.0	8	0	**754-4.0**	●	●	●	●	●	●	**764-4.0**	●	●	●	●	●		●

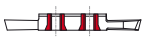
754VS / 764VS



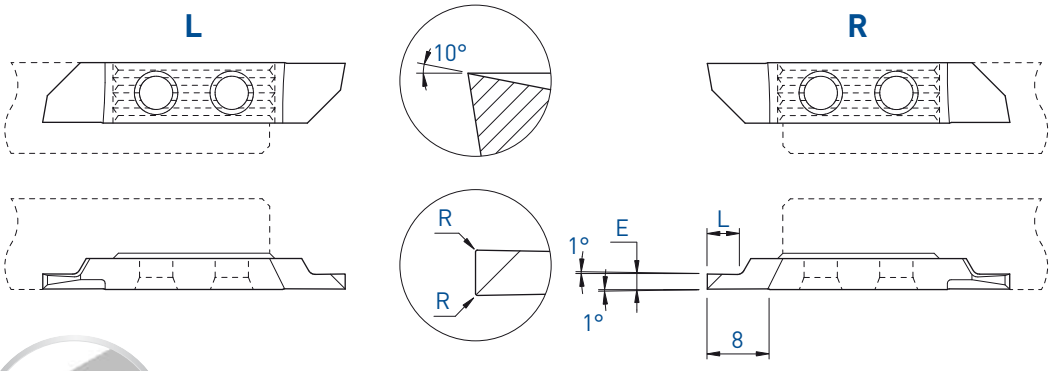


L									R							
E	L	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)
1.0	2	**754VS-1.0**	●	●	●				**764VS-1.0**	●	●	●			
1.2	2.5	**754VS-1.2**	●	●	●	●		●	**764VS-1.2**	●	●	●			
1.5	3	**754VS-1.5**	●	●	●				**764VS-1.5**	●	●	●			
2.0	4	**754VS-2.0**	●	●	●				**764VS-2.0**	●	●	●			
2.5	6	**754VS-2.5**	●	●	●				**764VS-2.5**	●	●	●	●		●
3.0	6	**754VS-3.0**	●	●	●				**764VS-3.0**	●	●	●			

7XX-XX-B

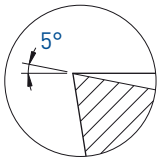


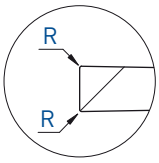
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



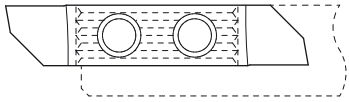


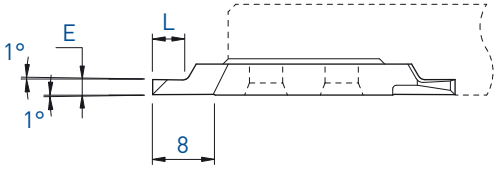
L										R									
E	L	R	Art. N°	P M N S TiAlN	P M N TiN	P M S N (µK20)	P M N S HTA	P M N HTiN	P M N S HN (µK10)	Art. N°	P M N S ST	P M N S TiAlN	P M S TiAlX	P M N TiN	P M S N (µK20)	P M N S HTA	P M N HTiN	P M N S HN (µK10)
1.0	2.5	0	**754X-1.0**	●	●	●	●	●	●	**764X-1.0**		●	●	●	●	●		●
1.0	2.5	0.08	**754X-1.0-R08**	●	●	●	●		●	**764X-1.0-R08**	●	●	●	●	●	●	●	●
1.0	2.5	0.20	-							**764X-1.0-R20**	●	●	●	●	●			
1.2	3	0	**754X-1.2**	●	●	●				**764X-1.2**		●	●	●	●	●		●
1.2	3	0.08	-							**764X-1.2-R08**	●	●	●	●	●			
1.5	3	0	**754X-1.5**	●	●	●	●		●	**764X-1.5**		●	●	●	●	●	●	●
1.5	3	0.08	**754X-1.5-R08**	●	●	●	●		●	**764X-1.5-R08**	●	●	●	●	●	●		●
1.5	3	0.15	-							**764X-1.5-R15**	●	●	●		●	●		●
1.5	3	0.20	**754X-1.5-R20**	●	●	●				**764X-1.5-R20**	●	●	●	●	●	●	●	●
1.8	4	0	**754X-1.8**	●	●	●				**764X-1.8**		●	●	●	●	●		●
1.8	4	0.20	-							**764X-1.8-R20**	●	●	●	●	●			
2.0	4	0	**754X-2.0**	●	●	●	●		●	**764X-2.0**		●	●	●	●	●	●	●
2.0	4	0.08	**754X-2.0-R08**	●	●	●	●		●	**764X-2.0-R08**	●	●	●	●	●	●	●	●
2.0	4	0.15	-							**764X-2.0-R15**	●	●	●		●	●		●
2.0	4	0.20	**754X-2.0-R20**	●	●	●	●		●	**764X-2.0-R20**	●	●	●	●	●	●		●
2.0	4	0.35	-							**764X-2.0-R35**	●	●	●		●	●		●
2.5	6	0	**754X-2.5**	●	●	●	●	●	●	**764X-2.5**		●	●	●	●	●	●	●
2.5	6	0.15	-							**764X-2.5-R15**	●	●	●		●	●		●
2.5	6	0.20	**754X-2.5-R20**	●	●	●	●		●	**764X-2.5-R20**	●	●	●	●	●	●		●
2.5	6	0.35	-							**764X-2.5-R35**	●	●	●		●	●		●
3.0	6	0	**754X-3.0**	●	●	●				**764X-3.0**		●	●	●	●	●		●
3.0	6	0.08	**754X-3.0-R08**	●	●	●				**764X-3.0-R08**	●	●	●	●	●	●		●
3.0	6	0.15	-							**764X-3.0-R15**	●	●	●	●	●	●		●
3.0	6	0.20	**754X-3.0-R20**	●	●	●				**764X-3.0-R20**	●	●	●	●	●	●		●
3.0	6	0.35	-							**764X-3.0-R35**	●	●	●		●	●		●
4.0	8	0	**754X-4.0**	●	●	●				**764X-4.0**		●	●	●	●	●		●
4.0	8	0.20	**754X-4.0-R20**	●	●	●				**764X-4.0-R20**	●	●	●	●	●	●		●
4.0	8	0.35	-							**764X-4.0-R35**	●	●	●		●	●		●





R









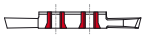
R

E	L	R	Art. N°	ST	TiAlN	TiAlX	TiN	N (µK20)
1.5	3	0.08	**764X5-1.5-R08-EP**	●	●	●	●	●
2.0	4	0.08	**764X5-2.0-R08-EP**	●	●	●	●	●
2.5	6	0.08	**764X5-2.5-R08-EP**	●	●	●	●	●
2.5	6	0.15	**764X5-2.5-R15-EP**	●	●	●	●	●
3.0	6	0.08	**764X5-3.0-R08-EP**	●	●	●	●	●
3.0	6	0.15	**764X5-3.0-R15-EP**	●	●	●	●	●
4.0	8	0.15	**764X5-4.0-R15-EP**	●	●	●	●	●
4.0	8	0.35	**764X5-4.0-R35-EP**	●	●	●	●	●

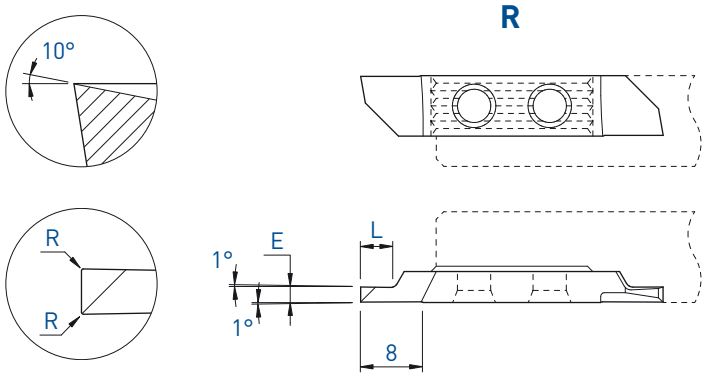


Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





R

E	L	R	Art. N°	ST	TiAlN	TiAlX	TiN	N (µK20)
				P M N S	P M N S	P M S	P M N	P S
1.5	3	0.08	**764X10-1.5-R08-EP**	●	●	●	●	●
2.0	4	0.08	**764X10-2.0-R08-EP**	●	●	●	●	●
2.5	6	0.08	**764X10-2.5-R08-EP**	●	●	●	●	●
2.5	6	0.15	**764X10-2.5-R15-EP**	●	●	●	●	●
3.0	6	0.08	**764X10-3.0-R08-EP**	●	●	●	●	●
3.0	6	0.15	**764X10-3.0-R15-EP**	●	●	●	●	●
4.0	8	0.15	**764X10-4.0-R15-EP**	●	●	●	●	●
4.0	8	0.35	**764X10-4.0-R35-EP**	●	●	●	●	●



Arête de coupe honée
Gehonte Schneidkante
Honed edge

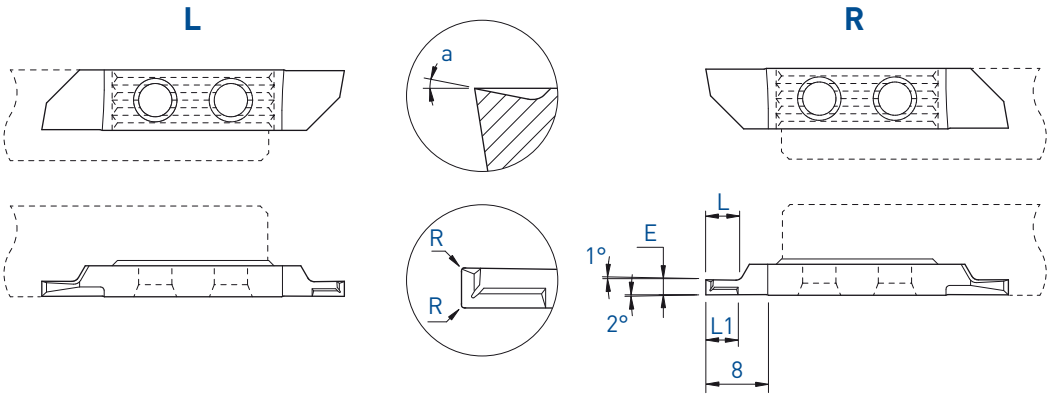
f min: 0.02 mm/U



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

754ZX / 764ZX

Fonçage-tournage
Einstechen und drehen
Grooving and turning





Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

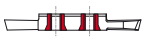


Arête de coupe honée
Gehonte Schneidkante
Honed edge

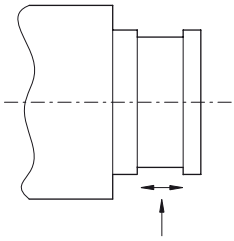
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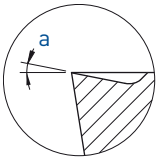
					L								R							
a	E	L	L1	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HAC	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HAC	HN (µk10)
10°	1.5	4	4	0.03	**754ZX10-1.5-R03**	●							**764ZX10-1.5-R03**	●	●	●					
	1.5	4	4	0.08	**754ZX10-1.5-R08**	●							**764ZX10-1.5-R08**	●	●	●					
	2.0	4	4	0.08	**754ZX10-2.0-R08**	●							**764ZX10-2.0-R08**	●	●	●					
	2.0	4	4	0.20	-								**764ZX10-2.0-R20**	●	●	●					
	2.5	5	5	0.08	**754ZX10-2.5-R08**	●	●						**764ZX10-2.5-R08**	●	●	●					
	2.5	5	5	0.20	-								**764ZX10-2.5-R20**	●	●	●					
	3.0	6	6	0.08	**754ZX10-3.0-R08**	●							**764ZX10-3.0-R08**	●	●	●					
	3.0	6	6	0.20	-								**764ZX10-3.0-R20**	●	●	●					
	4.0	6	6	0.20	-								**764ZX10-4.0-R20**	●	●						
25°	2.0	4	4	0.08	-								**764ZX25-2.0-R08**					●		●	
	2.0	4	4	0.20	-								**764ZX25-2.0-R20**					●		●	
	2.5	5	5	0.08	-								**764ZX25-2.5-R08**					●		●	
	2.5	5	5	0.20	-								**764ZX25-2.5-R20**					●		●	

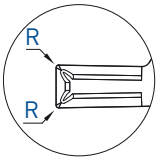
7XX-XX-B



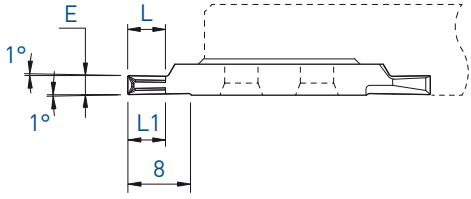
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05







R

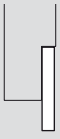






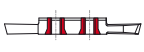
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



R

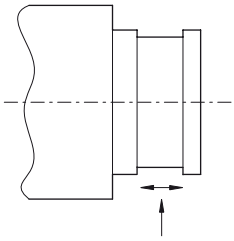
a	E	L	L1	R	Art. N°	ST	TiAlN	TiAlX	TiN	N (µK20)
10°	1.5	4	4	0.08	**764ZXB10-1.5-R08**	●	●	●		
	2.0	4	4	0.08	**764ZXB10-2.0-R08**	●	●	●		
	2.0	4	4	0.15	**764ZXB10-2.0-R15**	●	●	●		
	2.0	4	4	0.35	**764ZXB10-2.0-R35**	●	●	●		
	2.5	5	5	0.08	**764ZXB10-2.5-R08**	●	●	●		
	2.5	5	5	0.15	**764ZXB10-2.5-R15**	●	●	●		
	2.5	5	5	0.35	**764ZXB10-2.5-R35**	●	●	●		
	3.0	6	6	0.08	**764ZXB10-3.0-R08**	●	●	●		
	3.0	6	6	0.15	**764ZXB10-3.0-R15**	●	●	●		
	3.0	6	6	0.35	**764ZXB10-3.0-R35**	●	●	●		

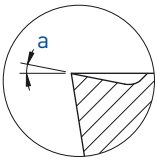


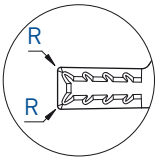
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

754ZXT / 764ZXT

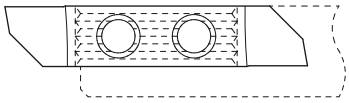
Fonçage-tournage
Einstechen und drehen
Grooving and turning

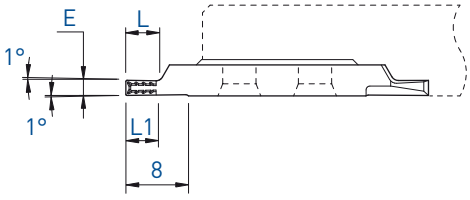






R





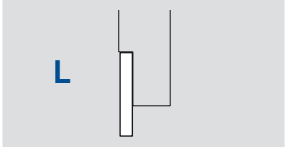


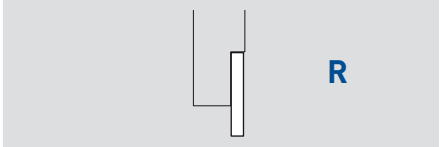
Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

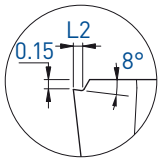


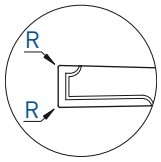


a	E	L	L1	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	ST	TiAlN	TiAlX	TiN	N (µk20)	HTA	HN (µk10)
	1.5	4	4	0.03	-				764ZXT10-1.5-R03	●	●	●				
	1.5	4	4	0.08	754ZXT10-1.5-R08	●			764ZXT10-1.5-R08	●	●	●	●			
	1.5	4	4	0.20	754ZXT10-1.5-R20	●			-							
	2.0	4	4	0.08	754ZXT10-2.0-R08	●			764ZXT10-2.0-R08	●	●	●	●			
	2.0	4	4	0.20	754ZXT10-2.0-R20	●			764ZXT10-2.0-R20	●	●	●	●			
	2.0	4	4	0.40	-				764ZXT10-2.0-R40	●	●	●				
	2.5	5	5	0.08	754ZXT10-2.5-R08	●			764ZXT10-2.5-R08	●	●	●	●			
10°	2.5	5	5	0.20	754ZXT10-2.5-R20	●			764ZXT10-2.5-R20	●	●	●				
	2.5	5	5	0.40	-				764ZXT10-2.5-R40	●	●	●				
	3.0	6	6	0.08	754ZXT10-3.0-R08	●	●		764ZXT10-3.0-R08	●	●	●				
	3.0	6	6	0.20	-				764ZXT10-3.0-R20	●	●	●			●	
	3.0	6	6	0.40	-				764ZXT10-3.0-R40	●	●	●				
	4.0	8	8	0.20	-				764ZXT10-4.0-R20	●	●	●	●			
	4.0	8	8	0.40	-				764ZXT10-4.0-R40	●	●	●	●			
	4.0	8	8	0.80	-				764ZXT10-4.0-R80	●	●	●				

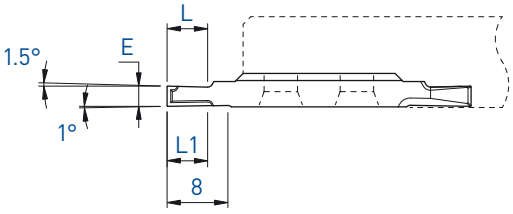


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





R

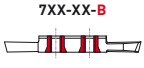




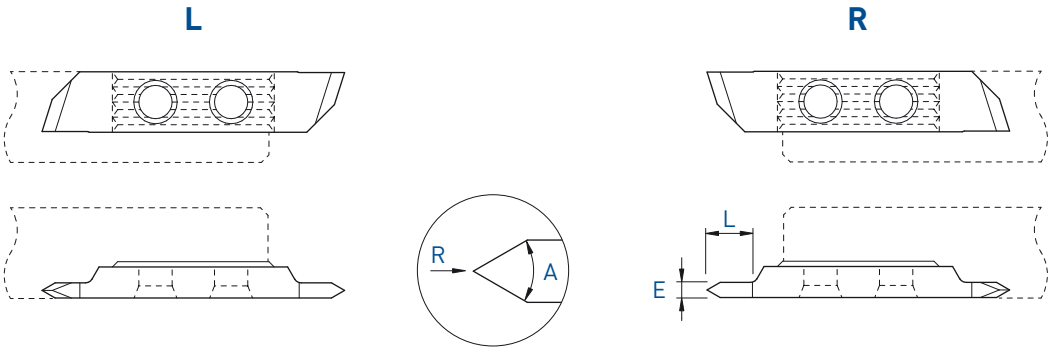


R

E	L	L1	L2	R	Art. N°	KCR	KN (μk10-20)
						N S	P M N S
1.5	3	2.5	0.24	0.08	**764ZF-X824-1.5-R08**	●	●
1.5	3	2.5	0.36	0.08	**764ZF-X836-1.5-R08**	●	●
2.0	4	3	0.24	0.08	**764ZF-X824-2.0-R08**	●	●
2.0	4	3	0.36	0.08	**764ZF-X836-2.0-R08**	●	●
2.0	4	3	0.48	0.15	**764ZF-X848-2.0-R15**	●	●
2.5	6	4	0.24	0.08	**764ZF-X824-2.5-R08**	●	●
2.5	6	4	0.36	0.08	**764ZF-X836-2.5-R08**	●	●
2.5	6	4	0.48	0.15	**764ZF-X848-2.5-R15**	●	●
3.0	6	4	0.36	0.08	**764ZF-X836-3.0-R08**	●	●
3.0	6	4	0.48	0.15	**764ZF-X848-3.0-R15**	●	●



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





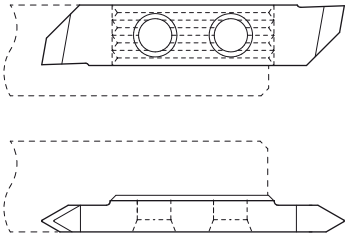
Profil partiel
Teilprofil
Partial profile

L										R							
A	E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
60°	2.0	6	0	**756-60-2.0**	●	●	●				**766-60-2.0**	●	●	●			
60°	2.0	6	0.02	**756-60-2.0-R02**	●	●	●	●		●	**766-60-2.0-R02**	●	●	●	●		●
60°	3.0	8	0	**756-60-3.0**	●	●	●				**766-60-3.0**	●	●	●			
60°	3.0	8	0.02	**756-60-3.0-R02**	●	●	●	●		●	**766-60-3.0-R02**	●	●	●	●		●
55°	2.0	6	0	**756-55-2.0**	●	●	●				**766-55-2.0**	●	●	●			
55°	2.0	6	0.02	**756-55-2.0-R02**	●	●	●				**766-55-2.0-R02**	●	●	●			
55°	3.0	8	0	**756-55-3.0**	●	●	●				**766-55-3.0**	●	●	●			
55°	3.0	8	0.02	**756-55-3.0-R02**	●	●	●				**766-55-3.0-R02**	●	●	●			

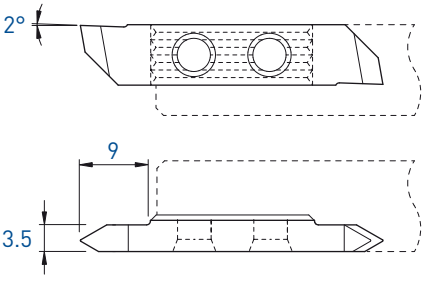
7XX-XX-B

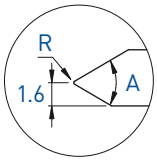
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R







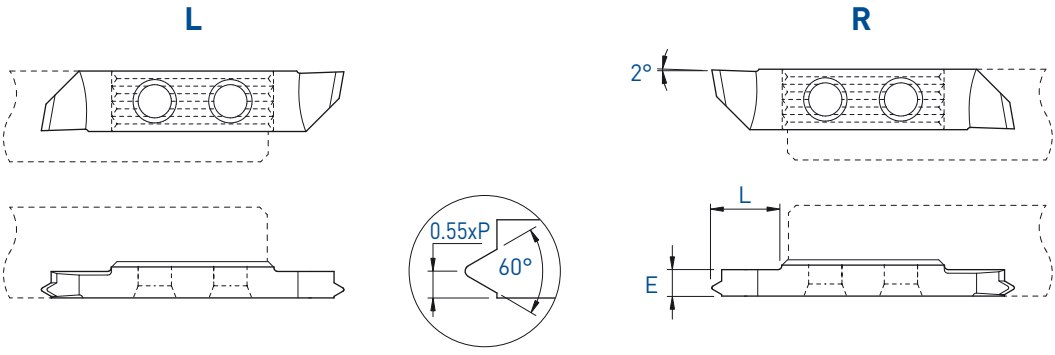
Profil partiel
Teilprofil
Partial profile

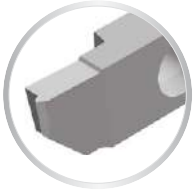
A	R	Pas Steigung Pitch P	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)
			L							**R**
60°	0.06	0.50-1.50	**756-AG60°**	●	●	●	**766-AG60°**	●	●	●
60°	0.20	1.75-3.00	**756-G60°**	●	●	●	**766-G60°**	●	●	●

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



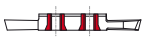


Profil complet métrique
Metrisches Vollprofil
Metric full profile

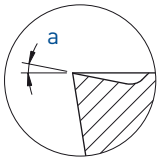
			L				R			
E	L	Pas Steigung Pitch P	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.5	8	0.80	**756-M-0.80**	●	●	●	**766-M-0.80**	●	●	●
2.5	8	1.00	**756-M-1.00**	●	●	●	**766-M-1.00**	●	●	●
2.5	8	1.25	**756-M-1.25**	●	●	●	**766-M-1.25**	●	●	●
3.5	9	1.50	**756-M-1.50**	●	●	●	**766-M-1.50**	●	●	●
3.5	9	1.75	**756-M-1.75**	●	●	●	**766-M-1.75**	●	●	●
3.5	9	2.00	**756-M-2.00**	●	●	●	**766-M-2.00**	●	●	●

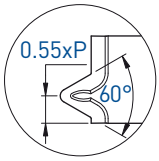
Pour de plus petits pas, voir page 1.86
Für kleinere Steigungen, siehe Seite 1.86
For smaller pitches, see page 1.86

7XX-XX-B

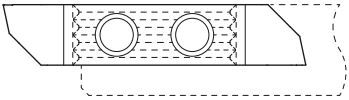


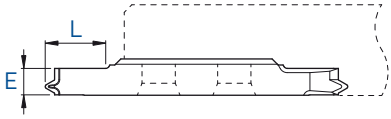
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





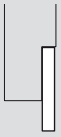
R







Profil partiel
Teilprofil
Partial profile



R

a	E	L	P	Art. N°	ST	TiAlN
10°	2.5	8	0.80	**766ZX10-M-0.80**	●	●
	2.5	8	1.00	**766ZX10-M-1.00**	●	●
	2.5	8	1.25	**766ZX10-M-1.25**	●	●
	3.5	9	1.50	**766ZX10-M-1.50**	●	●
	3.5	9	1.75	**766ZX10-M-1.75**	●	●
	3.5	9	2.00	**766ZX10-M-2.00**	●	●



Arête de coupe honée
Gehonte Schneidkante
Honed edge

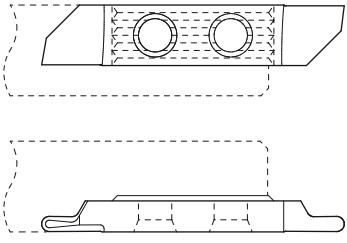


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

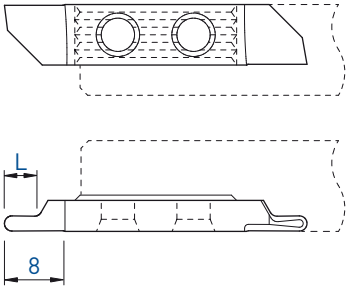
757 / 767

Plaquettes à rayon
Radius Wendeplatten
Radius inserts

L



R

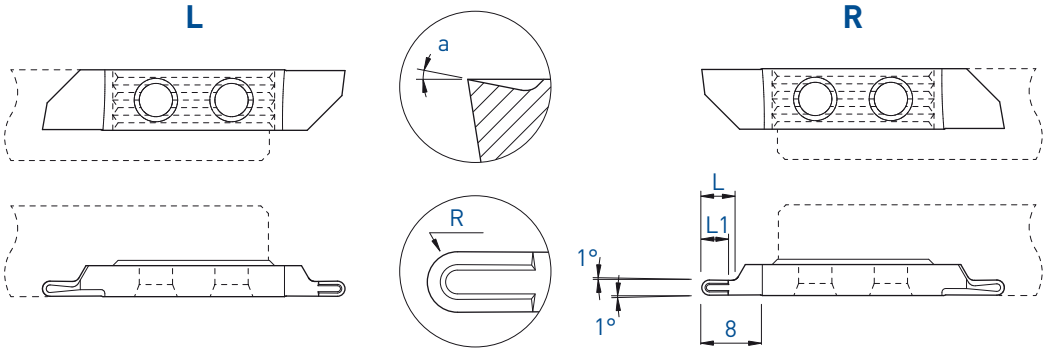




		L				R			
R	L	Art. N°	TiAlN	TiN	N (µK20)	Art. N°	TiAlN	TiN	N (µK20)
0.5	2.5	**757-R0.5**	●	●	●	**767-R0.5**	●	●	●
1.0	4	**757-R1.0**	●	●	●	**767-R1.0**	●	●	●
1.5	6	**757-R1.5**	●	●	●	**767-R1.5**	●	●	●
2.0	8	**757-R2.0**	●	●	●	**767-R2.0**	●	●	●

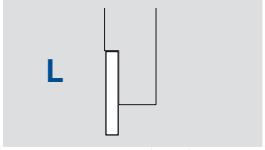


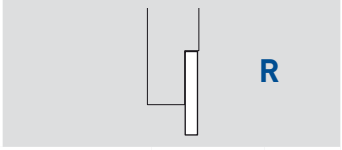
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05





Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control





a	R	L	L1	Art. N°	TiAlN	TiN	N (µK20)	Art. N°	TiAlN	TiN	N (µK20)	HTA	HN (µK10)
	1.0	4	3.5	**757ZX10-R1.0**	●			**767ZX10-R1.0**	●	●			
10°	1.5	6	4.0	**757ZX10-R1.5**	●			**767ZX10-R1.5**	●	●			
	2.0	8	4.5	**757ZX10-R2.0**	●			**767ZX10-R2.0**	●	●		●	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

7XX-XX-B

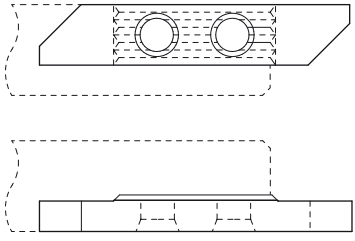


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

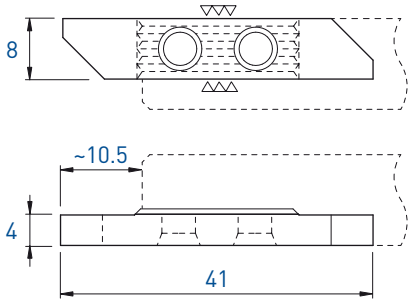
751-E / 761-E

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

L



R





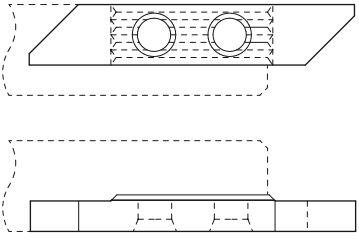
L			R		
Art. N°	N (µK20)	HN (µK10)	Art. N°	N (µK20)	HN (µK10)
751-E	●	●	761-E	●	●

7XX-XX-B

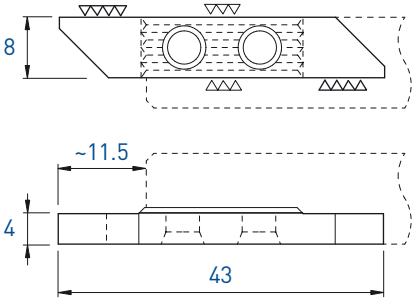


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R





Face de coupe polie
Polierte Schneidfläche
Polished cutting face

L							R						
Art. N°	TiAlN (PMNS)	TiN (PMN)	N (µk20) (PS)	HTA (PMNS)	HTiN (PMN)	HN (µk10) (PNS)	Art. N°	TiAlN (PMNS)	TiN (PMN)	N (µk20) (PS)	HTA (PMNS)	HTiN (PMN)	HN (µk10) (PNS)
751-EP	●	●	●	●		●	761-EP	●	●	●	●		●

7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

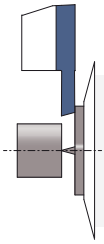
L

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	770-JET	1.167
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771	771	1.169
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	771R	1.171
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	771RXF	1.173
	771XF	1.170

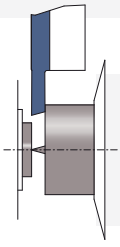
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	Type	Page
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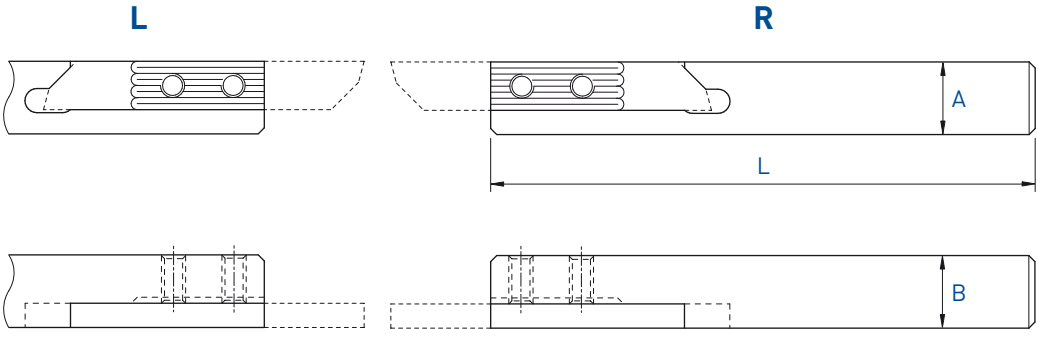
770 / 780
Porte-outils
Halter
Holders
> 1.166



771 / 781
Tronçonnage
Abstechen
Parting off
> 1.169



781L / 771R
Tronçonnage - coupe déportée
Abstechen - versetztes Schneiden
Parting off - cut off line
> 1.171

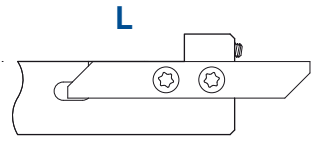


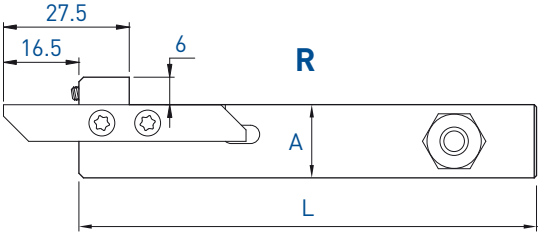
A x B	L	Serrage Spannsystem Clamping	L **Art. N°**	R **Art. N°**
10 x 10	115	A	**770-10**	**780-10**
12 x 12	130	A	**770-12**	**780-12**
12 x 12	90	A	**770-12-90**	**780-12-90**
12.7 x 12.7	130	A	**770-12.7**	**780-12.7**
14 x 14	130	A	**770-14**	**780-14**
16 x 16	130	A	**770-16**	**780-16**
16 x 16	75	A	**770-16-75**	**780-16-75**
20 x 20	120	A	**770-20**	**780-20**
25 x 25	140	A	**770-25**	**780-25**

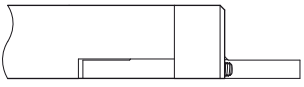
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

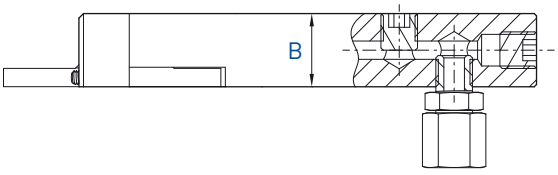
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

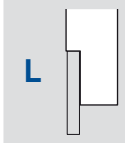
770-JET / 780-JET











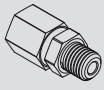


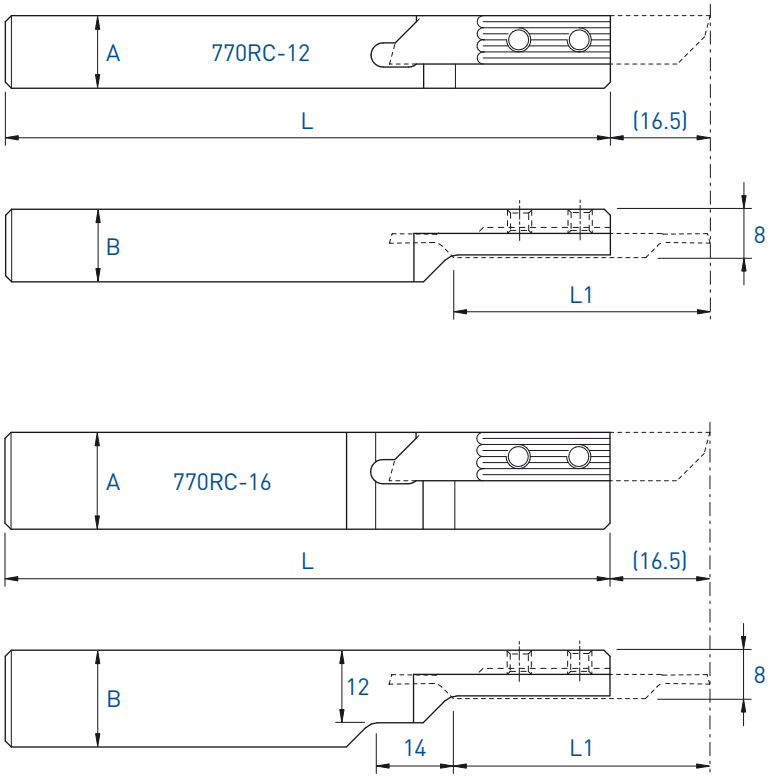
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
16 x 16	100	A	**770-16-JET**	**780-16-JET**

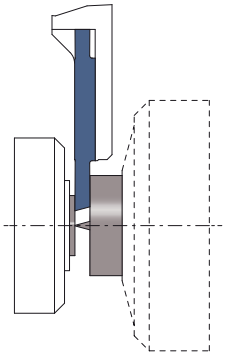
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

Pièces de rechange Ersatzteile Spare parts			Buses Düsen Nozzles 
	Art. N°	Art. N°	Art. N°
770-JET / 780-JET	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**
			More option see JET-Line





Utiliser des plaquettes type 771R
WSP Typ 771R verwenden
Use inserts type 771R

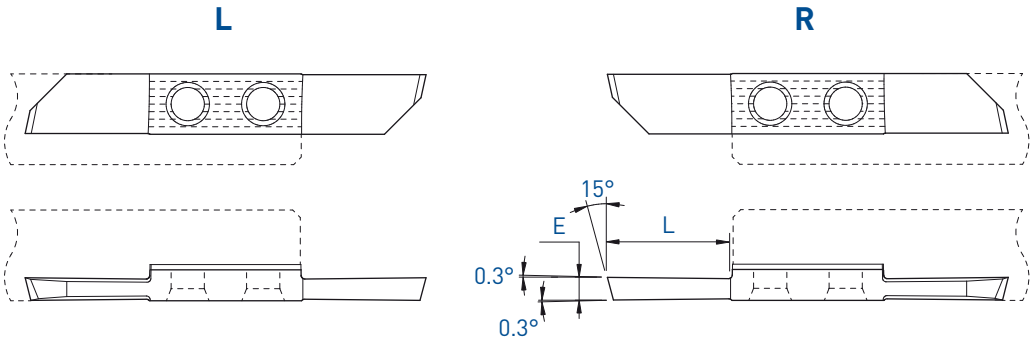
Voir pages 1.171 - 1.174
Siehe Seiten 1.171 - 1.174
See pages 1.171 - 1.174

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

A x B	L	L1	Serrage Spannsystem Clamping	Art. N°
12 x 12	130	42	A	**770RC-12**
16 x 16	130	42	A	**770RC-16**

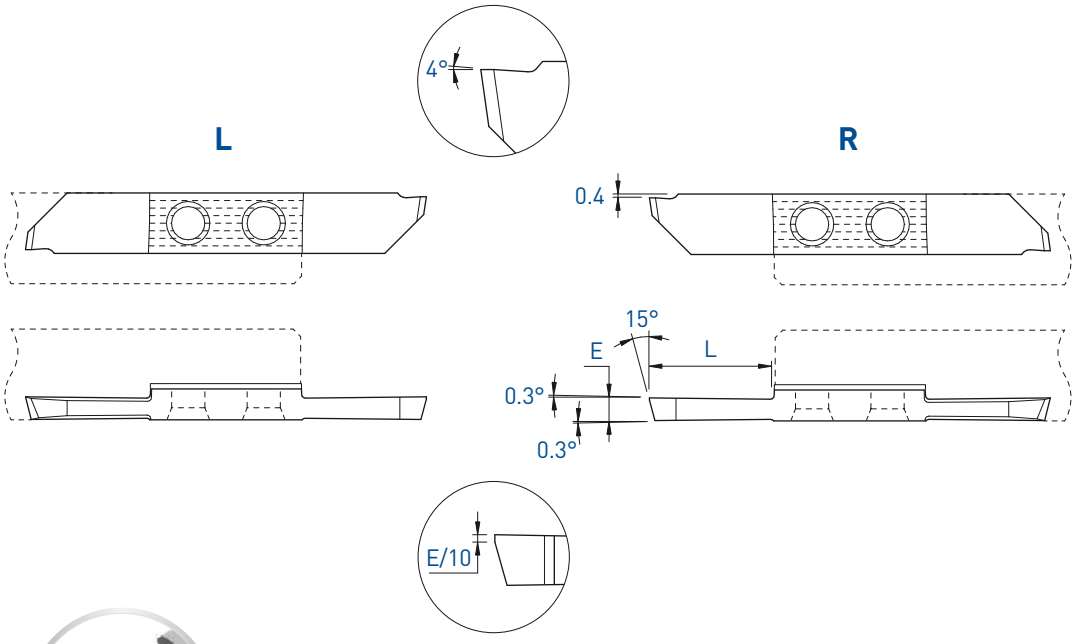
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

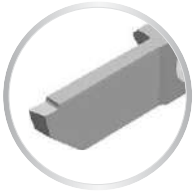




		L				R			
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)
1.5	16	-				**781-1.5**	●	●	●
2.0	16	**771-2.0**	●	●	●	**781-2.0**	●	●	●
2.5	16	**771-2.5**	●	●	●	**781-2.5**	●	●	●
3.0	16	**771-3.0**	●	●	●	**781-3.0**	●	●	●
3.5	16	**771-3.5**	●	●	●	**781-3.5**	●	●	●

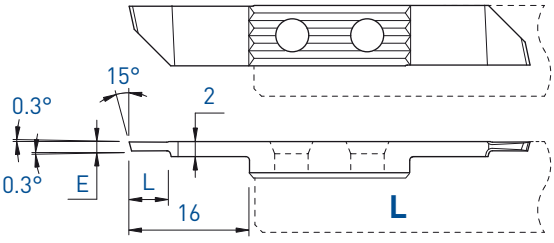
771XF / 781XF





		L				R			
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µk20)
2.0	16	-				781XF-2.0	●	●	●
2.5	16	771XF-2.5	●	●	●	781XF-2.5	●	●	●
3.0	16	771XF-3.0	●	●	●	781XF-3.0	●	●	●
3.5	16	771XF-3.5	●	●	●	781XF-3.5	●	●	●

Cut R



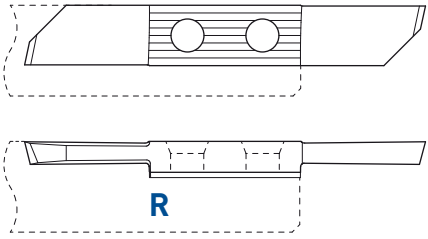


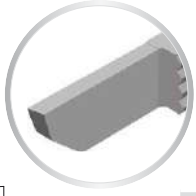
L (R)

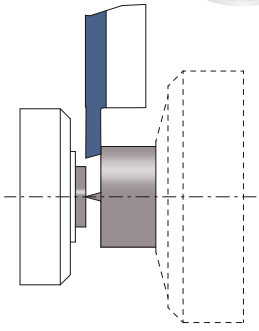
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	TiAlN	TiN	N (µk20)
1.0	5	**771R-1.0**	●	●	●
1.2	5	**771R-1.2**	●	●	●
1.5	8.5	**771R-1.5**	●	●	●

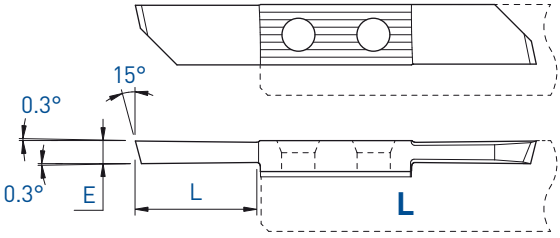
Cut L







Cut R



R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

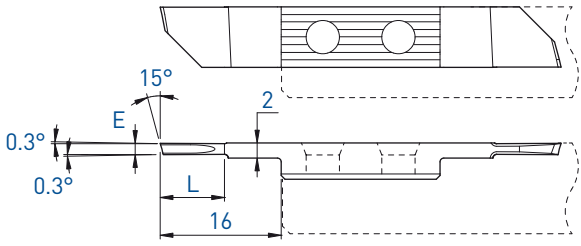
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.0	16	**781L-2.0**	●	●	●	**771R-2.0**	●	●	●
2.5	16	**781L-2.5**	●	●	●	**771R-2.5**	●	●	●
3.0	16	**781L-3.0**	●	●	●	**771R-3.0**	●	●	●
3.5	16	**781L-3.5**	●	●	●	**771R-3.5**	●	●	●

771RU

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

Cut R

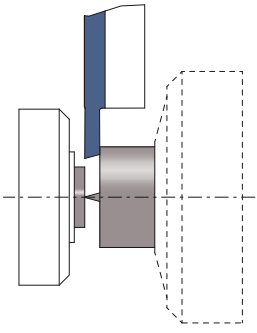




L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

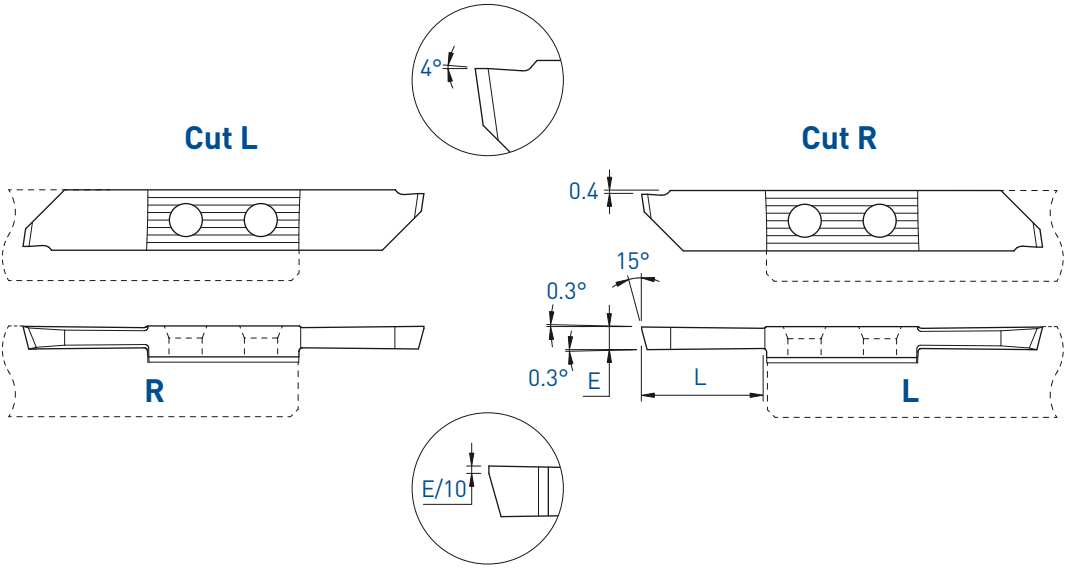
E	L	Art. N°	TiAlN	TiN	N (µk20)
			P M N S	P M N	P S
1.0	5	**771RU-1.0**	●		●
1.5	8.5	**771RU-1.5**	●		●



Tronçonnage
Abstechen
Parting off

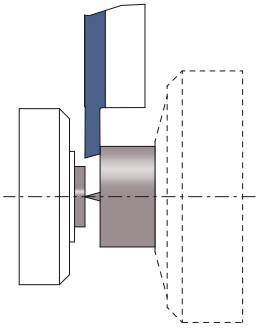
Coupe déportée
Versetztes Schneiden
Cut off line

781LXF / 771RXF





		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.0	16	-				771RXF-2.0	●	●	●
2.5	16	781LXF-2.5	●	●	●	771RXF-2.5	●	●	●
3.0	16	781LXF-3.0	●	●	●	771RXF-3.0	●	●	●
3.5	16	781LXF-3.5	●	●	●	771RXF-3.5	●	●	●

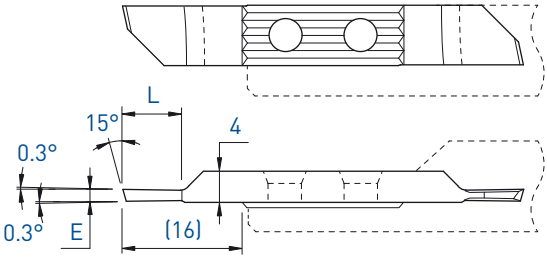


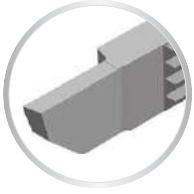
771RD

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

Cut R

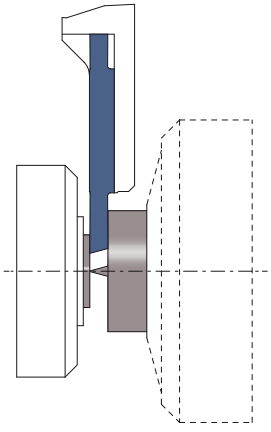


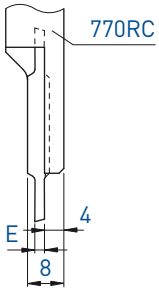


L (R)

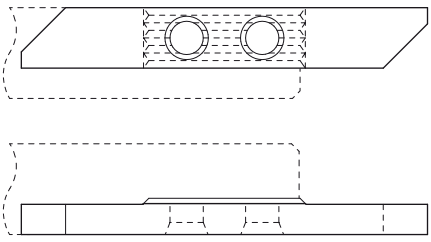
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	TiAlN	TiN	N (µk20)
			P M N S	P M N	P S
1.2	5	**771RD-1.2**	●	●	●
1.5	7.5	**771RD-1.5**	●	●	●
2.0	10	**771RD-2.0**	●	●	●

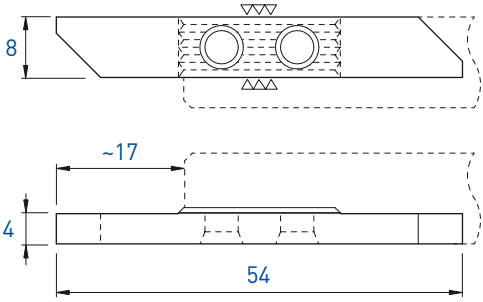


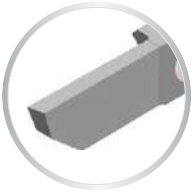


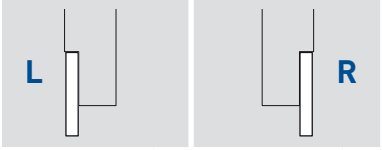
L



R







Art. N°	P S N (µk20)	Art. N°	P S N (µk20)
771-E	●	781-E	●

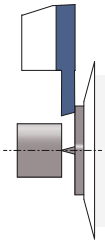
L

	Type	Page
7050	7050	1.178
	7051	1.179
	7051-E	1.183
	7051R	1.181
	7051RXF	1.182
	7051XF	1.180

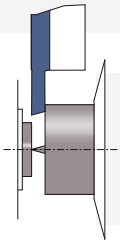
R

	Type	Page
7060	7060	1.178
	7061	1.179
	7061-E	1.183
	7061L	1.181
	7061LXF	1.182
	7061XF	1.180

7050 / 7060
Porte-outils
Halter
Holders
> **1.178**

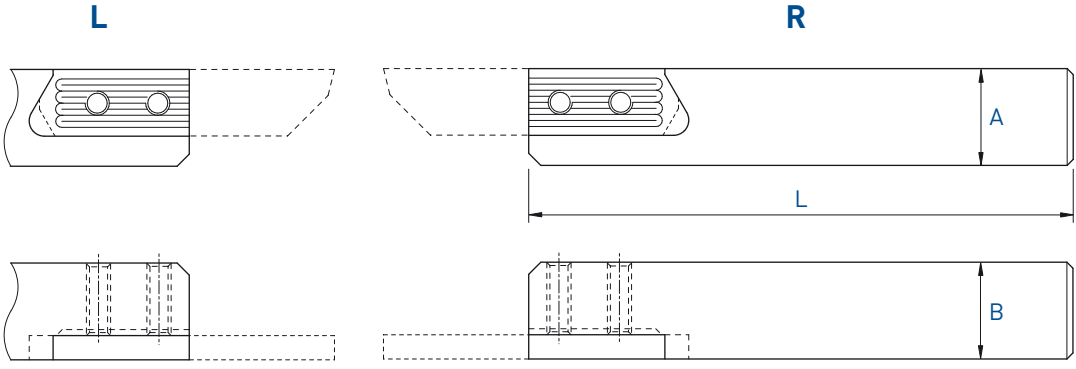


7051 / 7061
Tronçonnage
Abstechen
Parting off
> **1.179**



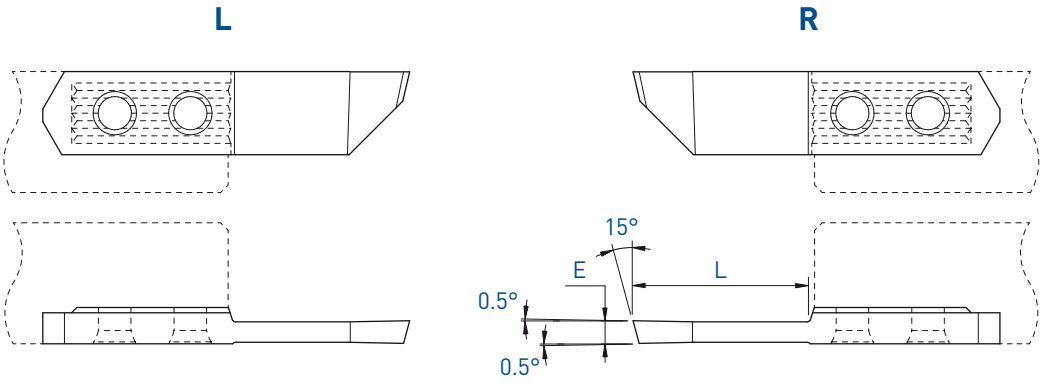
7051R / 7061L
Tronçonnage - coupe déportée
Abstechen - versetztes Schneiden
Parting off - cut off line
> **1.181**

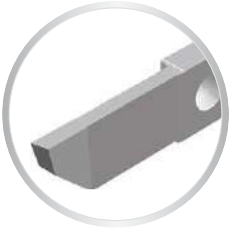
Plaquettes ébauches
WSP-Rohlinge
Blank inserts
> **1.183**



A x B	L	Serrage Spannsystem Clamping	L **Art. N°**	R **Art. N°**
16 x 16	130	A	**7050-16**	**7060-16**
16 x 16	75	A	**7050-16-75**	**7060-16-75**
20 x 20	120	A	**7050-20**	**7060-20**
25 x 25	140	A	**7050-25**	**7060-25**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
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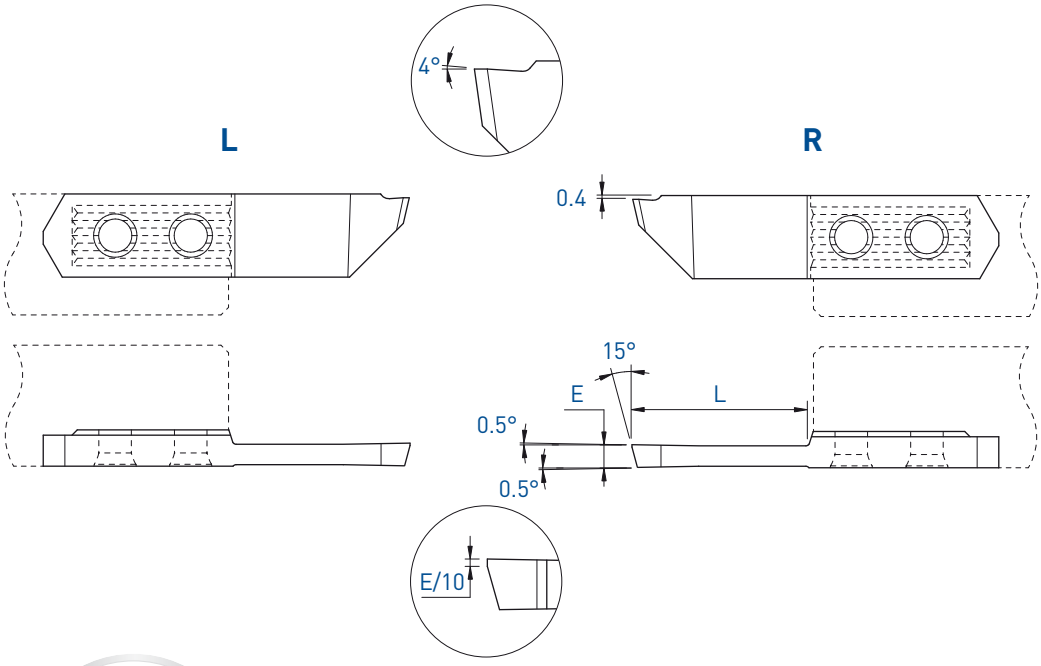




		L				R			
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)
2.5	22	-				**7061-2.5**	●	●	●
3.0	22	**7051-3.0**	●	●	●	**7061-3.0**	●	●	●
3.5	22	-				**7061-3.5**	●	●	●

7051XF / 7061XF

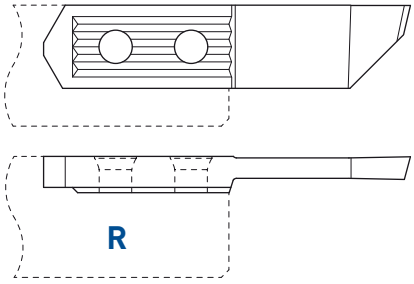
Tronçonnage
Abstechen
Parting off



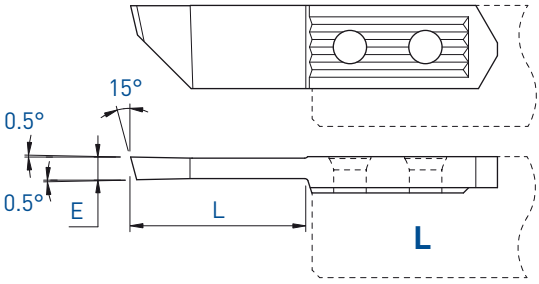


		L				R			
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)
3.0	22	**7051XF-3.0**	●	●	●	**7061XF-3.0**	●	●	●

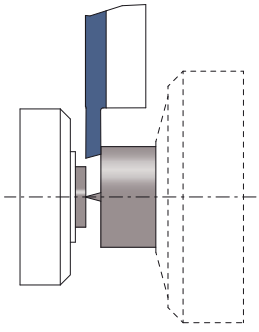
Cut L



Cut R





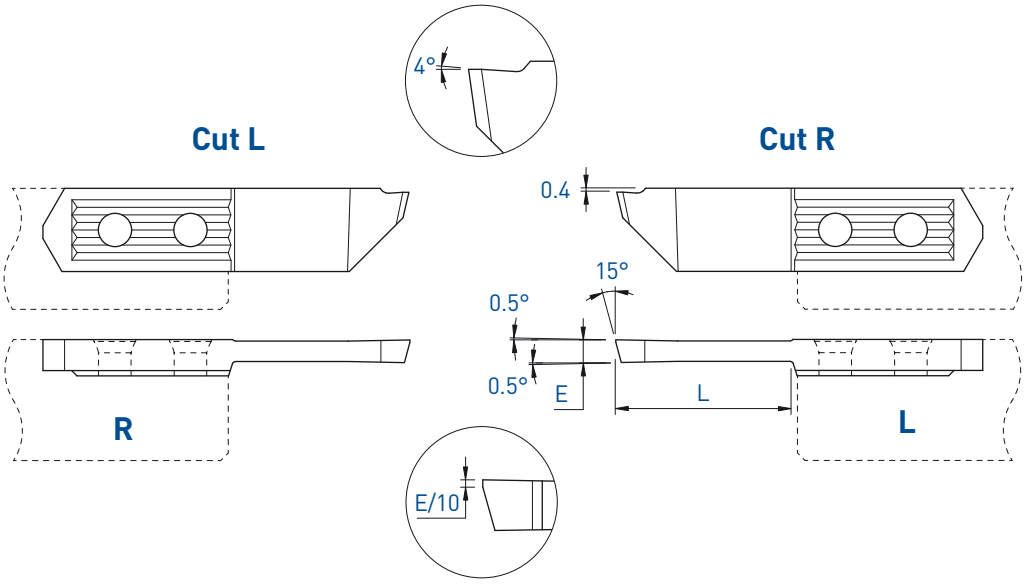


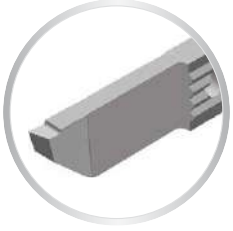
		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)	Art. N°	P M N S TiAlN	P M N TiN	P S N (µK20)
2.5	22	-				**7051R-2.5**	●	●	●
3.0	22	**7061L-3.0**	●	●	●	**7051R-3.0**	●	●	●
3.5	22	-				**7051R-3.5**	●	●	●

7061LXF / 7051RXF

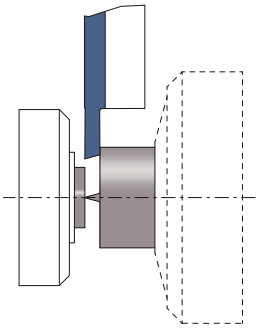
Coupe déportée
Versetztes Schneiden
Cut off line

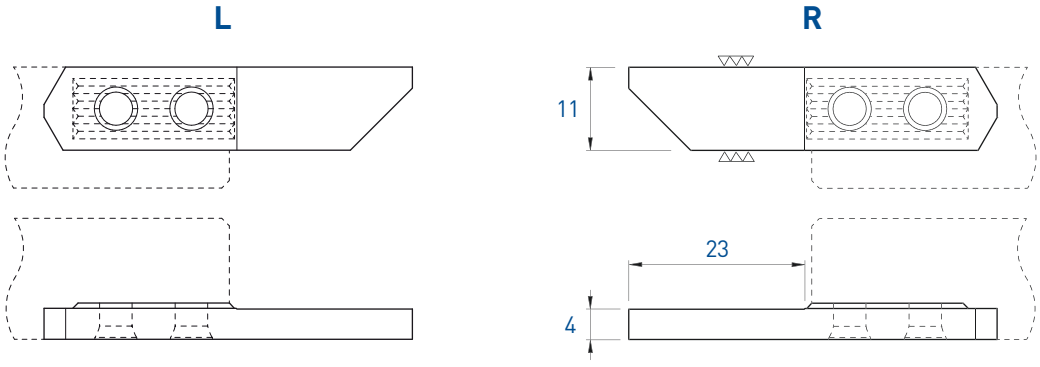
Tronçonnage
Abstechen
Parting off



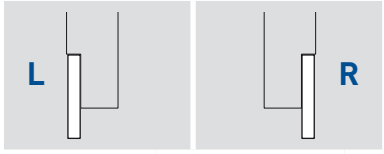


		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
3.0	22	**7061LXF-3.0**	●	●	●	**7051RXF-3.0**	●	●	●









Art. N°	P S N (µk20)	Art. N°	P S N (µk20)
7051-E	●	7061-E	●

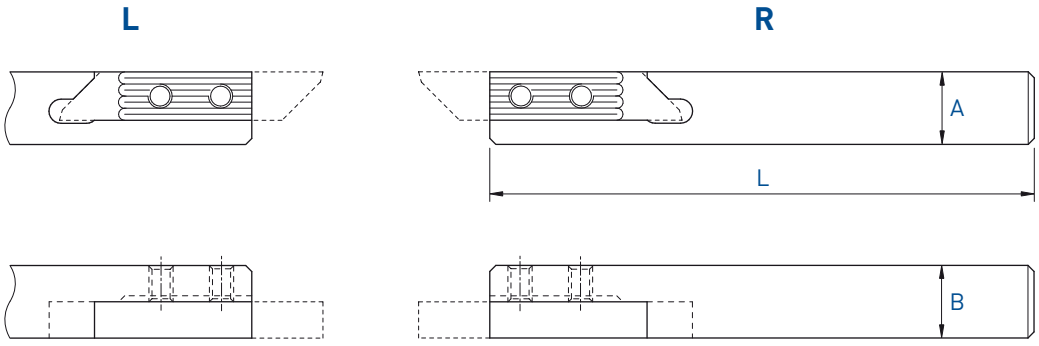
L		
Type		Page
W750	W750	1.186
	W750-JET	1.187
W751	W751-E5	1.188
	W751-E6	1.190
	W751-EP5	1.189
	W751-EP6	1.191

R		
Type		Page
W760	W760	1.186
	W760-JET	1.187
W761	W761-E5	1.188
	W761-E6	1.190
	W761-EP5	1.189
	W761-EP6	1.191

W750 / W760
Porte-outils
Halter
Holders
> 1.186

W750-JET / W760-JET
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply
> 1.187

W751-E / W761-E
Plaquettes ébauches
WSP-Rohlinge
Blank inserts
> 1.188

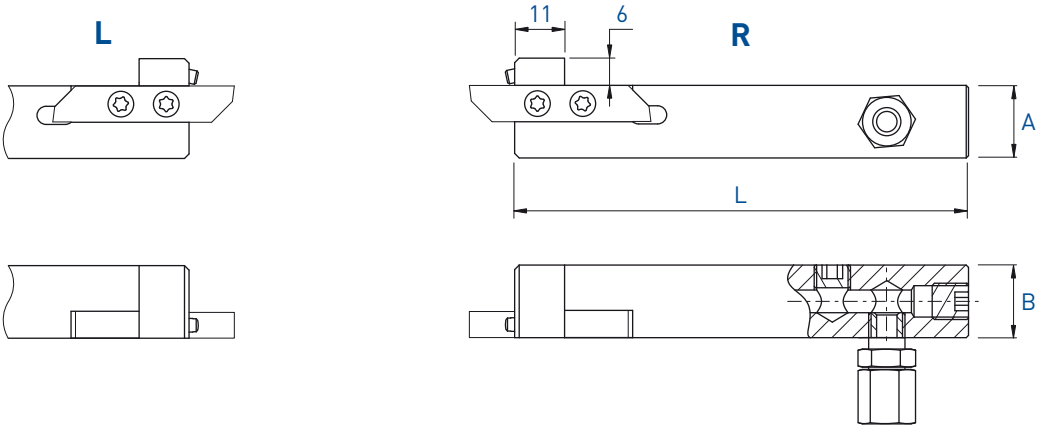


A x B	L	Serrage Spannsystem Clamping	L **Art. N°**	R **Art. N°**
12 x 12	130	A	**W750-12**	**W760-12**
16 x 16	130	A	**W750-16**	**W760-16**
20 x 20	120	A	**W750-20**	**W760-20**

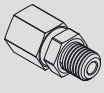
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

W750-JET / W760-JET



A x B	L	Serrage Spannsystem Clamping	L Art. N°	R Art. N°
16 x 16	100	A	**W750-16-JET**	**W760-16-JET**
20 x 20	100	A	**W750-20-JET**	**W760-20-JET**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°	Buses Düsen Nozzles  Art. N°
W750-JET / W760-JET	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5** More option see JET-Line

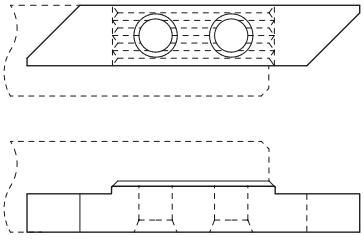
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

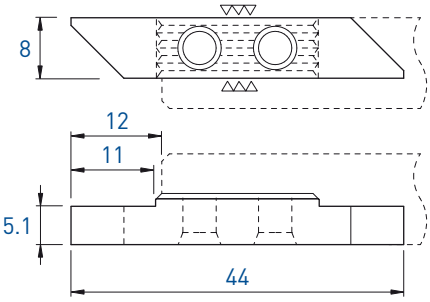
Each holder is supplied with one or more screws.
The keys must be ordered separately.

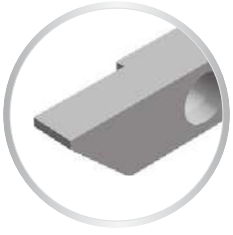
W751-E5 / W761-E5

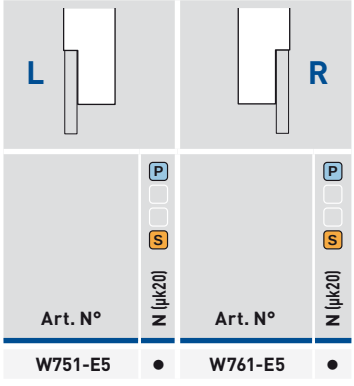
L



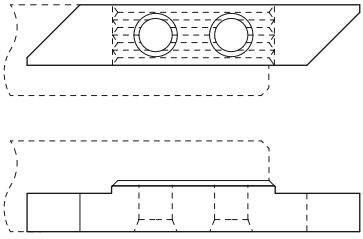
R



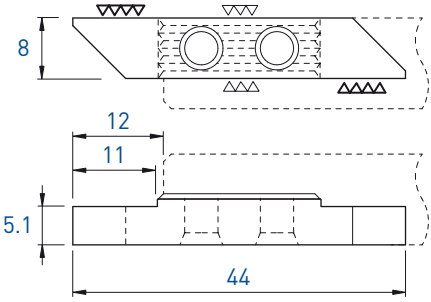


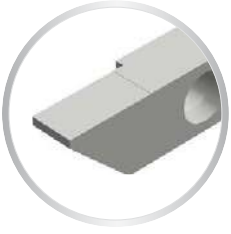


L



R

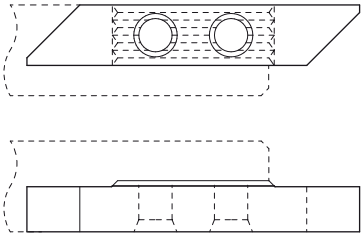




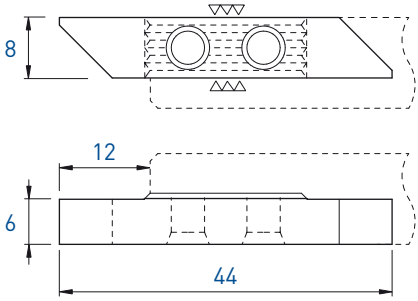
L		R	
Art. N°	N (µk20)	Art. N°	N (µk20)
W751-EP5	●	W761-EP5	●

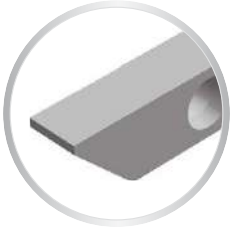
W751-E6 / W761-E6

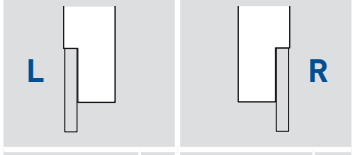
L



R

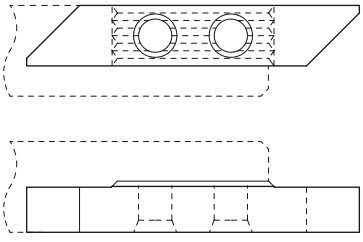




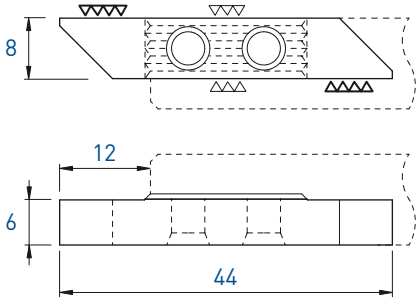


Art. N°	P S N (µK20)	Art. N°	P S N (µK20)
W751-E6	●	W761-E6	●

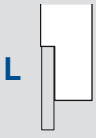
L



R

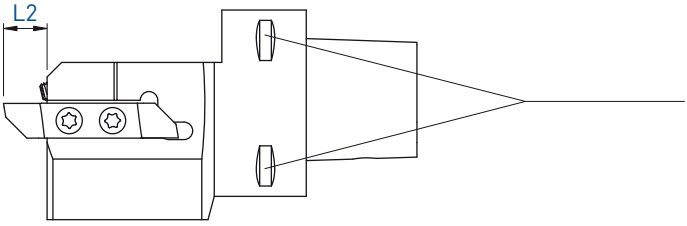




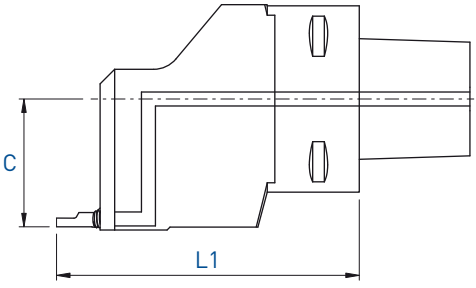
L	R
	

Art. N°	P S N (µk20)	Art. N°	P S N (µk20)
W751-EP6	●	W761-EP6	●

Polygonal interface PSC3 / PSC4 / HSK			> 1.193
740Z / 760Z	Porte-outils pour usinage déporté Halter für versetzte Bearbeitung Tool holder for off line machining		> 1.200
Star	**SL7/10-JET**		> 1.201
Tornos	**DECO 7/10 - EvoDECO 10**	**R**	> 1.202
	DECO 7/10 - EvoDECO 10	**L**	> 1.204
	DECO 13 - EvoDECO 16 **DECO 20 - EvoDECO 20/32**		> 1.206
	MultiSwiss 6x16		> 1.208
	AS14 / SAS16		> 1.209
	SwissNano		> 1.210
Schütte			> 1.211
Arno			> 1.212



Porte-outils pour changeur automatique
Halter für Werkzeugwechsler
Holder for automatic changer



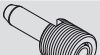


Type	Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	C	L2	Art. N°	Buses Düsen Nozzles Art. N°
PSC3	740	> 1.43	52	22	7.5	**PSC3-740-22052-G**	**JJ-M3X6-D1.5**
PSC3	760	> 1.101	59	22	10	**PSC3-760-22059-G**	
PSC4	740	> 1.43	62	27	7.5	**PSC4-740-27062-G**	
PSC4	760	> 1.101	67	27	10	**PSC4-760-27067-G**	

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

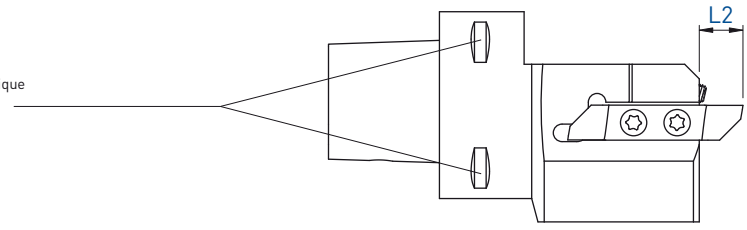
Options	
	
Art. N°	**Art. N°**
HSK-40-JET-M12X1	**C-HSK-40-JET**

PSC3 / PSC4

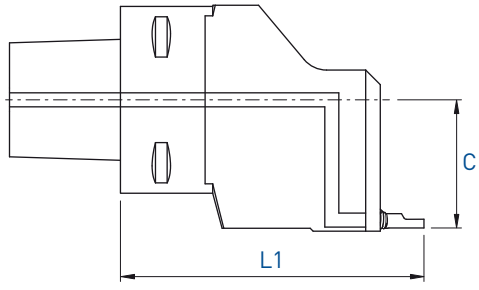
L

Interface polygonale PSC
Polygonal Schnittstelle PSC
Polygonal interface PSC

Porte-outils pour changeur automatique
Halter für Werkzeugwechsler
Holder for automatic changer

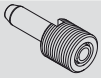






Type	Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	C	L2	Art. N°	Buses Düsen Nozzles Art. N°
PSC3	730	> 1.43	52	22	7.5	**PSC3-730-22052-G**	**JJ-M3X6-D1.5**
PSC3	750	> 1.101	59	22	10	**PSC3-750-22059-G**	
PSC4	730	> 1.43	62	27	7.5	**PSC4-730-27062-G**	
PSC4	750	> 1.101	67	27	10	**PSC4-750-27067-G**	

Options

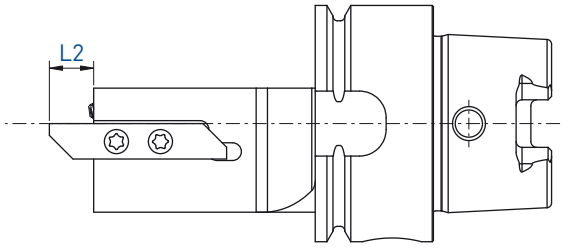
	
Art. N°	**Art. N°**
HSK-40-JET-M12X1	**C-HSK-40-JET**

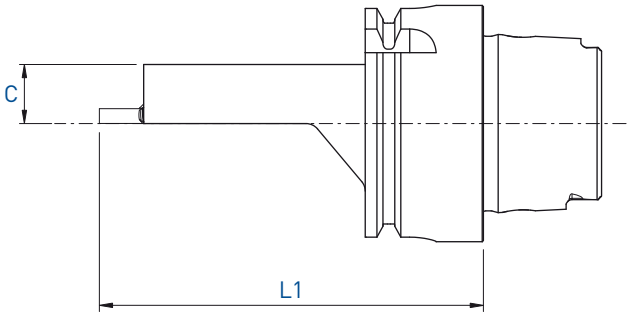
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.







Utilisable sur toutes les machines avec broches HSK-T ou HSK-A

Einsetzbar auf allen Maschinen, mit HSK-T oder HSK-A Pin

Usable on all machines with HSK-T or HSK-A spindles

Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	C	**Art. N°**	Buses Düsen Nozzles **Art. N°**
740	> 1.43	65	7.5	15	**HSK-A40-S191-740-0065-JET**	**JJ-M3X6-D1.5**
760	> 1.101	70	10	15	**HSK-A40-S191-760-0070-JET**	**JJ-M3X6-D1.5**

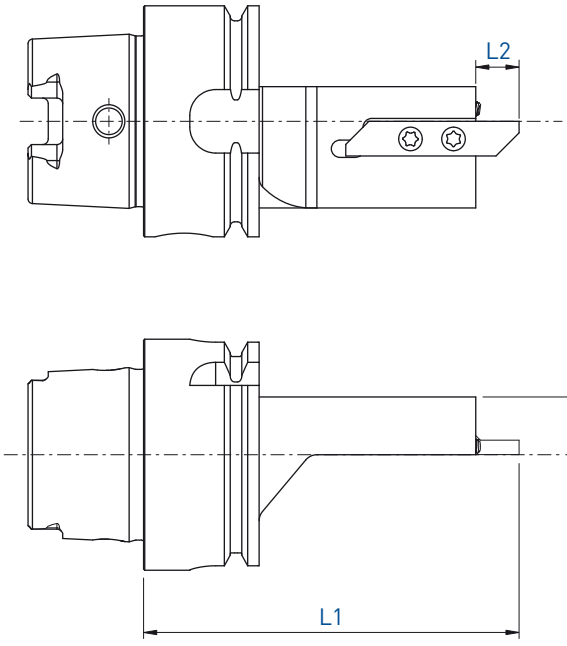
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

Options	
	
Art. N°	**Art. N°**
HSK-40-JET-M12X1	**C-HSK-40-JET**





Utilisable sur toutes les machines avec broches HSK-T ou HSK-A

Einsetzbar auf allen Maschinen, mit HSK-T oder HSK-A Pin

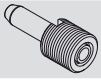
Usable on all machines with HSK-T or HSK-A spindles

Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	C	Art. N°	Buses Düsen Nozzles Art. N°
730	> 1.43	65	7.5	10	**HSK-T40-730-0065-JET**	**JJ-M3X6-D1.5**

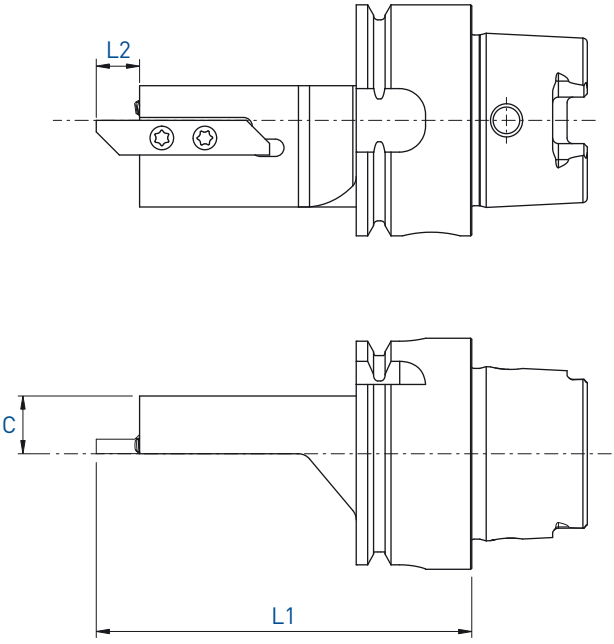
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws. The keys must be ordered separately.

Options	
	
Art. N°	**Art. N°**
HSK-40-JET-M12X1	**C-HSK-40-JET**





Utilisable sur toutes les machines avec broches HSK-T ou HSK-A

Einsetzbar auf allen Maschinen, mit HSK-T oder HSK-A Pin

Usable on all machines with HSK-T or HSK-A spindles

Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	C	Art. N°	Buses Düsen Nozzles Art. N°
740	> 1.43	65	7.5	10	**HSK-T40-740-0065-JET**	**JJ-M3X6-D1.5**
760	> 1.101	70	10	15	**HSK-T40-760-0070-JET**	**JJ-M3X6-D1.5**

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

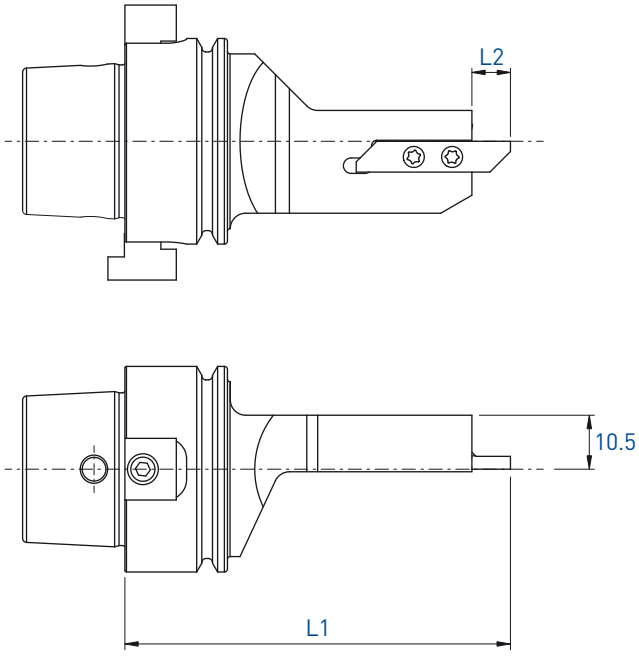
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Options	
	
Art. N°	**Art. N°**
HSK-40-JET-M12X1	**C-HSK-40-JET**

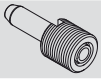
HSK-E40-WM | L

Porte-outils pour machines Willemin-Macodel
Halter für Willemin Macodel-Maschine
Holders for Willemin Macodel-machine





Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	Art. N°	Buses Düsen Nozzles Art. N°
730	> 1.43	75	7.5	**HSK-E40-730-0075-JET-WM**	**JJ-M3X6-D1.5**
750	> 1.101	75	10	**HSK-E40-750-0075-JET-WM**	**JJ-M3X6-D1.5**

Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	**Art. N°**
HSK-40-JET-M12X1	**C-HSK-40-JET**

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

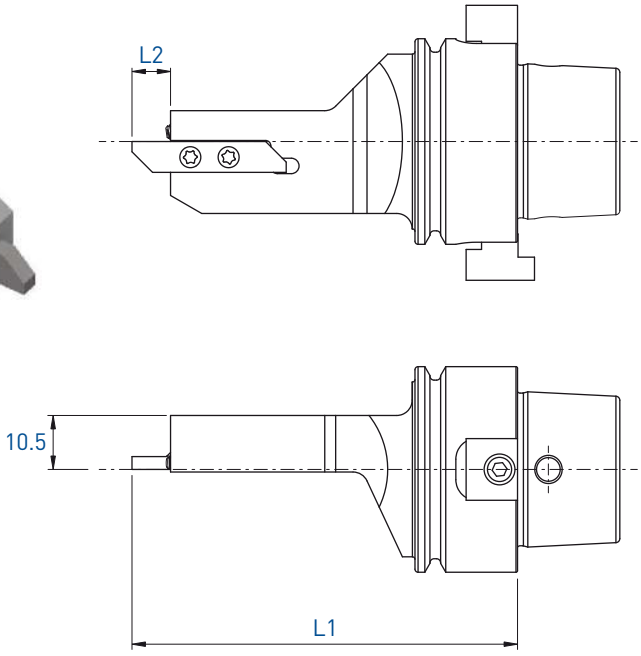
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils pour machines Willemin-Macodel
Halter für Willemin Macodel-Maschine
Holders for Willemin Macodel-machine

R

HSK-E40-WM





Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	Art. N°	Buses Düsen Nozzles Art. N°
740	> 1.43	75	7.5	**HSK-E40-740-0075-JET-WM**	**JJ-M3X6-D1.5**
760	> 1.101	75	10	**HSK-E40-760-0075-JET-WM**	**JJ-M3X6-D1.5**

Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	**Art. N°**
HSK-40-JET-M12X1	**C-HSK-40-JET**

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

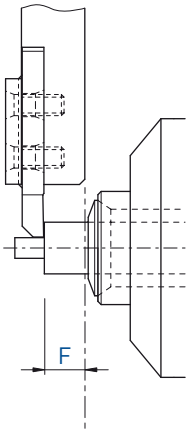
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

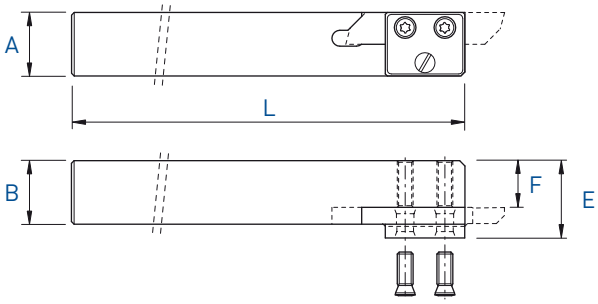
Each holder is supplied with one or more screws.
The keys must be ordered separately.

740Z / 760Z

R

Porte-outils pour usinage déporté
Halter für versetzte Bearbeitung
Holders for shifted machining





740 Series

A x B	L	F	E	**Art. N°**	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
12 x 12	130	9.5	14.5	**740Z-12**	741 - 747	> 1.43
16 x 16	130	13.5	18.5	**740Z-16**	741 - 747	> 1.43

760 Series

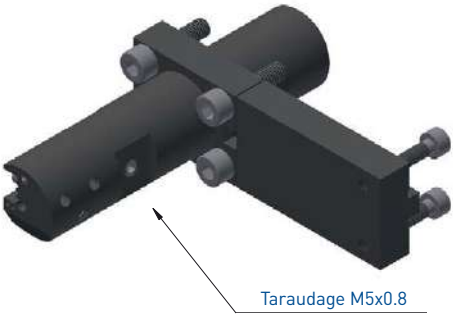
A x B	L	F	E	**Art. N°**	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
12 x 12	130	8	15	**760Z-12**	761 - 767	> 1.101
16 x 16	130	12	19	**760Z-16**	761 - 767	> 1.101

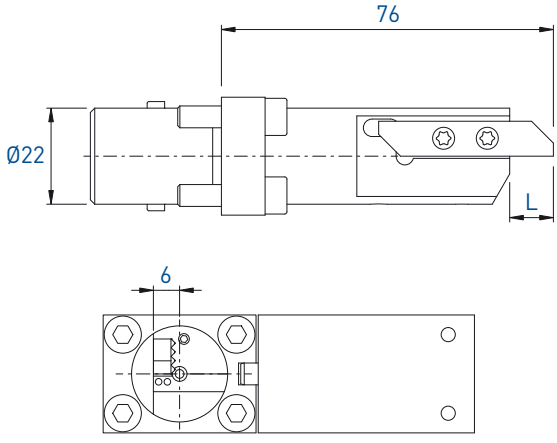
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils pour machine Star avec arrosage intégré
Halter für Star Maschine mit intergrierter Kühlmittelzufuhr
Holders for Star machine with integrated coolant supply

SL7/10-JET



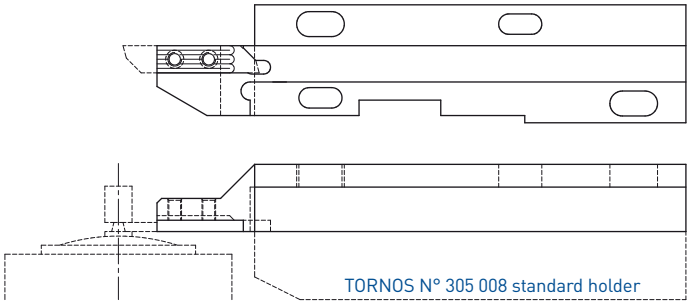




Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740-SL7/10-JET	740	> 1.43
760-SL7/10-JET	760	> 1.101

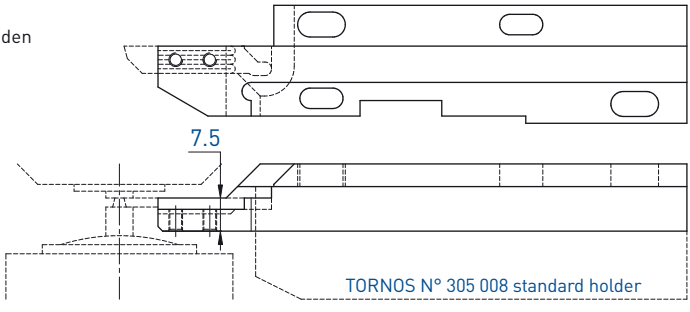
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Coupe à droite
Rechtsschneiden
Right hand cut



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740-DECO10	741 - 747	> 1.43

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

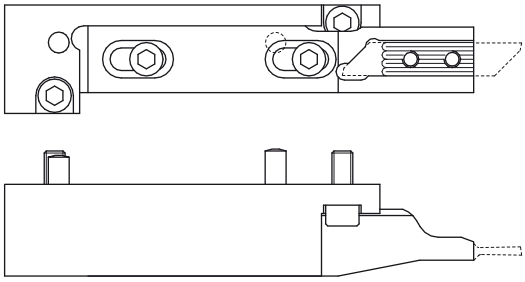


Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
730R-DECO10	731R / 731N	1.51 - 1.58

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

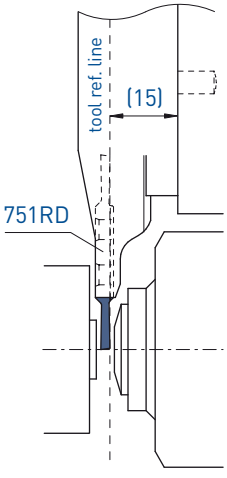
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off

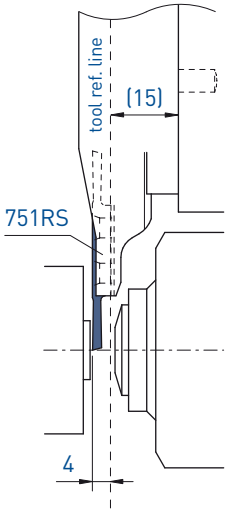




Réglable en longueur
Längseinstellbar
Adjustable length

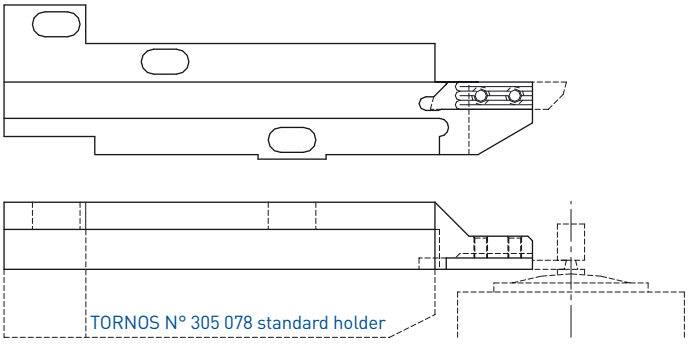
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
750R-DECO10	751R / 751N	> 1.104





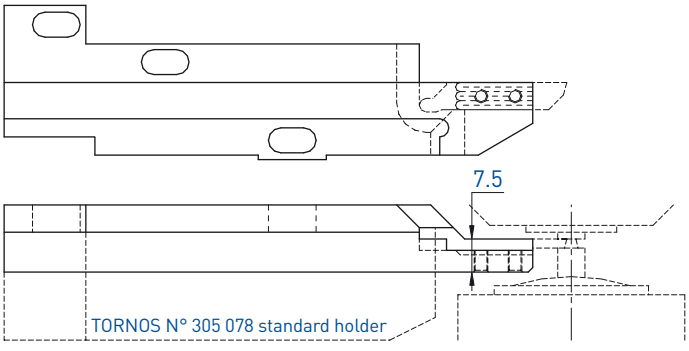
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Coupe à gauche
Linksschneiden
Left hand cut



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
730-DECO10	731 - 737	> 1.43

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

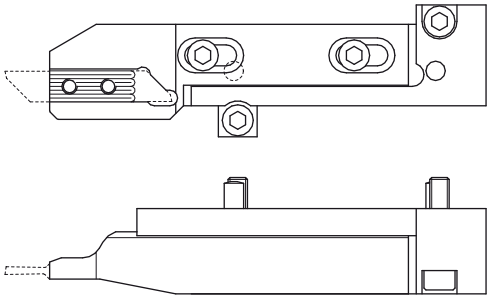


Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740L-DECO10	741L / 741N	> 1.49

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

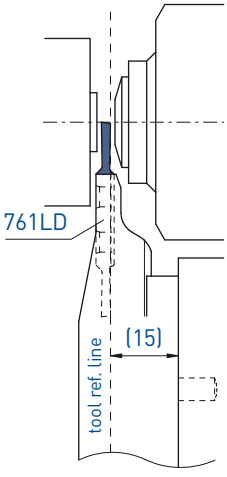
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off

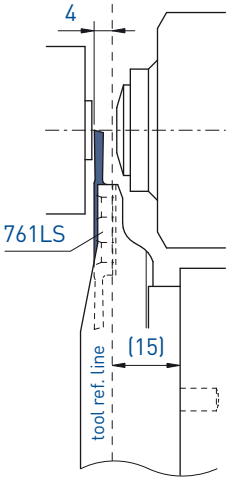




Réglable en longueur
Längseinstellbar
Adjustable length

Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
760L-DECO10	761L / 761N	1.104 - 1.125



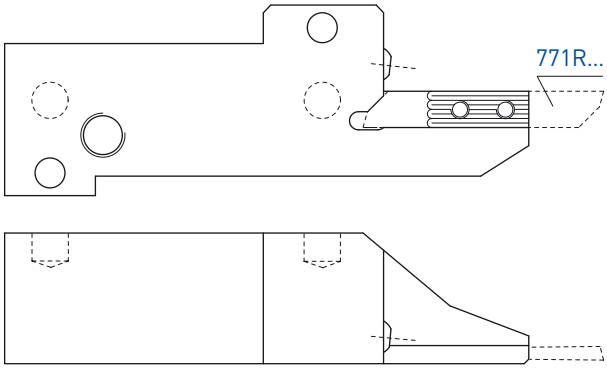


Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

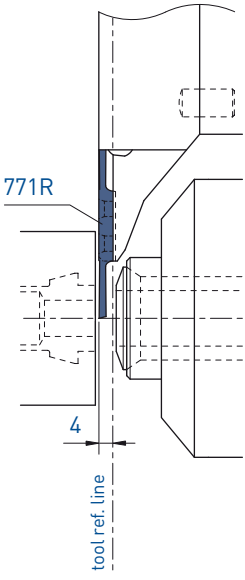
DECO 13
EvoDECO 16

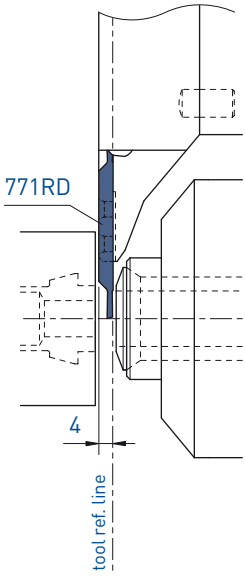
Porte-outils pour machine Tornos
Halter für Tornos Maschine
Holders for Tornos machine

Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off



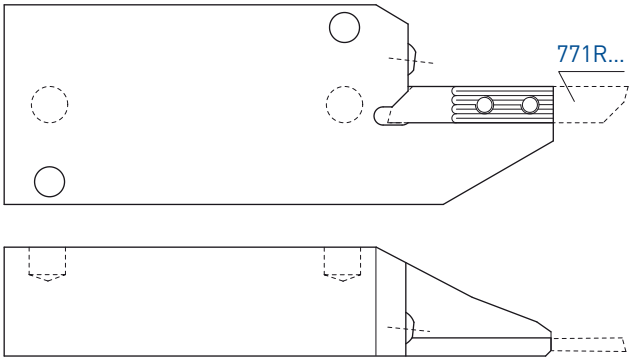
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
770R-DECO13	771R	1.171 - 1.174



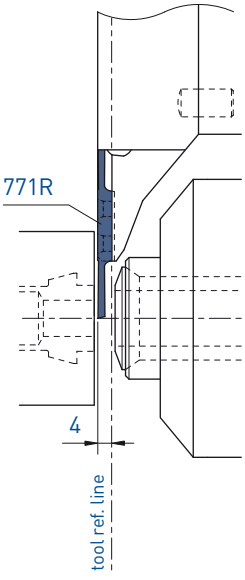


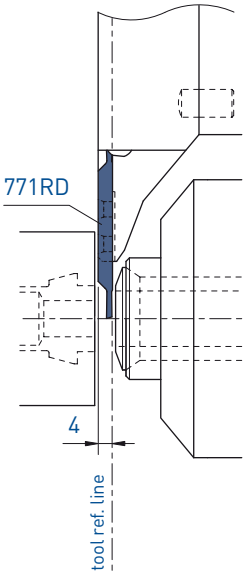
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
770R-DECO20	771R	1.171 - 1.174

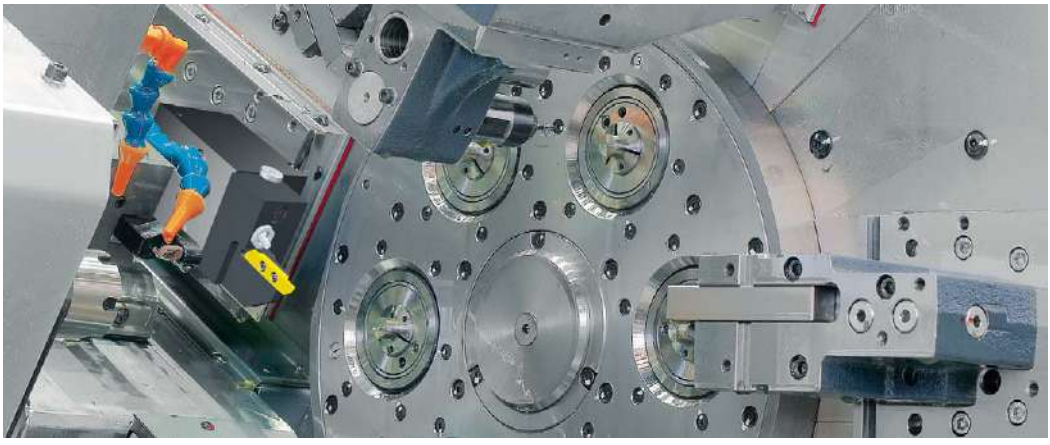




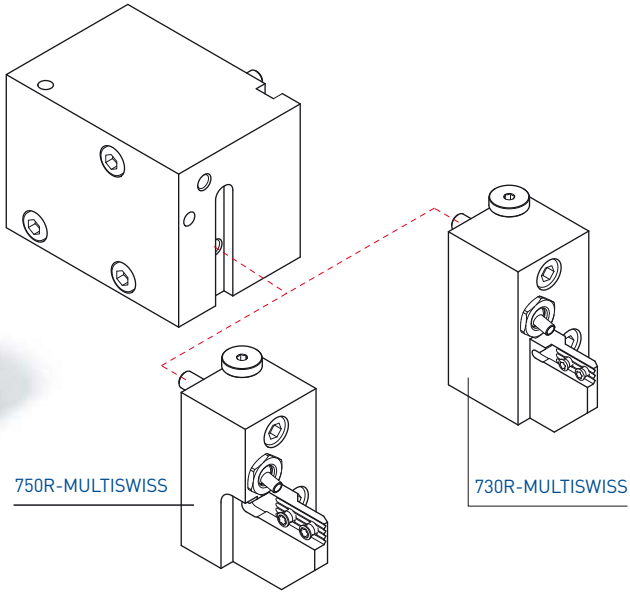
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Each holder is supplied with one or more screws. The keys must be ordered separately.

MultiSwiss 6x16

Porte-outils pour machine Tornos
Halter für Tornos Maschine
Holders for Tornos machine





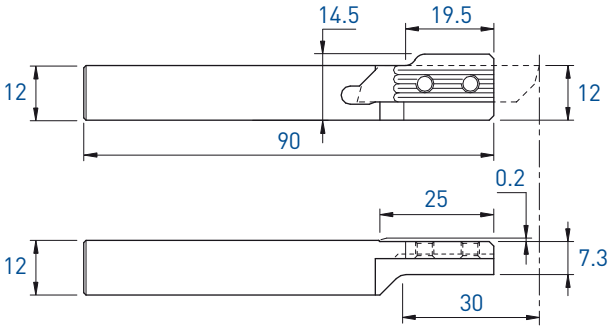


Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

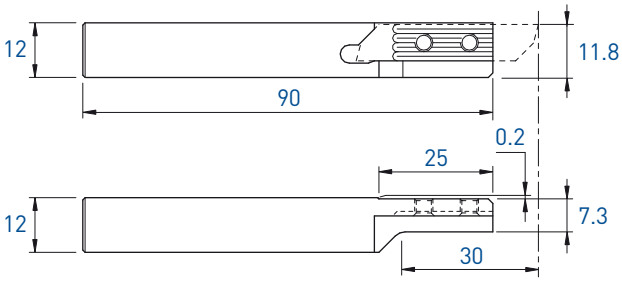
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Die Schlüssel sind separat zu bestellen.

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The keys must be ordered separately.

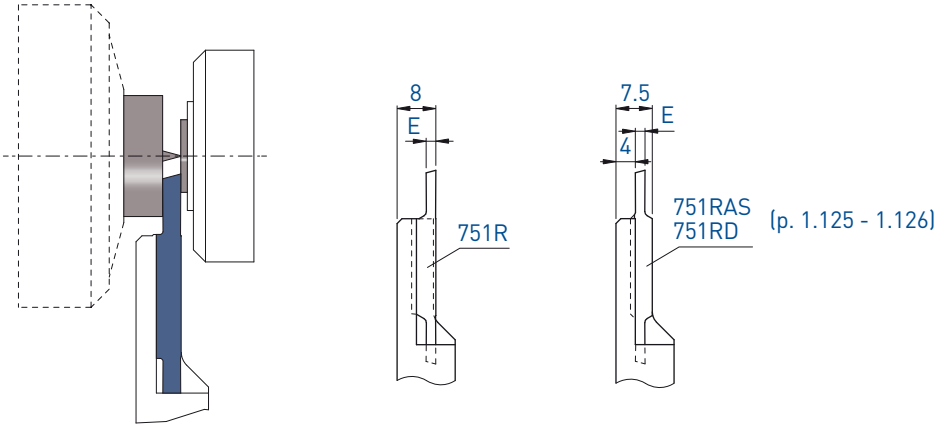
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
730R-MULTISWISS	731R / 731N	1.49 - 1.57
750R-MULTISWISS	751R / 751N	1.103 - 1.126



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
750RAS-12	751R	1.114 - 1.127



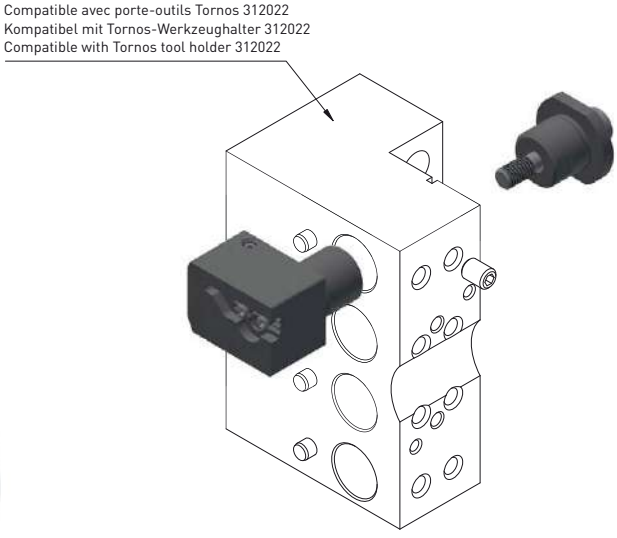
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
750RAS-12-H11.8	751R	1.114 - 1.127



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.



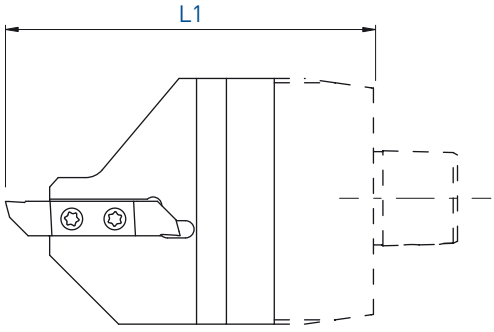


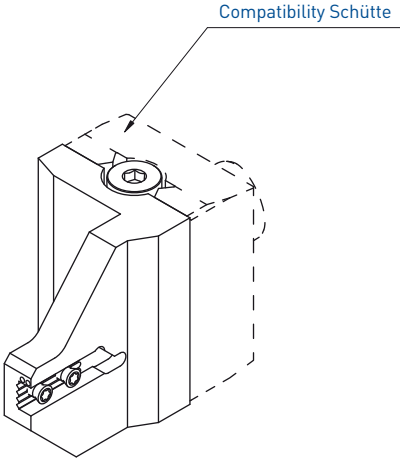


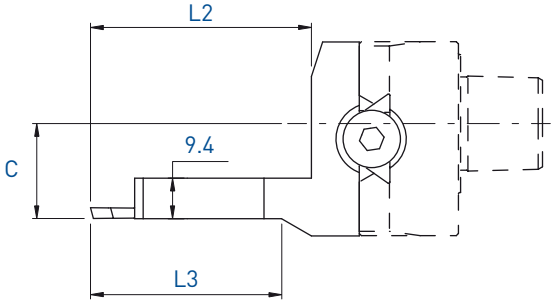
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740-SN-312022	740	1.43 - 1.89

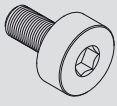
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
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Each holder is supplied with one or more screws. The keys must be ordered separately.







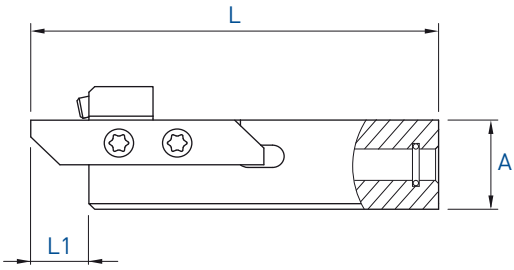


Plaquettes type WSP Typ Inserts type	Pages Seiten Pages	L1	C	L2	L3	Art. N°	Compatibility Schütte	 Art. N°
761-767	> 1.101	86	22	51	44	**DT20-760-JET**	***C3-75870949***	**V-M6X0.5-14-L18**
		83	27.5	48	–	**DT30-760-JET**	***C4-75836783***	

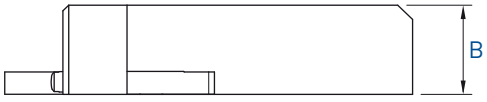
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Each holder is supplied with one or more screws. The keys must be ordered separately.

AFC-740-JET / AFC-760-JET









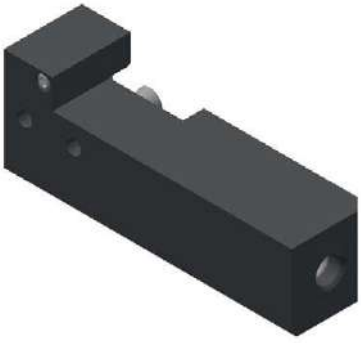
À monter exclusivement avec les butées ARNO AHA...-UN...-AFC
Ausschließlich mit ARNO AHA...-UN...-AFC Anschlagssystemen montieren
To be assembled exclusively with ARNO AHA...-UN...-AFC stop systems

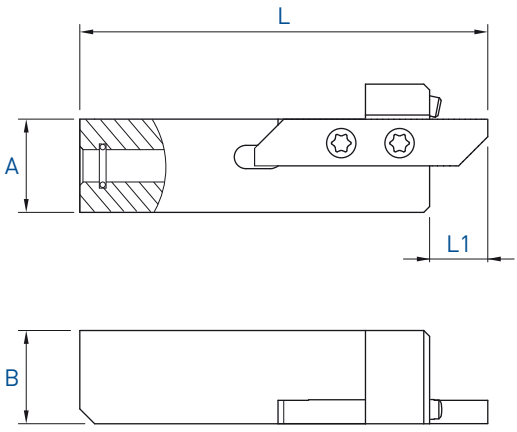
Plaquettes type WSP Typ Insert type	Pages Seiten Pages	AxB	L	L1	**Art. N°**	Buses Düsen Nozzles **Art. N°**
740	> 1.43	12x12	70	7.5	**AFC-740-12-JET**	**JJ-M3X6-D1.5**
740	> 1.43	16x16	70	7.5	**AFC-740-16-JET**	**JJ-M3X6-D1.5**
760	> 1.101	12x12	70	10	**AFC-760-12-JET**	**JJ-M3X6-D1.5**
760	> 1.101	16x16	70	10	**AFC-760-16-JET**	**JJ-M3X6-D1.5**
						More option see JET-Line

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

AFC-730R-JET / AFC-750R-JET







À monter exclusivement avec les butées ARNO AHA...-UN...-AFC
Ausschließlich mit ARNO AHA...-UN...-AFC Anschlagssystemen montieren
To be assembled exclusively with ARNO AHA...-UN...-AFC stop systems

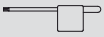
Plaquettes type WSP Typ Insert type	Pages Seiten Pages	AxB	L	L1	**Art. N°**	Buses Düsen Nozzles **Art. N°**
730	> 1.43	12x12	70	7.5	**AFC-730R-12-JET**	**JJ-M3X6-D1.5**
730	> 1.43	16x16	70	7.5	**AFC-730R-16-JET**	**JJ-M3X6-D1.5**
750	> 1.101	12x12	70	10	**AFC-750R-12-JET**	**JJ-M3X6-D1.5**
750	> 1.101	16x16	70	10	**AFC-750R-16-JET**	**JJ-M3X6-D1.5**
						More option see JET-Line

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

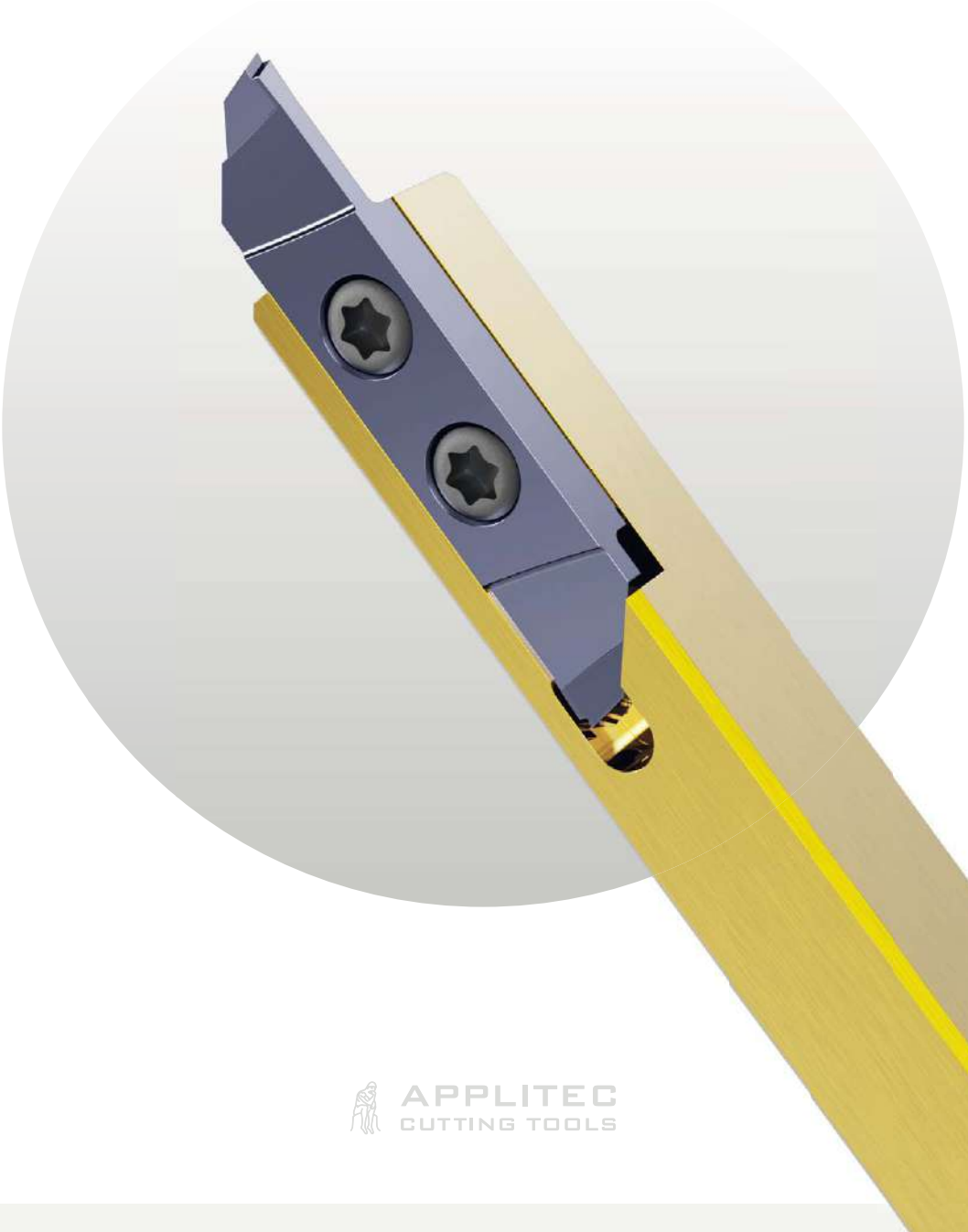
Vis et clés de rechange
Ersatzschrauben und Schlüsseln
Spare screws and keys

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options	Serrage type B Spannsystem Typ B Clamping system type B	Options
710	710-6 / - NOVIBRA	**V-M2.5X5.8-T8**	**C-T8**	-	-
	710-7 / - NOVIBRA	**V-M2.5X6.5-T8**			
	710-8 / - NOVIBRA 710-10 - 710-12	**V-M2.5X7.8-T8**			
720	720-7	**V-M2.5X6.5-T8**	**C-T8**	-	-
	720-8 - 720-12	**V-M2.5X7.8-T8**			
730	730-7 /- JET / -NOVIBRA	**V-M3X7-T8**	**C-T8**	-	-
	730-8 / -NOVIBRA			**V-M2.5X7.8-T8**	**C-T8**
	730-9.52 - 730-20 730-DECO10 730R-DECO10			-	-
	730RC	**V-M3X5.5-T8**			
740	740-7 /-JET /-NOVIBRA	**V-M3X7-T8**	**C-T8**	-	-
	740-8 /-NOVIBRA - 740-12 /-JET /-NOVIBRA			**V-M2.5X7.8-T8**	**C-T8**
	740-16 - 740-20 740/730-D 740-C			-	-
	740-D-JET	**V-M3X5.5-T8**			
	740-DECO10	**V-M3X7-T8**			
	740L-DECO10				
	740-Z	**V-M3X9-T8**			

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options	Serrage type B Spannsystem Typ B Clamping system type B BN11 BN21	
750	750-10 - 750-12 /-JET	**V-M4X9-T15**	**C-T15**	-	-
	750-10-AB			**V-M3X10-BN21**	**C-6P-2.0**
	750-12-AB			**V-M3X8-BN11**	**C-6P-2.5**
	750-12.7 - 750-14			**V-M3X10-BN11**	
	750-16			**V-M3X12-BN11**	
	750-20			**V-M3X16-BN11**	
	750RAS - 750-RC	**V-M4X7.3-T15**		-	-
	750R-DECO10	**V-M4X5.6-T15**			
760	760-10 - 760-12 /-JET / -NOVIBRA / 760/750	**V-M4X9-T15**	**C-T15**	-	-
	760-10-AB			**V-M3X10-BN21**	**C-6P-2.0**
	760-12-AB			**V-M3X8-BN11**	**C-6P-2.5**
	760-12.7 - 760-14			**V-M3X10-BN11**	
	760-16			**V-M3X12-BN11**	
	760-20			**V-M3X16-BN11**	
	760-D-JET			-	-
	760LC	**V-M4X7.3-T15**			
	760L-DECO10	**V-M4X5.6-T15**			
	760-Z	**V-M4X12-T15**			

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage type B Spannsystem Typ B Clamping system type B  	
770	770 / -JET	**V-M4X9-T15**	**C-T15**	-	-
	770RC	**V-M4X7.3-T15**			
780	780 / -JET	**V-M4X9-T15**	**C-T15**	-	-
7050	7050	**V-M4X9-T15**	**C-T15**	-	-
	7051				
7060	7060	**V-M4X9-T15**	**C-T15**	-	-
	7061				
W	W750 / W760 /-JET	**V-M4X11.5-T15**	**C-T15**	-	-
PSC3	PSC3-730	**V-M3X7-T8**	**C-T8**	-	-
	PSC3-740				
	PSC3-750				
	PSC3-760	**V-M4X9-T15**	**C-T15**		
PSC4	PSC4-730	**V-M4X9-T15**	**C-T15**	-	-
	PSC4-740				
	PSC4-750				
	PSC4-760				
HSK	HSK-A40-E40-T40-740	**V-M3X7-T8**	**C-T8**	-	-
	HSK-A40-E40-T40-760	**V-M4X9-T15**	**C-T15**		
STAR	SL7/10-JET	**V-M3X7-T8**	**C-T8**	-	-
DECO 7/10 EvoDECO 10	730-DECO10	**V-M3X5.5-T8**	**C-T8**	-	-
	730R-DECO10				
	740-DECO10				
	740L-DECO10				
	750R-DECO10				
	760L-DECO10				
DECO 13 EvoDECO 16	770R-DECO13	**V-M3X5.5-T8**	**C-T8**	-	-
DECO 20 EvoDECO 20/32	770R-DECO20	**V-M3X5.5-T8**	**C-T8**	-	-
MultiSwiss	730R-MULTISWISS	**V-M3X5.5-T8**	**C-T8**	-	-
	750R-MULTISWISS	**V-M4X7.3-T15**	**C-T15**		
SwissNano	740-SN-312022	**V-M3X5.5-T8**	**C-T8**	-	-
Schütte	DT20-760-JET	**V-M4X9-T15**	**C-T15**	-	-
	DT30-760-JET				
Arno	AFC-730R	**V-M3X5.5-T8**	**C-T8**	-	-
	AFC-740				
	AFC-750R				
	AFC-760				

TOP-Watch



APPLITEC
CUTTING TOOLS

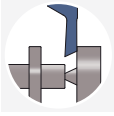
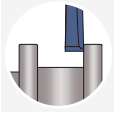
SF Series

Index

Codification
Kodifizierung
Coding guide > 2.04

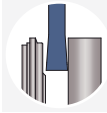
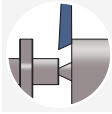
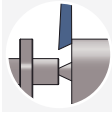
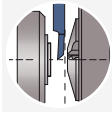
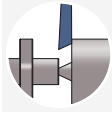
Infos et avantages
Infos und Vorteile
Infos and advantages > 2.05

Nuances
Sorten
Grades > 2.06

	pour machines à cames für kurvengesteuerte Maschinen for cam driven machines	pour machines CNC für CNC-Maschinen for CNC driven machines	
	L	L	R
	710 710-SF 710-NOVIBRA > 2.13	730 730-NOVIBRA	740 740SF 740-NOVIBRA > 2.23
	711SF > 2.16		741SF > 2.27
	712SF > 2.18		742SF > 2.32
	713SF > 2.20		743SF > 2.37
			744SF > 2.43
		736SF	746SF > 2.44
			748SF > 2.46
			749SF > 2.47

	pour machines à cames für kurvengesteuerte Maschinen for cam driven machines	pour machines CNC für CNC-Maschinen for CNC driven machines	
	L	L	R
	711-ESF >	731-ESF	741-ESF > 2.48

Coupe à droite déportée | Versetztes Rechtsschneiden | Right cut off line

	730RC	> 2.49
	731NSF	> 2.50
	731RSF	> 2.51
	750RC	> 2.54
	751RDSF	> 2.55
	770-SN-SF	> 2.56
	771RVSF	> 2.58

Porte-outils pour SwissNano
Halter für SwissNano
Holder for SwissNano

MODU-Line **ML12** > 2.59

Codification
Kodifizierung
Coding guide

7	4	4	SF	–	X412	–	0.8	–	HTAXF

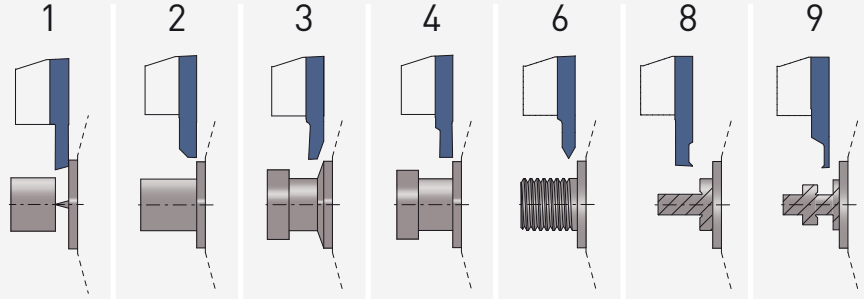
Super finish

Dimension
Abmessung
Dimension

Nuance
Sorte
Grade

Géométrie de coupe / Brise-copeaux / Particularités
Schneidgeometrie / Spanbrecher / Sondereigenschaften
Cutting geometry / Chip breaker / Special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

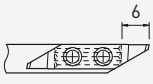


Gamme de produit
Produktserie
Product series

définit la compatibilité des plaquettes avec le porte-outil
definiert die Kompatibilität der Wendeschneidplatten mit dem Werkzeughalter
define the compatibility of the inserts with the toolholder

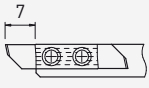
L = 1, 3, 5, 7 (chiffre impair / ungerade Zahl / uneven number)
R = 4 (chiffre pair / gerade Zahl / even number)

L 710



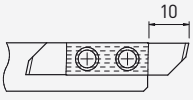
pour machines à cames
für kurvengesteuerte Maschinen
for cam driven machines

L 730 | R 740



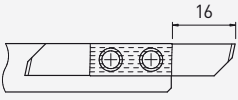
main series
small type

L 750



main series
large type

L 770

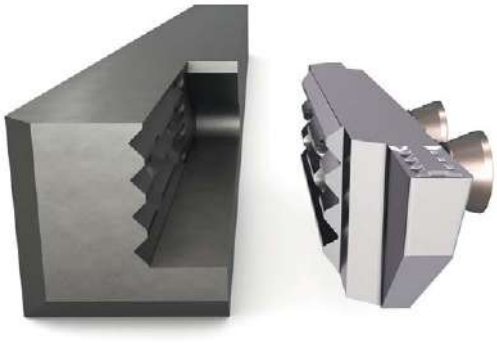


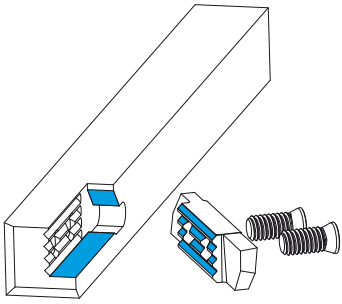
tronçonnage uniquement
nur für abstechen
only for parting off

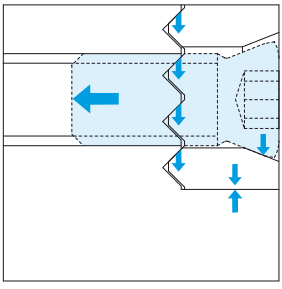
Applitec série 700 Système de serrage à denture décalée avec 2 vis de fixation
Applitec 700 Serie Spannsystem mit 2 Schrauben und verschobener Verzahnung
Applitec 700 series Shifted teeth clamping system with 2 screws

100% rigid!

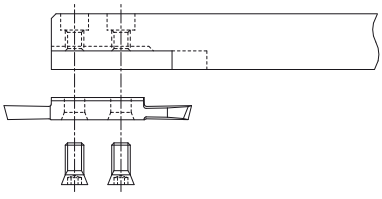
Système de serrage Applitec à denture décalée
Applitec-Spannsystem mit verschobener Verzahnung
Applitec clamping system with shifted teeth

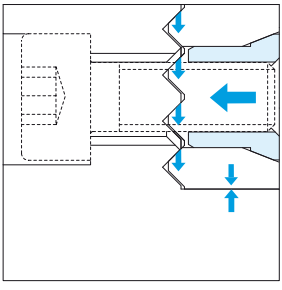






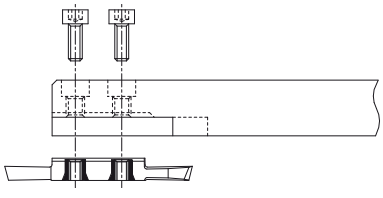
Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)





Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
-B nach der Artikelreferenz hinzufügen
add -B after the article number



Changement de la plaquette possible dans la machine, sans démontage du porte-outil
WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
The insert can be changed in the machine without removing the tool holder

* = sur demande / auf Anfrage / on request

Nuances
Sorten
Grades

µK20

N



K20

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance micro-grain tenace, résistante aux conditions défavorables, recommandée pour des opérations de coupe dans des matières ne nécessitant aucun revêtement
- zähe Feinkornsorte, in ungünstige Bearbeitungskonditionen widerstandsfähig, für Schnittbearbeitung von Stahl und rostfreiem Stahl empfohlen
- tough micro-grain grade, suitable for unfavorable machining conditions, suitable for cutting in material that not necessitate any tool coating

µK20

TAF



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF **F** M E

P ★★★★☆
M ★★★★☆
N ★★★★☆
S ★★★★☆

- nuance très résistante aux conditions défavorables, recommandée pour des opérations de coupes dans les aciers et aciers inoxydables
- zähe widerstandsfähige Sorte in ungünstigen Bearbeitungskonditionen, für Schnittbearbeitung von Stahl und rostfreiem Stahl empfohlen
- tough grade, resistant to unfavorable machining conditions, suitable for cutting of steel and stainless steel

µK20

TAF-RE



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF F M E

P ★★★★☆
M ★★★★☆
N ★★★★☆
S ★★★★☆

- nuance identique à TAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie TAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as TAF, after coating grounded clearance, recommended for finishing

µK10 - µK20

KN



K10 - K20

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance de base non revêtue micro-grain, alliant une très bonne résistance à l'usure et une bonne ténacité
- recommandé pour l'usinage des matières ne nécessitant aucun revêtement, par exemple le titane pur

- verschleißfeste Feinkornsorte, unbeschichtet, mit hoher Zähigkeit und guter Widerstandsfähigkeit
- empfohlen für die Bearbeitung von Werkstoffen, die keine Beschichtung erfordern, zum Beispiel reines Titan

- wear-resistant micro-grain grade, uncoated, with high toughness and good resistance
- recommended for machining materials that do not require coating, such as pure titanium

µK10 - µK20

KSTF



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF **F** M E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance très résistante à l'usure et à la température
- 1er choix pour les aciers > 50 HRC, les aciers à base de nickel, chrome-cobalt, inox et titane allié.

- verschleißfeste Sorte, beständig gegen hohe Temperaturen
- erste Wahl für Stähle > 50 HRC, Nickelbasislegierungen, Chrom-Kobalt, rostfreien Stahl und legiertes Titan

- wear-resistant grade, highly resistant to temperature
- first choice for steels > 50 HRC, nickel-based alloys, chrome-cobalt, stainless steel, and alloyed titanium

µK10 - µK20

KSTF-RE



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF F M E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance identique à KSTF avec dépouilles rectifiées après revêtement pour des opérations de finition

- gleiche Sorte wie KSTF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen

- same grade as KSTF, after coating grounded clearance, recommended for finishing,

Nuances
Sorten
Grades

HN

µK10



K10

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance micro-grain, bonne résistance à l'usure
- recommandé pour des opérations d'ébauche et de finition pour des matières ou usinages ne nécessitant aucun revêtement

- verschleissfeste Feinkornsorte
- für Schruppen und Schlichtbearbeitung empfohlen oder für Werkstoffe oder Bearbeitungen, die keine Beschichtung erfordern

- wear resistant micro-grain carbide
- recommended for roughing and finishing and for materials or operations that do not necessitate any tool coating

HTC

µK10



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF **F** M E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition
- **conseillé pour l'usinage de la matière 20AP**

- verschleissfeste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen
- **für Bearbeitung von 20AP geeignet**

- wear resistant grade, low friction ratio, recommended for roughing and finishing
- **suitable for machining of 20AP material**

HTC-RE

µK10



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F M E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance identique à HTC avec dépouilles rectifiées après revêtement pour des opérations de finition
- **conseillé pour l'usinage de la matière 20AP**

- gleiche Sorte wie HTC nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- **für Bearbeitung von 20AP geeignet**

- same grade as HTC, after coating grounded clearance, recommended for finishing
- **suitable for machining of 20AP material**

µK10

HTAF



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF **F** M E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance résistante à l'usure, recommandée pour des opérations d'ébauche et de finition
- **conseillé pour l'usinage des matières Finemac et inox 4c27a**

- verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen
- **für Bearbeitung von Finemac und 4c27a-Rostfreiem Stahl geeignet**

- wear resistant grade, recommended for roughing and finishing
- **suitable for machining of Finemac and 4c27a stainless steel**

µK10

HTAF-RE



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F M E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance identique à HTAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- **recommandé pour les matières Finemac et inox 4c27a**

- gleiche Sorte wie HTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- **für Bearbeitung von Finemac und 4c27a-Rostfreiem Stahl geeignet**

- same grade as HTAF, after coating grounded clearance, recommended for finishing
- **suitable for machining of Finemac and 4c27a stainless steel**

µK10

HTAXF



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF **F** M E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance complémentaire, résistante à l'usure et à la température pour l'usinage ébauche et finition des matières inox 304, 316L, 317L, 904, Phynox
  Aciers alliés contenant : chrome nickel, vanadium, molybdène...

- komplementäre Sorte, verschleissfest und temperaturbeständing. Für Schruppen und Schlichtbearbeitung von Materialien Inox 304, 316L, 317L, 904, Phynox
  Legierter Stahl enthaltend Chrom-Nickel, Vanadium, Molybdän...

- complementary grade, wear and temperature resistant four roughing and finishing of following materials : Inox 304, 316L, 317L, 904, Phynox
  Alloy steel containing Chrome-nickel, Vanadium, Molybdenum...

Nuances
Sorten
Grades

µK10

HTAXF-RE



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F M E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance identique à HTAXF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte, wie HTAXF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as HTAXF, after coating grounded clearance, recommended for finishing

µK10

HCR-TF



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F M E

P ☆☆☆☆☆
M ☆☆☆☆☆
N ★★★★★
S ★★★★☆

- nuance spécifique aux matériaux non ferreux tels que cuivre, laiton, laiton sans plomb, bronze, maillechort. Réduit le collage. Alternative aux revêtements DLC pour certains domaines d'applications
- spezifische Sorte, für Nichteisenmetalle wie Kupfer, Messing, bleifreies Messing, Bronze, Neusilber. Verringerung des Klebens. Alternative zu DLC-Beschichtungen in gewissen Einsatzbereichen
- specific grade for non-ferrous materials such as copper, brass, lead-free brass, bronze and nickel silver. Reduces sticking. Alternative to DLC coatings for certain applications

µK10

HTiN



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F M E

P ★★★★☆
M ★★★★☆
N ★★★☆☆
S ☆☆☆☆☆

- nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition
- verschleisste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen
- wear resistant grade low friction ratio, recommended for roughing and finishing

µK01

XN



K01

Non revêtu
Unbeschichtet
Uncoated

P ★ ☆ ☆ ☆ ☆
M ★ ☆ ☆ ☆ ☆
N ★ ★ ★ ☆ ☆
S ★ ★ ★ ☆ ☆

- nuance micro-grain très résistante à l'usure, recommandée pour des opérations d'ébauche et de finition pour des matières ou usinages ne nécessitant aucun revêtement
- sehr verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen oder für Werkstoffe oder Bearbeitungen, die keine Beschichtung erfordern
- wear resistant micro-grain carbide, recommended for roughing and finishing and for materials or operations that do not necessitate any tool coating

µK01

XTC



K01

µK01 + revêtement PVD
µK01 + PVD Beschichtung
µK01 + PVD coating

TF **F** M E

P ★ ★ ★ ★ ★
M ★ ★ ★ ★ ★
N ★ ★ ★ ★ ☆
S ★ ★ ★ ★ ☆

- nuance très résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations de finition
- sehr verschleissfeste Sorte, geringer Reibwert, für Schlichtbearbeitung empfohlen
- very wear resistant grade, recommended for finishing, suitable for machining of very abrasive materials

µK01

XTAF



K01

µK01 + revêtement PVD
µK01 + PVD Beschichtung
µK01 + PVD coating

TF **F** M E

P ★ ★ ★ ★ ★
M ★ ★ ★ ★ ★
N ★ ★ ★ ★ ☆
S ★ ★ ★ ★ ☆

- nuance très résistante à l'usure, recommandée pour des opérations de finition, conseillée pour l'usinage des matières très abrasives
- sehr verschleissfeste Sorte, für Schlichtbearbeitung empfohlen, für die Bearbeitung von sehr abrasive Rohstoffe geeignet
- very wear resistant grade, recommended for finishing, suitable for machining of very abrasive materials

µK01

XTAF-RE



K01

µK01 + revêtement PVD
µK01 + PVD Beschichtung
µK01 + PVD coating

TF F M E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance identique à HTAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie XTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as XTAF, after coating grounded clearance, recommended for finishing

µK01

XTAXF



K01

µK01 + revêtement PVD
µK01 + PVD coating
µK01 + PVD Beschichtung

TF **F** M E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★☆

- nuance complémentaire très résistante à l'usure et à la température pour la finition des matières inox 304, 316L, 317L, 904, Phynox
  Aciers alliés contenant : chrome nickel, vanadium, molybdène...
- komplementäre Sorte, sehr veschleissfest und temperaturbeständig. Für Schlichtbearbeitung von Materialien Inox 304, 316L, 317L, 904, Phynox
  Legierter Stahl enthaltend Chrom-Nickel, Vanadium, Molybdän...
- complementary grade, very wear and temperature resistant for finishing of following materials: Inox 304, 316L, 317L, 904, Phynox
  Alloy steel containing Chrome-nickel, Vanadium, Molybdenum...

µK01

XTAXF-RE



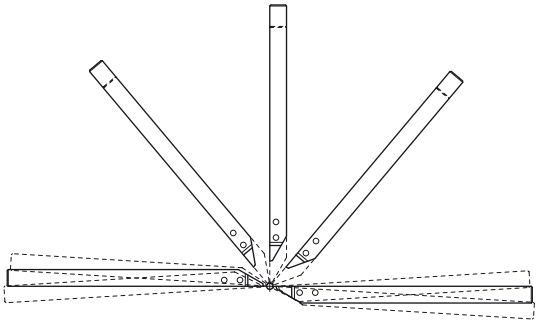
K01

µK01 + revêtement PVD
µK01 + PVD Beschichtung
µK01 + PVD coating

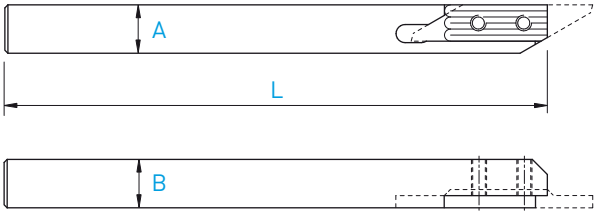
TF F M E

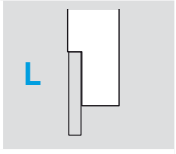
P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance identique à HTAXF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie XTAXF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as XTAXF, after coating grounded clearance, recommended for finishing,



Porte-outils pour machines à cames à gauche
Halter für linksdrehende kurvengesteuerte Maschinen
Tool holders for left hand turning cam driven machines





A x B	L	Serrage Spannsystem Clamping	Art. N°
6 x 6	115	A	**710-6**
7 x 7	115	A	**710-7**
8 x 8	115	A	**710-8**
8 x 8	140	A	**710-8-140**
10 x 10	115	A	**710-10**
12 x 12	130	A	**710-12**



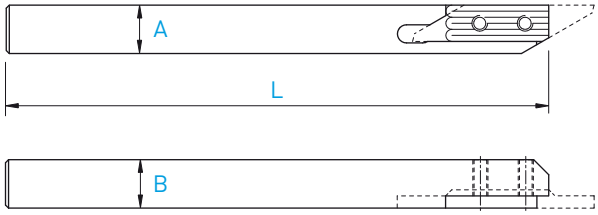
Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
710-6	**V-M2.5X5.8-T8**	**C-T8**
710-7	**V-M2.5X6.5-T8**	
710-8		
710-10	**V-M2.5X7.8-T8**	
710-12		

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

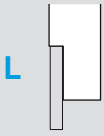
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

710-SF



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish



A x B	L	Serrage Spannsystem Clamping	Art. N°
7 x 7	140	A	**710-7-140-SF**
8 x 8	140	A	**710-8-140-SF**



Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
710-7-SF	**V-M2.5X6.5-T8**	**C-T8**
710-8-SF	**V-M2.5X7.8-T8**	

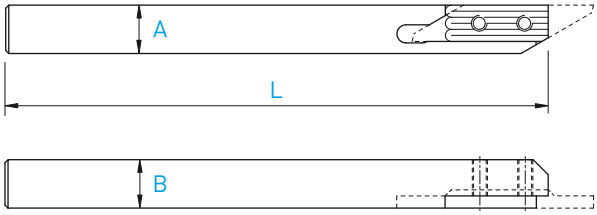
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

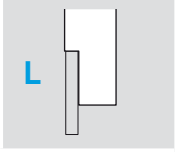
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

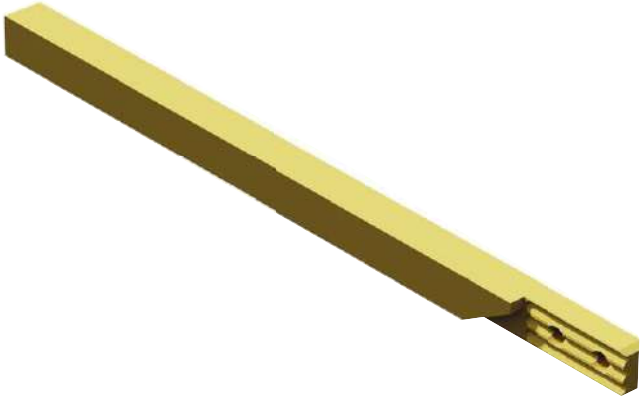
Porte-outils en métal lourd anti-vibratoire
Schwingungdämpfender Schwermetallhalter
Low vibration heavy metal holders

710-NOVIBRA





A x B	L	Serrage Spannsystem Clamping	Art. N°
6 x 6	115	A	**710-6-NOVIBRA**
7 x 7	115	A	**710-7-NOVIBRA**
8 x 8	115	A	**710-8-NOVIBRA**



Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
710-6-NOVIBRA	**V-M2.5X5.8-T8**	
710-7-NOVIBRA	**V-M2.5X6.5-T8**	**C-T8**
710-8-NOVIBRA	**V-M2.5X7.8-T8**	

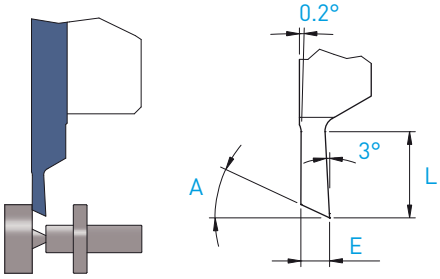
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

711SF

Tronçonnage
Abstechen
Parting off



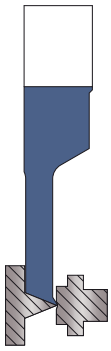


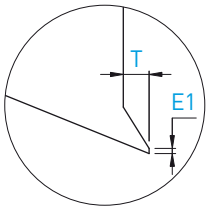
L

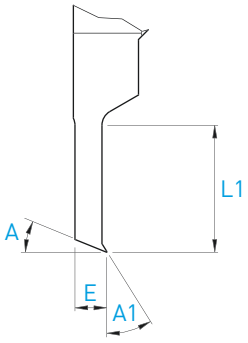
E	L	A	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µK10)
				P	P	P M N S	P M N S	N S
0.8	3.0	25°	**711SF-0.8-25°**	●	●	●	●	●
1.0	3.0	25°	**711SF-1.0-25°**	●		●	●	

Coupe rentrante
Abstechen Zentrumfrei
Pip-free back parting off

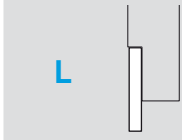
711SF-A







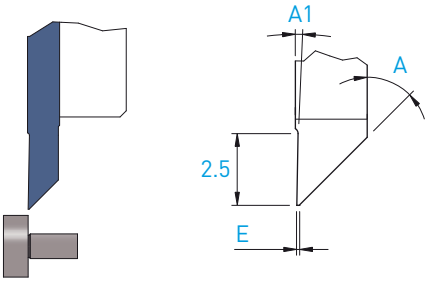




E1	E	A	A1	T	L1	Art. N°	N	TAF-RE
0.03	0.8	22°	32°	0.15	4	**711SF-0.8-22°-A3215**	●	●
0.03	1.0	22°	32°	0.15	4	**711SF-1.0-22°-A3215**	●	●

712SF

Tournage avant ébauche / finition
Vorwärts drehen schruppen / schlichten
Front turning for roughing / finishing



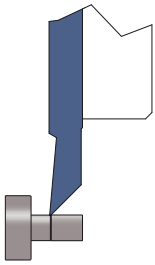


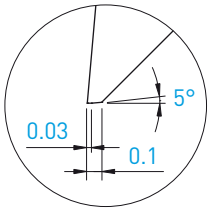
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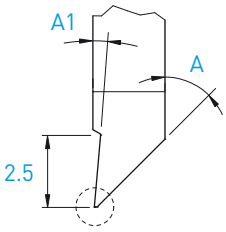
E	A	A1	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µK10)
0.03	45°	3°	**712SF-3/3-45°**	●		●		●
0.08	45°	1°	**712SF-8/8-45°**	●	●	●	●	●

Tournage avant finition (pivotage)
Vorwärts drehen schlichten
Front turning for finishing

712SF-10/3

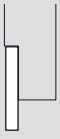








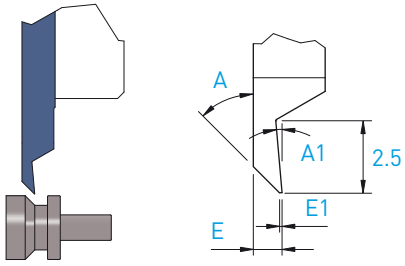
L



A	A1	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µk10)
			P	P	P M N S	P M N S	N S
45°	3°	712SF-10/3	●	●	●	●	●

713SF

Tournage arrière ébauche / finition
Rückwärts drehen schruppen / schlichten
Back turning for roughing / finishing



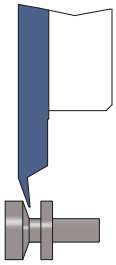


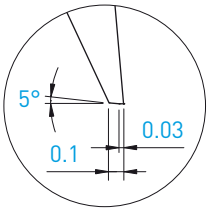
L

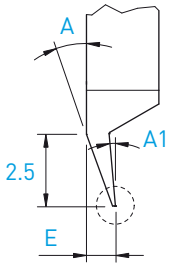
E1	E	A	A1	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µK10)
					P	P	P	P	
							M	M	
							N	N	N
							S	S	S
0.03	1.0	45°	5°	**713SF-3/3-45°-1.0**	●		●		●
0.10	1.0	45°	5°	**713SF-10/10-45°-1.0**	●		●		●

Tournage arrière finition
Rückwärts drehen schlichten
Back turning for finishing

713SF-10/3

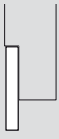






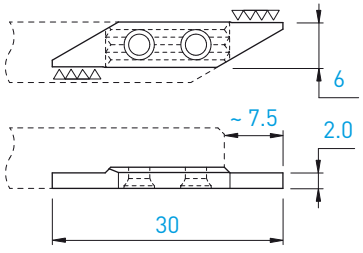


L



E	A	A1	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µk10)
				P	P	P M N S	P M N S	N S
1.0	20°	5°	**713SF-10/3**	●		●	●	●

711-ESF

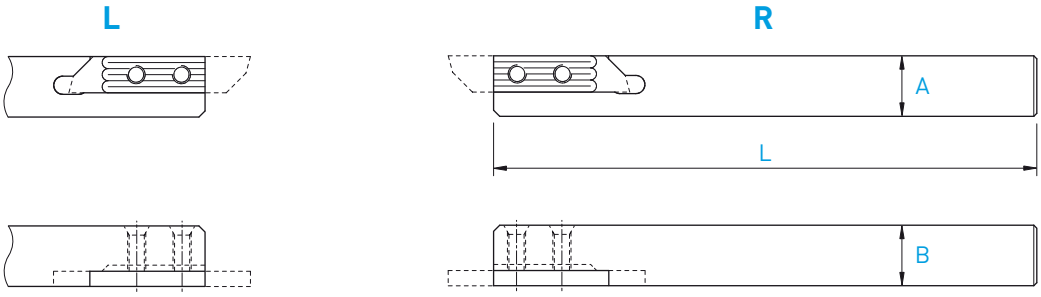




L



Art. N°	HTC	HTAF	HTiN	HN (µk10)	XTAF	XN (µk01)	XTC
	P M N S	P M N S	P M N S	N S	P M N S	N S	P
711-ESF	●	●		●	●	●	●



A x B	L	Serrage Spannsystem Clamping	L Art. N°	R Art. N°
7 x 7	115	A	**730-7**	**740-7**
8 x 8	115	A + B	**730-8**	**740-8**
8 x 8	140	A + B	**730-8-140**	**-**
10 x 10	115	A + B	**730-10**	**740-10**
12 x 12	130	A + B	**730-12**	**740-12**
12 x 12	90	A + B	**730-12-90**	**740-12-90**



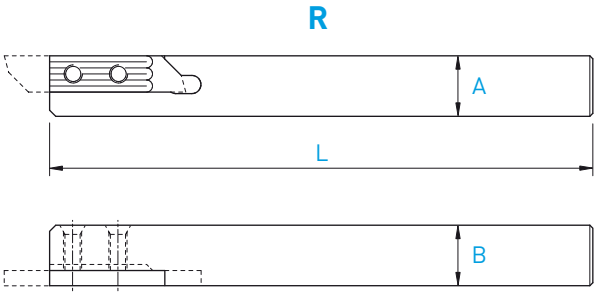
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

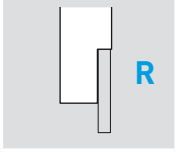
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options	Serrage standard (B) Standard Spannsystem (B) Standard clamping system (B)	Options
730/740-7	**V-M3X7-T8**	**C-T8**	**-**	**-**
730/740-8			**V-M2.5X7.8-T8**	**C-T8**
730/740-10				
730/740-12				

740-SF



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish



A x B	L	Serrage Spannsystem Clamping	Art. N°
7 x 7	90	A	**740-7-90-SF**
8 x 8	115	A + B	**740-8-SF**
8 x 8	90	A + B	**740-8-90-SF**
10 x 10	115	A + B	**740-10-SF**
10 x 10	90	A + B	**740-10-90-SF**
12 x 12	130	A + B	**740-12-SF**
12 x 12	90	A + B	**740-12-90-SF**



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.

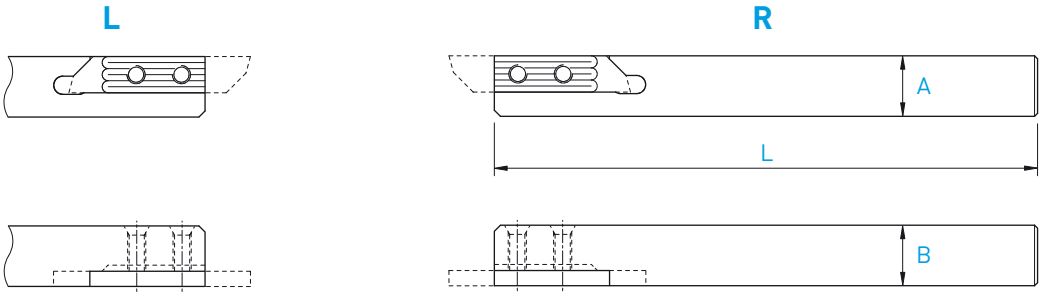
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options	Serrage standard (B) Standard Spannsystem (B) Standard clamping system (B)	Options
740-SF-7	**V-M3X7-T8**	**C-T8**	-	-
740-SF-8				
740-SF-10			**V-M2.5X7.8-T8**	**C-T8**
740-SF-12				

Porte-outils en métal lourd anti-vibratoire
Schwingungdämpfender Schwermetallhalter
Low vibration heavy metal holders

730 / 740-NOVIBRA



A x B	L	Serrage Spannsystem Clamping	L	R
			Art. N°	Art. N°
7 x 7	115	A	**730-7-NOVIBRA**	**740-7-NOVIBRA**
8 x 8	115	A + B	**730-8-NOVIBRA**	**740-8-NOVIBRA**
8 x 8	80	A + B	-	**740-8-80-NOVIBRA**
10 x 10	115	A + B	-	**740-10-NOVIBRA**
12 x 12	130	A + B	-	**740-12-NOVIBRA**



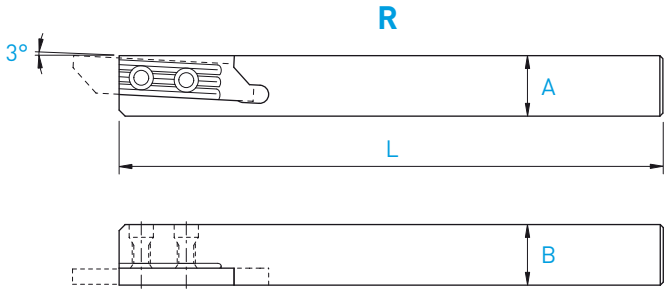
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

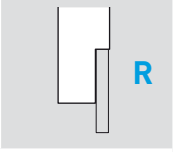
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options	Serrage standard (B) Standard Spannsystem (B) Standard clamping system (B)	Options
730/740-NOVIBRA-7	**V-M3X7-T8**	**C-T8**	-	-
730/740-NOVIBRA-8			**V-M2.5X7.8-T8**	**C-T8**
740-NOVIBRA-10				
740-NOVIBRA-12				

740X3-SF



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish



A x B	L	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	A + B	**740X3-8-SF**
10 x 10	115	A + B	**740X3-10-SF**
12 x 12	130	A + B	**740X3-12-SF**

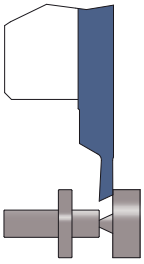


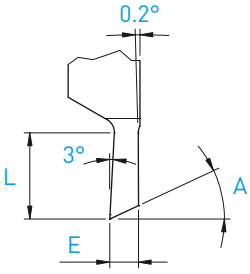
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.

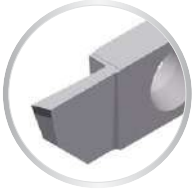
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

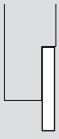
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options	Serrage standard (B) Standard Spannsystem (B) Standard clamping system (B)	Options
740X-SF-8	**V-M3X7-T8**	**C-T8**	**V-M2.5X7.8-T8**	**C-T8**
740X-SF-10				
740X-SF-12				





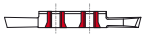




R

E	L	A	Art. N°	KSTF	KN (µK10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAXF-RE	XN (µK01)
				P M N S	P M N S	P	P	P M N S	P M N S	P M S	P M S	P M N S	N S	P M N S	P M S	P M S	N S
0.5	2.0	25°	**741SF-0.5-25°**	●	●	●	●	●	●	●		●	●	●	●		●
0.8	3.0	25°	**741SF-0.8-25°**	●	●	●	●	●	●	●			●	●	●		●
1.0	3.0	25°	**741SF-1.0-25°**	●	●	●	●	●	●	●	●		●	●	●	●	●
1.2	6.0	22°	**741SF-1.2-22°**	●	●	●	●	●	●	●	●		●	●	●	●	●

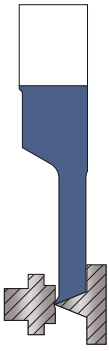
7XX-XX-B

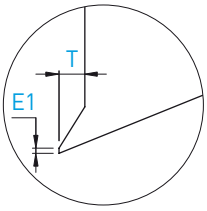


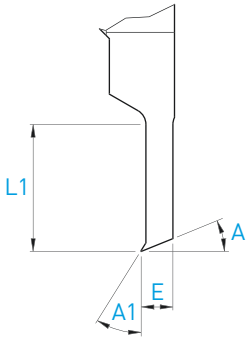
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

741SF-A

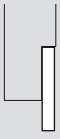
Coupe rentrante
Abstechen Zentrumfrei
Pip-free back parting off







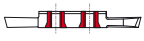




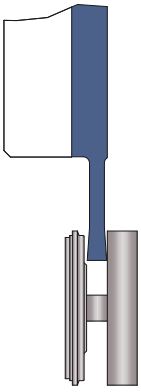
R

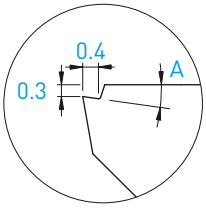
E1	E	A	A1	T	L1	Art. N°	TAF-RE	N
0.03	0.8	22°	32°	0.15	4	**741SF-0.8-22°-A3215**	●	●
0.03	1.0	22°	32°	0.15	4	**741SF-1.0-22°-A3215**	●	●
0.03	1.2	22°	32°	0.20	6	**741SF-1.2-22°-A3220**	●	●

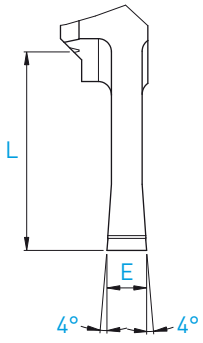
7XX-XX-B

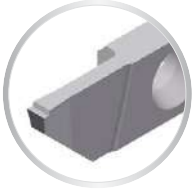


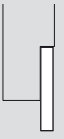
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05







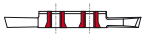




R

E	A	L	Art. N°	HCR-TF	HN (µk10)
1.5	8°	7.5	**741NSF-X840-1.5**	●	●
2.0	8°	8.0	**741NSF-X840-2.0**	●	●

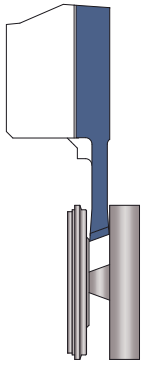
7XX-XX-B

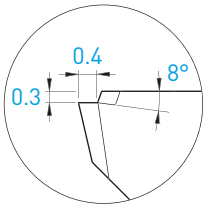


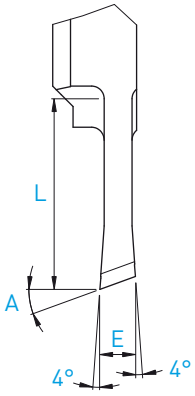
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

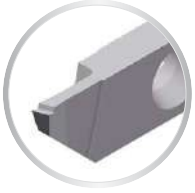
741SF-X

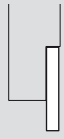
Tronçonnage
Abstechen
Parting off







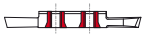




R

E	A	L	Art. N°	HCR-TF	HN (µK10)
1.1	20°	5.0	**741SF-X840-1.1-20°**	●	●
1.4	20°	7.5	**741SF-X840-1.4-20°**	●	●
1.5	5°	7.5	**741SF-X840-1.5-5°**	●	●
1.9	20°	8.0	**741SF-X840-1.9-20°**	●	●

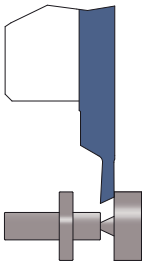
7XX-XX-B

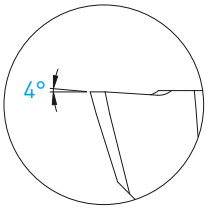


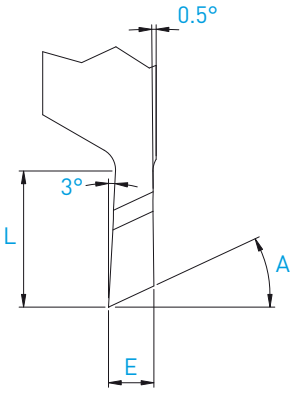
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Tronçonnage
Abstechen
Parting off

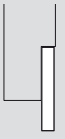
741SF-X4







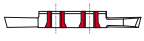




R

E	A	L	Art. N°	KSTF	KN (µk10-20)
0.8	25°	3.0	**741SF-X4-0.8-25**	●	●
1.0	25°	3.0	**741SF-X4-1.0-25**	●	●

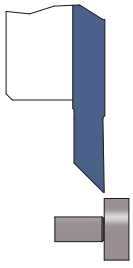
7XX-XX-B

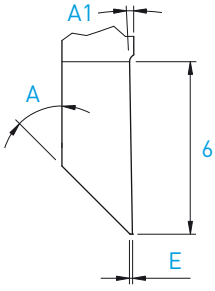


Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

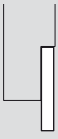
742SF

Tournage avant ébauche / finition
Vorwärts drehen schruppen / schlichten
Front turning for roughing / finishing





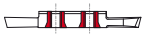




R

E	A	A1	Art. N°	KSTF	KSTF-RE	KN (µK10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAF-RE	XN (µK01)
				P M N S	P M N S	P M N S	P	P	P M N S	P M N S	P M	P M	P M N S	N S	P M S	P M S	P M S	N S
0.03	45°	3°	**742SF-3/3-45°**	●	●	●	●	●	●	●	●	●	●	●	●	●		●
0.05	45°	3°	**742SF-5/5-45°**					●	●	●				●				
0.08	45°	1°	**742SF-8/8-45°**	●	●	●	●	●	●	●	●	●	●	●	●	●		●

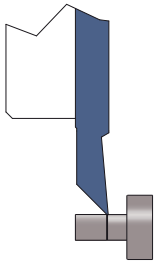
7XX-XX-B

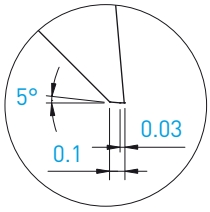


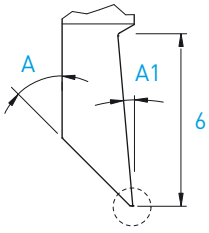
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Tournage avant finition
Vorwärts drehen schlichten
Front turning for finishing

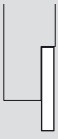
742SF-10/3







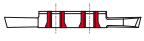




R

A	A1	Art. N°	KSTF	KSTF-RE	KN (µK10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAXF-RE	XN (µK01)
			P M N S	P M N S	P M N S	P	P	P M N S	P M N S	P M S	P M	P M N S	N S	P M N S	P M S	P M S	N S
45°	5°	**742SF-10/3**	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

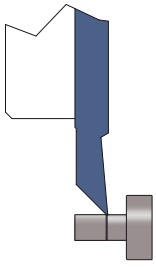
7XX-XX-B

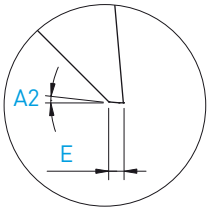


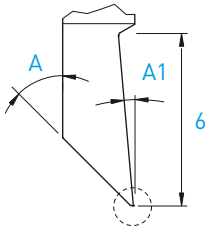
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

742SF-_/0

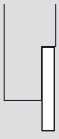
Tournage avant finition
Vorwärts drehen schlichten
Front turning for finishing







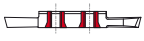




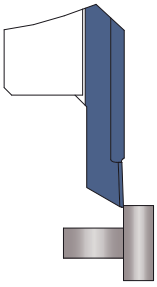
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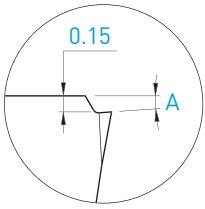
E	A	A1	A2	Art. N°	KSTF	KSTF-RE	KN (µK10-20)	HTAF-RE	XTAF-RE
0.10	45°	5°	5°	**742SF-10/0-5°-45°**	●	●	●	●	●
0.15	30°	3°	2°	**742SF-15/0-2°-30°**	●	●	●	●	●

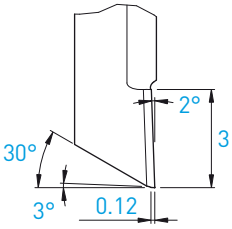
7XX-XX-B



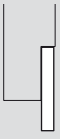
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05







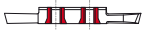




R

A	Art. N°	HTAXF	HCR-TF	HN (µk10)
4°	**742SF-X412**	●	●	●
8°	**742SF-X812**	●	●	●
12°	**742SF-X1212**	●	●	●

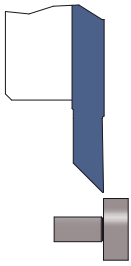
7XX-XX-B

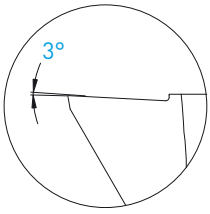


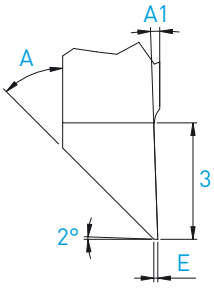
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

742SF-XZ

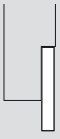
Tournage avant
Vorwärtsdrehen
Front turning







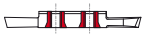




R

E	A	A1	Art. N°	P M N S KSTF	P M N S KN (µk10-20)
0.05	43°	2°	**742SF-XZ3-5/0-2-43**	●	●
0.10	43°	2°	**742SF-XZ3-10/0-2-43**	●	●

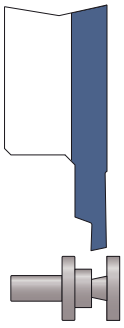
7XX-XX-B

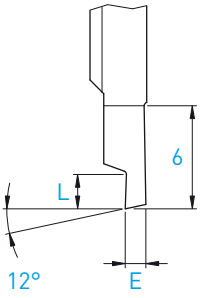


Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

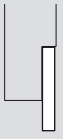
Tournage arrière ébauche
Rückwärts drehen schruppen
Back turning for roughing

743SF





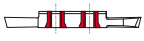




R

E	L	Art. N°	HTC	HTAF	HN (µk10)
			P	P M N S	N S
1.2	2.5	**743SF-120/0-12°**	●	●	●
1.4	3.0	**743SF-140/0-12°**	●	●	●
1.6	3.0	**743SF-160/0-12°**	●	●	●
1.8	4.0	**743SF-180/0-12°**	●	●	●

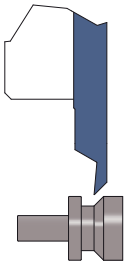
7XX-XX-B

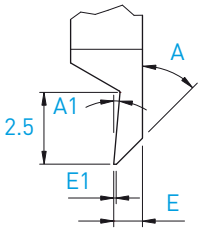


Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

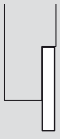
743SF-3/3

Tournage arrière ébauche / finition
Rückwärts drehen schruppen / schlichten
Back turning for roughing / finishing





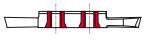




R

E1	E	A	A1	Art. N°	KSTF	KSTF-RE	KN (µK10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAXF-RE	XN (µK01)
					P M N S	P M N S	P M N S	P	P	P M N S	P M N S	P M S	P M S	P M N S	N S	P M N S	P M S	P M S	N S
0.03	1.0	45°	5°	**743SF-3/3-45°-1.0**	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
0.03	1.2	45°	5°	**743SF-3/3-45°-1.2**	●	●	●	●	●	●	●	●	●		●	●	●	●	●
0.10	1.0	45°	5°	**743SF-10/10-45°-1.0**	●	●	●	●	●	●	●	●	●		●	●	●	●	●
0.05	0.8	30°	3°	**743SF-5/5-30°-0.8**	●	●	●				●								
0.05	1.0	30°	3°	**743SF-5/5-30°-1.0**	●	●	●				●								

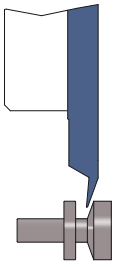
7XX-XX-B

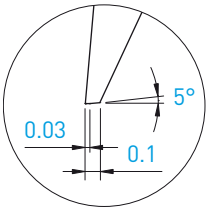


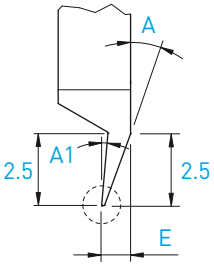
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Tournage arrière finition
Rückwärts drehen schlichten
Back turning for finishing

743SF-10/3







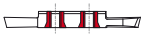




R

E	A	A1	Art. N°	KSTF	KSTF-RE	KN (µK10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAXF-RE	XN (µK01)
				P M N S	P M N S	P M N S	P	P	P M N S	P M N S	P M S	P M	P M N S	N S	P M N S	P M S	P M S	N S
1.0	20°	5°	**743SF-10/3**	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

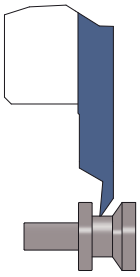
7XX-XX-B

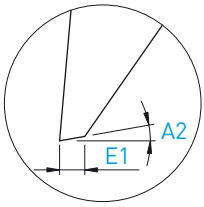


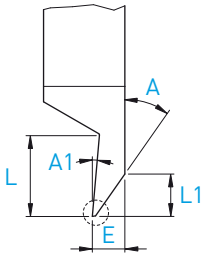
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

743SF-_/0

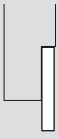
Tournage arrière finition
Rückwärts drehen schlichten
Back turning for finishing







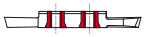




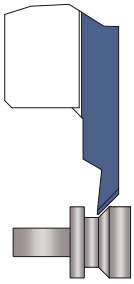
R

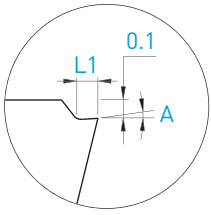
E1	E	L1	L	A	A1	A2	Art. N°	P M N S KSTF	P M N S KSTF-RE	P M N S KN (µK10-20)	P M N S HTAF-RE	P M N S XTAF-RE
0.08	1.0	1.6	2.5	30°	5°	2°	**743SF-8/0-2°-30°-1.0**	●	●	●	●	●
0.15	1.2	1.8	4.0	30°	3°	2°	**743SF-15/0-2°-30°-1.2**	●	●	●	●	●
0.10	1.0	1.3	2.5	35°	5°	10°	**743SF-10/0-10°-35°-1.0**	●	●	●	●	●

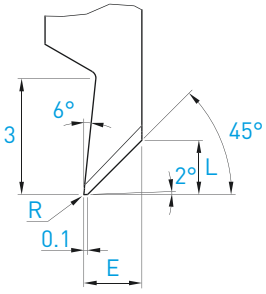
7XX-XX-B

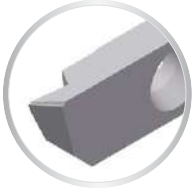


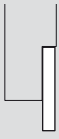
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05







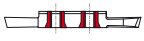




R

E	L	L1	A	R	Art. N°	KSTF	KN (µk10-20)	HTAXF	HCR-TF	HN (µk10)
1.0	0.9	0.12	4°	0	**743SF-X412-45°-1.0**			●	●	●
			8°	0	**743SF-X812-45°-1.0**			●	●	●
			12°	0	**743SF-X1212-45°-1.0**			●	●	●
1.5	1.4	0.12	4°	0	**743SF-X412-45°-1.5**			●	●	●
			8°	0	**743SF-X812-45°-1.5**			●	●	●
			12°	0	**743SF-X1212-45°-1.5**			●	●	●
1.5	1.3	0.24	6°	0.05	**743SF-X624-45°-1.5-R05**	●	●			

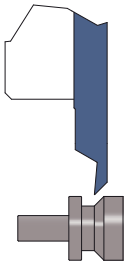
7XX-XX-B

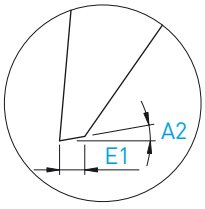


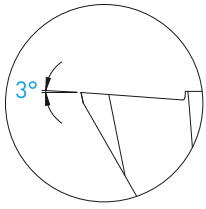
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

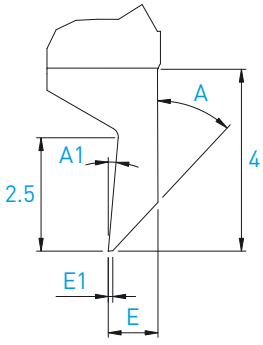
743SF-XZ

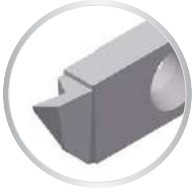
Tournage arrière
Rückwärts drehen
Back turning

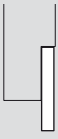








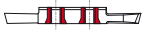




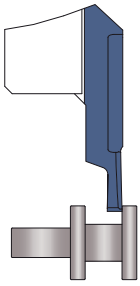
R

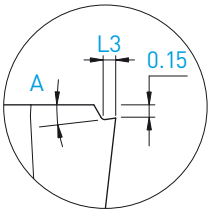
E1	E	A	A1	A2	Art. N°	KSTF	KN (µk10-20)
0.05	1.0	30°	5°	5°	**743SF-XZ3-5/0-5-30-1.0**	●	●
0.10	1.1	43°	5°	5°	**743SF-XZ3-10/0-5-43-1.1**	●	●

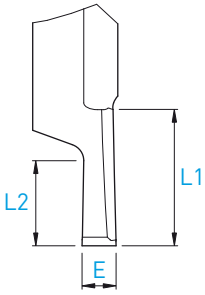
7XX-XX-B



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05







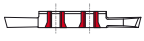




R

A	E	L1	L2	L3	Art. N°	HTAXF	HCR-TF	HN (µk10)
4°	0.5	3	1.0	0.12	**744SF-X412-0.5**	●	●	●
	0.6	3	1.5	0.12	**744SF-X412-0.6**	●	●	●
	0.8	4	2.0	0.12	**744SF-X412-0.8**	●	●	●
	1.0	4	2.5	0.12	**744SF-X412-1.0**	●	●	●
	1.0	4	2.5	0.24	**744SF-X424-1.0**	●	●	●
	1.0	4	2.5	0.36	**744SF-X436-1.0**	●	●	●
	1.2	5	3.0	0.12	**744SF-X412-1.2**	●	●	●
8°	0.6	3	1.5	0.12	**744SF-X812-0.6**	●	●	●
	0.8	4	2.0	0.12	**744SF-X812-0.8**	●	●	●
	1.0	4	2.5	0.12	**744SF-X812-1.0**	●	●	●
	1.2	5	3.0	0.12	**744SF-X812-1.2**	●	●	●

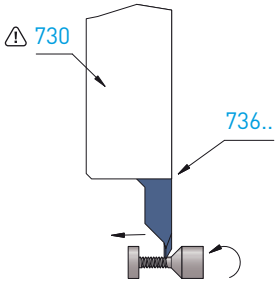
7XX-XX-B

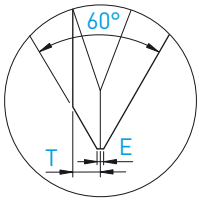


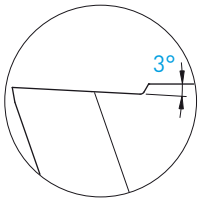
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

736SF

Filetage à profil partiel – norme NIHS
Gewinde drehen mit Teilprofil – Norm NIHS
Threading with partial profile – norm NIHS





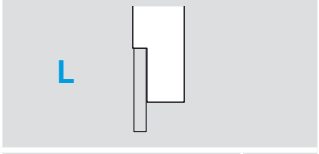


Filetage à droite
sens rotation machine M4

Rechtgewinde Drehrichtung
der Maschine M4

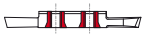
Right-hand thread rotating
machinery M4



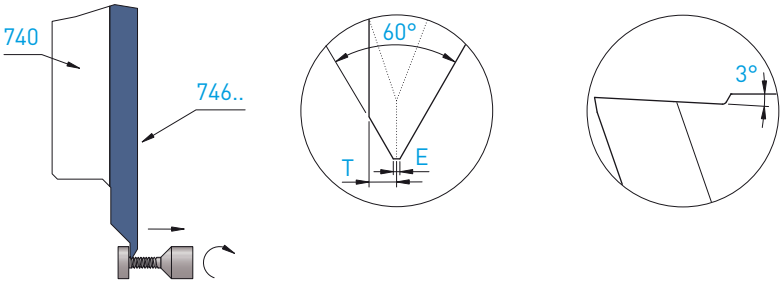


Filetage Gewinde drehen Threading	Pas Steigung Pitch P	T	E 0/-0.01	Art. N°	P M N S HTAF	N S HN (µk10)
S0.50	0.125	0.07	0.015	**736SFX3-A60-S0.50-AR**	●	●
S0.60	0.150	0.09	0.020	**736SFX3-A60-S0.60-AR**	●	●
S0.70	0.175	0.10	0.020	**736SFX3-A60-S0.70-AR**	●	●
S0.80	0.200	0.12	0.025	**736SFX3-A60-S0.80-AR**	●	●
S0.90	0.225	0.13	0.030	**736SFX3-A60-S0.90-AR**	●	●
S1.00	0.250	0.15	0.035	**736SFX3-A60-S1.00-AR**	●	●

7XX-XX-B



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

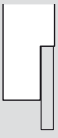


Filetage à droite
sens rotation machine M3

Rechtgewinde Drehrichtung
der Maschine M3

Right-hand thread rotating
machinery M3

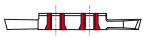




R

Filetage Gewinde drehen Threading	Pas Steigung Pitch P	T	E 0/-0.01	Art. N°	P M N S KSTF	P M N S KN (µk10-20)	P M N S HTAF	N S HN (µk10)
S0.50	0.125	0.07	0.015	**746SFX3-A60-S0.50-AR**	●	●	●	●
S0.60	0.150	0.09	0.020	**746SFX3-A60-S0.60-AR**	●	●	●	●
S0.70	0.175	0.10	0.020	**746SFX3-A60-S0.70-AR**	●	●	●	●
S0.80	0.200	0.12	0.025	**746SFX3-A60-S0.80-AR**	●	●	●	●
S0.90	0.225	0.13	0.030	**746SFX3-A60-S0.90-AR**	●	●	●	●
S1.00	0.250	0.15	0.035	**746SFX3-A60-S1.00-AR**	●	●	●	●

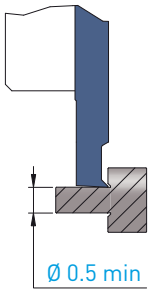
7XX-XX-B

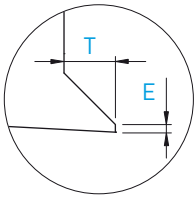


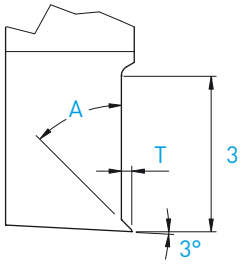
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

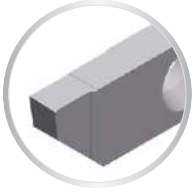
748SF

Plaquettes piqûre avant
Fronteinstich WSP
Front grooving inserts





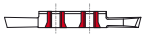




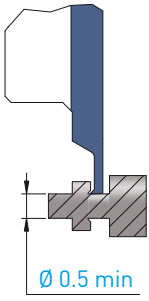
R

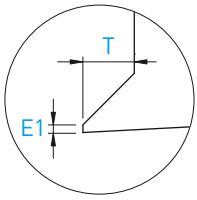
E 0/-0.01	A	T	Art. N°	KSTF	KSTF-RE	KN (µk10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTiN	HN (µk10)
				P M N S	P M N S	P M N S	P	P	P M N S	P M N S	P M N S	N S
0.03	45°	0.2	**748SF-E03-A45°-L20**	●	●	●	●	●	●	●		●
0.05	45°	0.3	**748SF-E05-A45°-L30**	●	●	●	●	●	●		●	●
0.08	45°	0.5	**748SF-E08-A45°-L50**	●	●	●	●	●	●		●	●

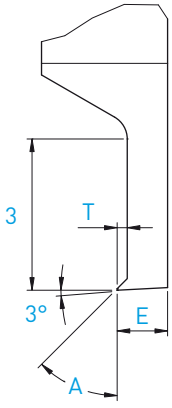
7XX-XX-B

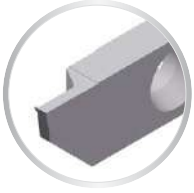


Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05



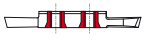






						R								
E1 0/-0.01	A	T	E	Art. N°	P M N S KSTF	P M N S KSTF-RE	P M N S KN (µk10-20)	P HTC	P HTC-RE	P M N S HTAF	P M N S HTAF-RE	P M N S HTiN	N S HN (µk10)
0.03	45°	0.2	1.0	**749SF-E03-A45°-L20-B100**	●	●	●	●	●	●	●		●
0.05	45°	0.3	1.0	**749SF-E05-A45°-L30-B100**	●	●	●	●		●			●
0.08	45°	0.5	1.2	**749SF-E08-A45°-L50-B120**	●	●	●	●	●	●			●

7XX-XX-B

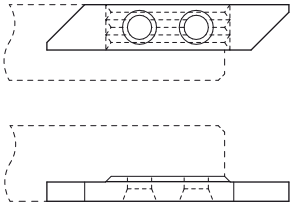


Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

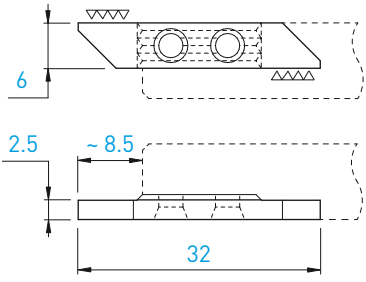
731-ESF / 741-ESF

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

L



R

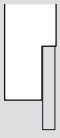




L



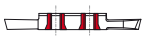
R



Art. N°	KSTF	KN (µK10-20)	HTC	HTAF	HTAXF	HCR-TF	HTiN	HN (µK10)	XTC	XTAF	XN (µK01)
	P M N S	P M N S	P	P M N S	P M	N	P M N S	N S	P	P M N S	N S
731-ESF	●	●	●	●	●	●	●	●	●	●	●

Art. N°	KSTF	KN (µK10-20)	HTC	HTAF	HTAXF	HCR-TF	HTiN	HN (µK10)	XTC	XTAF	XN (µK01)
	P M N S	P M N S	P	P M N S	P M S	N	P M N S	N S	P	P M N S	N S
741-ESF	●	●	●	●	●	●	●	●	●	●	●

7XX-XX-B

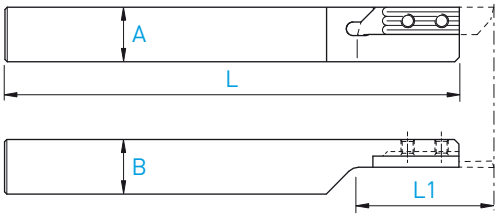


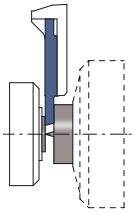
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

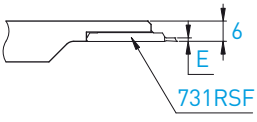
Porte-outils
Halter
Holders

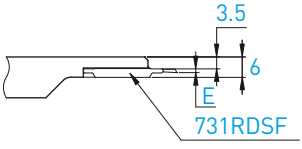
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

730RC



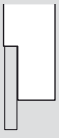






L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line



A x B	L	L1	Art. N°
8 x 8	115	24	**730RC-8**
10 x 10	115	24	**730RC-10**
12 x 12	130	30	**730RC-12**
12.7 x 12.7	130	30	**730RC-12.7**
16 x 16	130	40	**730RC-16**

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

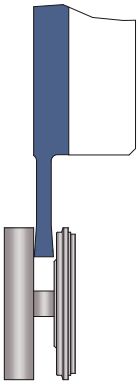
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

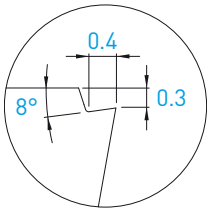
Each holder is supplied with one or more screws.
The keys must be ordered separately.

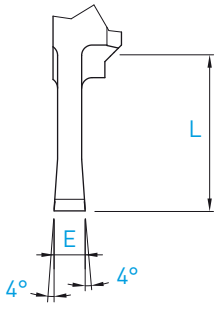
Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
730RC	**V-M3X5.5-T8**	**C-T8**

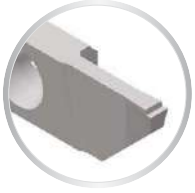
731NSF-X

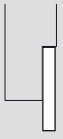
Tronçonnage
Abstechen
Parting off







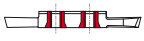




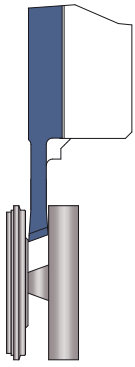
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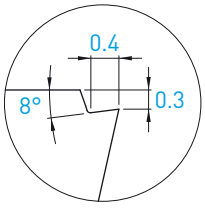
E	L	Art. N°	HCR-TF	HN (µK10)
1.5	7.5	**731NSF-X840-1.5**	●	●

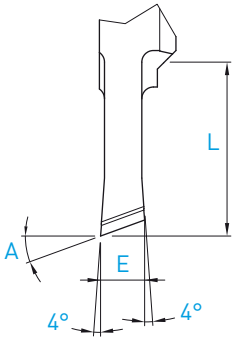
7XX-XX-B



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05







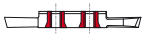


L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	A	Art. N°	HCR-TF	HN (µk10)
1.5	7.5	5°	**731RSF-X840-1.5-5**	●	●
1.4	7.5	20°	**731RSF-X840-1.4-20**	●	●
1.9	7.5	20°	**731RSF-X840-1.9-20**	●	●

7XX-XX-B

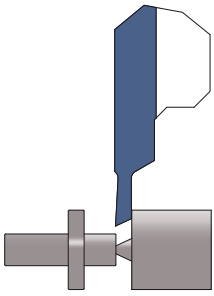


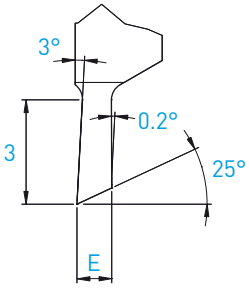
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

731RSF

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Tronçonnage
Abstechen
Parting off





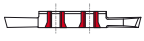


L (R)

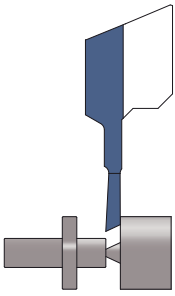
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

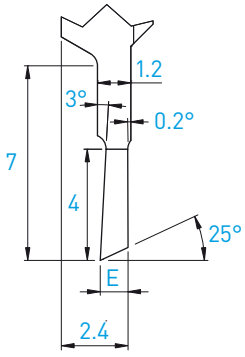
E	Art. N°	HTAF	HTiN	HN (µK10)
1.0	**731RSF-1.0-25°**	●	●	●

7XX-XX-B



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05





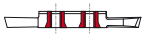


L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	Art. N°	HTAF	HTiN	HN (µk10)
0.8	**731RDSF-0.8-25°**	●		●
1.0	**731RDSF-1.0-25°**	●	●	●

7XX-XX-B

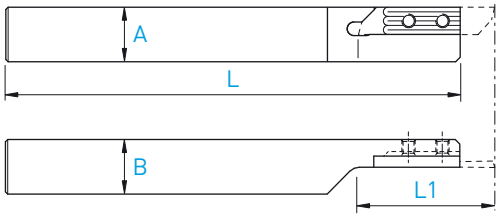


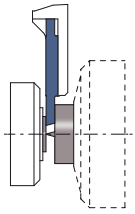
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

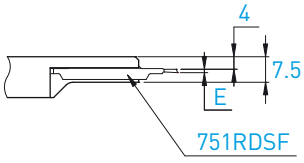
750RC

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Porte-outils
Halter
Holders

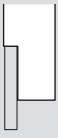






L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line



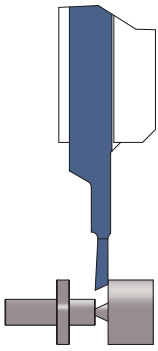
A x B	L	L1	Art. N°
12 x 12	130	30	**750RC-12**
16 x 16	130	40	**750RC-16**

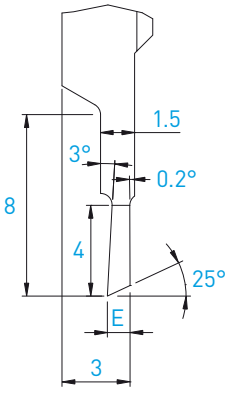
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
750RC	**V-M4X7.3-T15**	**C-T15**





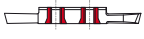


L (R)

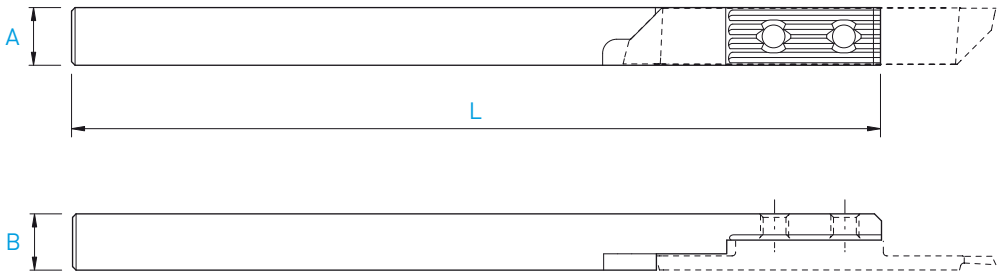
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

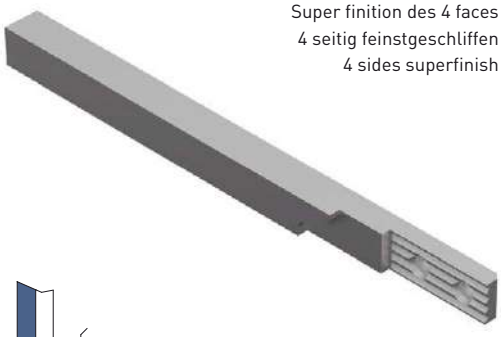
E	Art. N°	HTAF	HTiN	HN (µk10)
0.8	**751RDSF-0.8-25°**	●		●
1.0	**751RDSF-1.0-25°**	●		●

7XX-XX-B



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05





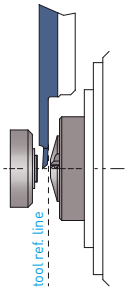
Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish

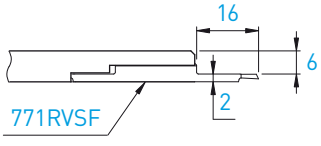
L (R)

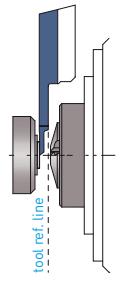
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

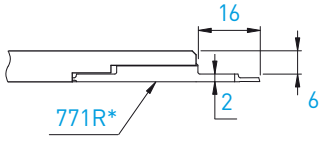


A x B	L	Art. N°
8.2 x 8	115	**770-8.2X8-SN4-SF**









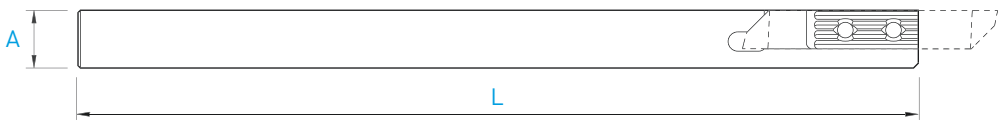
* voir TOP-Line
* siehe TOP-Line
* see TOP-Line

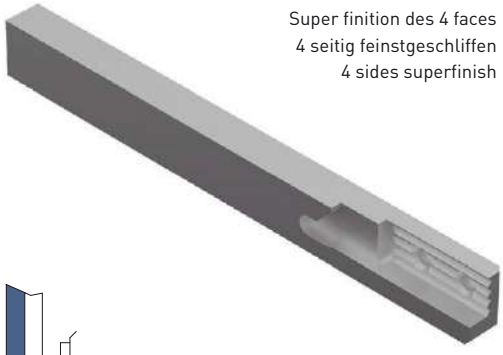
Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
770-SN-SF	**V-M4X7.3-T15**	**C-T15**

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

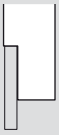




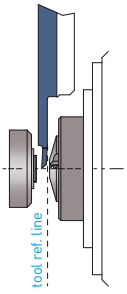
Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish

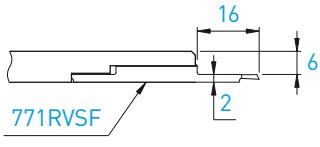
L (R)

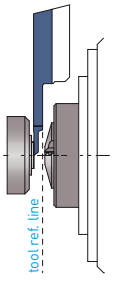
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

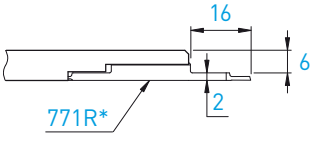


A x B	L	Art. N°
12 x 8	115	**770-12X8-SN7-SF**









* voir TOP-Line
* siehe TOP-Line
* see TOP-Line

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
770-SN-SF	**V-M4X7.3-T15**	**C-T15**

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

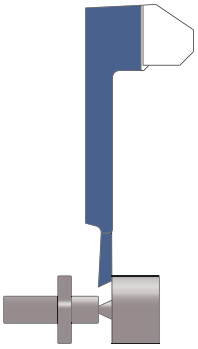
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

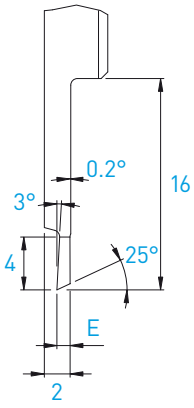
Each holder is supplied with one or more screws.
The keys must be ordered separately.

771RVSF

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Tronçonnage
Abstechen
Parting off





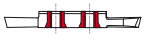


L (R)

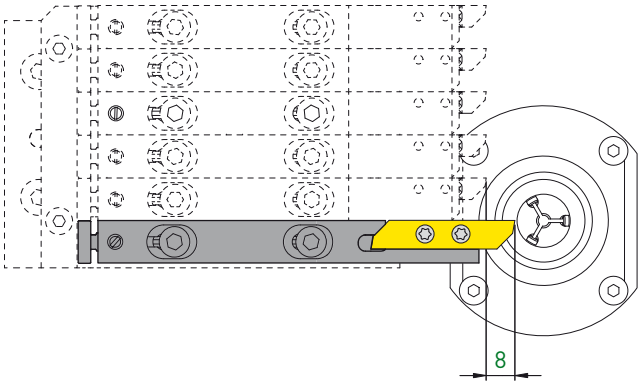
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	Art. N°	TAF	N (µK20)
1.0	**771RVSF-1.0-25°**	●	●
1.2	**771RVSF-1.2-25°**	●	●
1.5	**771RVSF-1.5-25°**	●	●

7XX-XX-B



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05



Type de machine Maschinen-Typ Type of machine	Porte-outils Halter Holders	**Art. N°**	Plaquettes type WSP Typ Inserts type
SwissNano	ML12	**ML12A-730RC-SWISS-NANO**	731RSF / 731RDSF
		ML12A-750RC-SWISS-NANO	751RDSF

Voir chapitre MODU-Line
Siehe Kapitel MODU-Line
See chapter MODU-Line

ONE-Line



APPLITEC
CUTTING TOOLS

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Infos et avantages Infos und Vorteile Infos and advantages			> 3.04
Nuances Sorten Grades			> 3.06
Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data			> 3.07
Porte-outils Halter Holder	130 / 140		> 3.08
Tronçonnage Abstechen Parting off	131 / 141		> 3.11
Tournage avant Vorwärts drehen Front turning	142		> 3.19
Tournage arrière Rückwärts drehen Back turning	143		> 3.21
Fonçage-tournage Einstechen und drehen Grooving and turning	144		> 3.23
Filetage Gewinde drehen Threading	146		> 3.25
Plaquettes à rayon Radius Wendeplatten Radius inserts	147		> 3.27
Plaquettes ébauches WSP-Rohlinge Blank inserts	131-EP / 141-EP		> 3.28
Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories			> 3.29

1	3	4	X	-	2.0	-	R20	-	KST

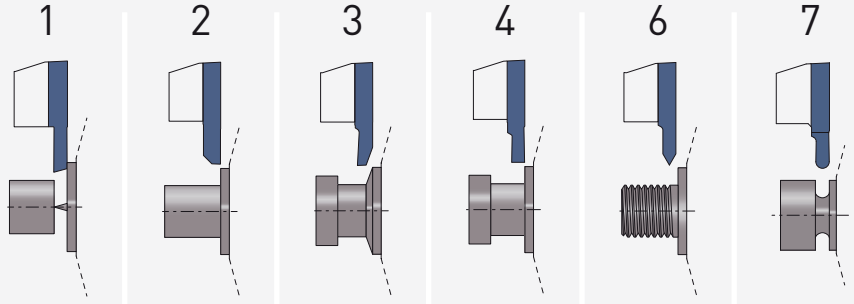
Dimension
Abmessung
Dimension

Rayon
Radius
Radius

Nuance
Sorte
Grade

Géométrie de coupe	brise-copeaux	particularités
Schneidgeometrie	Spanbrecher	Sondereigenschaften
Cutting geometry	chip breaker	special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

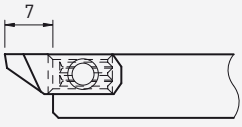


Gamme de produit	définit la compatibilité des plaquettes avec le porte-outils
Produktserie	definiert die Kompatibilität der Wendeschneidplatten mit dem Werkzeughalter
Product series	define the compatibility of the inserts with the toolholder

L = 3 (chiffre impair / ungerade Zahl / uneven number)

R = 4 (chiffre pair / gerade Zahl / even number)

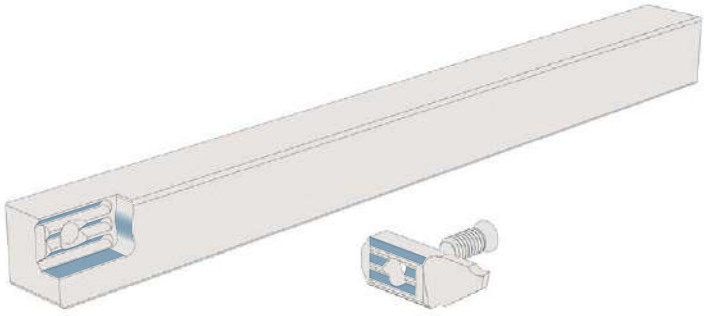
L	R
130	140

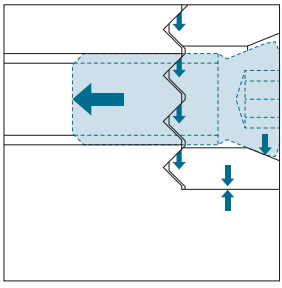


Applitec série 100	Système de serrage à denture décalée avec 1 vis de fixation
Applitec 100 Serie	Spannsystem mit 1 Schraube und verschobener Verzahnung
Applitec 100 series	Shifted teeth clamping system with 1 screw

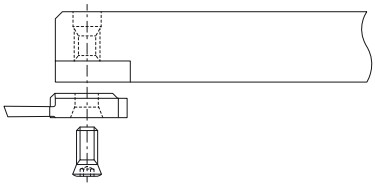
Rigid !

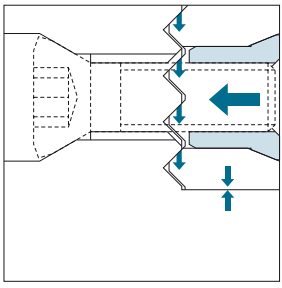
Système de serrage Applitec à denture décalée
Applitec-Spannsystem mit verschobener Verzahnung
Applitec clamping system with shifted teeth





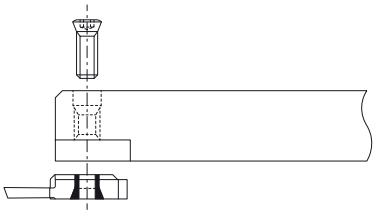
Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)





Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
-B nach der Artikelreferenz hinzufügen
add -B after the article number

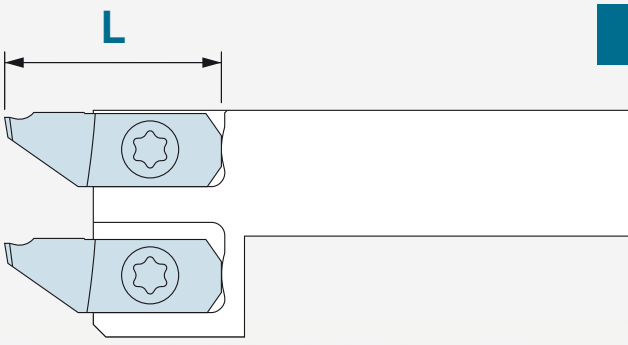


Changement de la plaquette possible dans la machine, sans démontage du porte-outil
WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
The insert can be changed in the machine without removing the tool holder

* = sur demande / auf Anfrage / on request

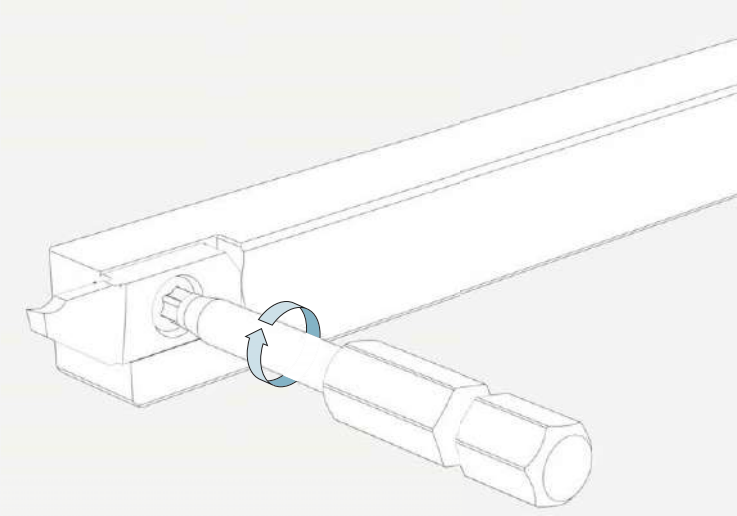
Space requirement

Conçu pour maximiser l'efficacité dans les espaces les plus restreints
Entwickelt, um die Effizienz auf engstem Raum zu maximieren
Designed to maximize efficiency in the tightest spaces



Optimal clamping

Le couple de serrage recommandé est de 2 Nm
Das empfohlene Anzugsdrehmoment beträgt 2 Nm
The recommended tightening torque is 2 Nm



KN

µK10 - µK20



K10 - K20

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance de base non revêtue micro-grain alliant une très bonne résistance à l'usure et ténacité
- recommandé pour l'usinage des matières ne nécessitant aucun revêtement par exemple le titane pur

- unbeschichtete Basis-Nuance mit feiner Körnung, die eine sehr gute Verschleißfestigkeit und Zähigkeit vereint
- empfohlen für die Bearbeitung von Materialien, die keine Beschichtung erfordern, wie z. B. reines Titan

- uncoated base grade with fine grain, combining excellent wear resistance and toughness
- recommended for machining materials that require no coating, such as pure titanium

KTA

µK10 - µK20



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF F **M** E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance universelle
- 1er choix pour l'usinage des aciers, aciers inoxydables et alliage de titane

- universelle Sorte
- erste Wahl für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen

- universal grade
- first choice for machining steel, stainless steel, and titanium alloys

KST

µK10 - µK20



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF F **M** E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

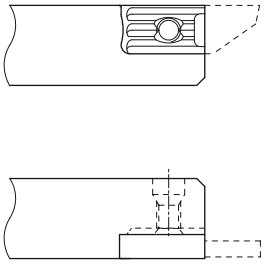
- nuance très résistante à l'usure et à la température
- 1er choix pour les aciers > 50 HRC, les alliages à base de nickel, chrome-cobalt, inox et titane allié

- sehr verschleiß- und temperaturbeständige Sorte
- erste Wahl für Stähle > 50 HRC, Nickelbasislegierungen, Chrom-Kobalt, Edelstahl und legiertes Titan

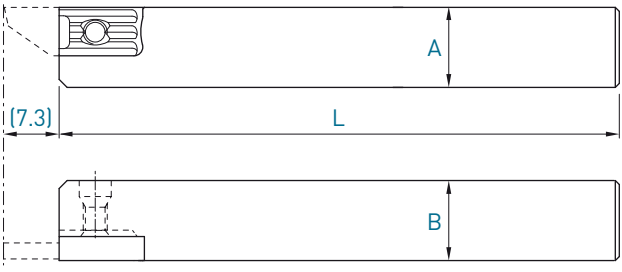
- highly wear- and temperature-resistant grade
- first choice for steels > 50 HRC, nickel-based alloys, chrome-cobalt, stainless steels, and alloyed titanium

		Tournage Drehen Turning			Tronçonnage Abstechen Parting off		
Matière **Werkstoff** **Material**		VC (m/min)	Prof. de passe Schnitttiefe Depth of cut (mm)	Avance Vorschub Feed (mm/U)	VC (m/min)	Largeur de coupe Abstechbreite Cutting width (mm)	Avance Vorschub Feed (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	80 - 150	0.50 - 1.50 1.50 - 2.50	0.01 - 0.08 0.03 - 0.15
Acier Stahl Steel < 600 N/mm²	P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	70 - 120	0.50 - 1.50 1.50 - 2.50	0.01 - 0.06 0.03 - 0.12
Acier Stahl Steel < 800 N/mm²	P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.05 0.03 - 0.10
Acier Stahl Steel > 800 N/mm²	P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	40 - 80	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Aluminium Si <12%	N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	180 - 400	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Aluminium Si >12%	N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	150 - 300	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35	100 - 300	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Titane Titan Titanium	S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15	30 - 50	0.50 - 1.50 1.50 - 2.50	0.01 - 0.03 0.03 - 0.06

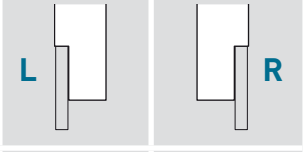
L



R

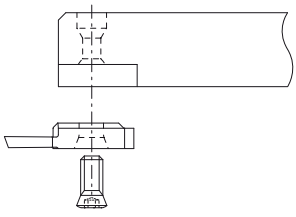




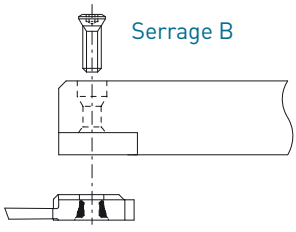


A x B	L	Serrage Spannsystem Clamping	**Art. N°**	**Art. N°**
8 x 8	115	A+B	**130-8**	**140-8**
10 x 10	115	A+B	**130-10**	**140-10**
12 x 12	115	A+B	**130-12**	**140-12**

Serrage A



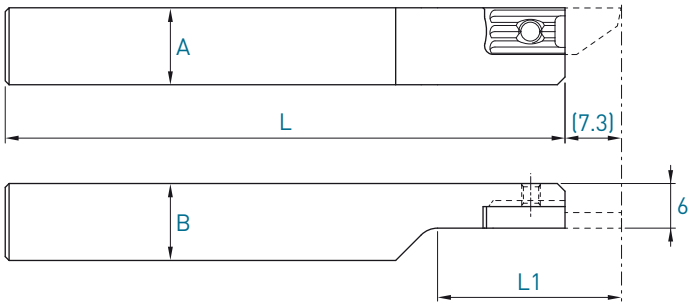
Serrage B

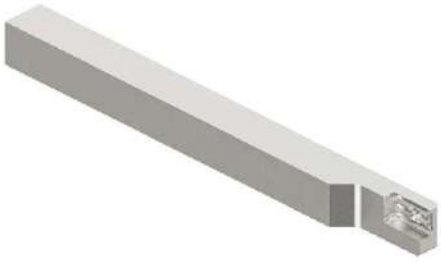


Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Utiliser des plaquettes type 131R
WSP Typ 131R verwenden
Use inserts type 131R

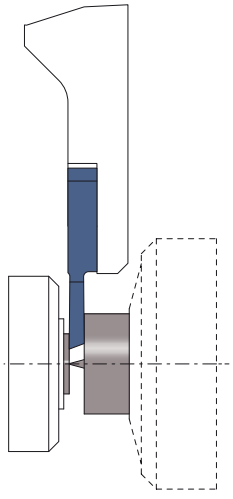
Voir pages 3.11 - 3.14
Siehe Seiten 3.11 - 3.14
See pages 3.11 - 3.14





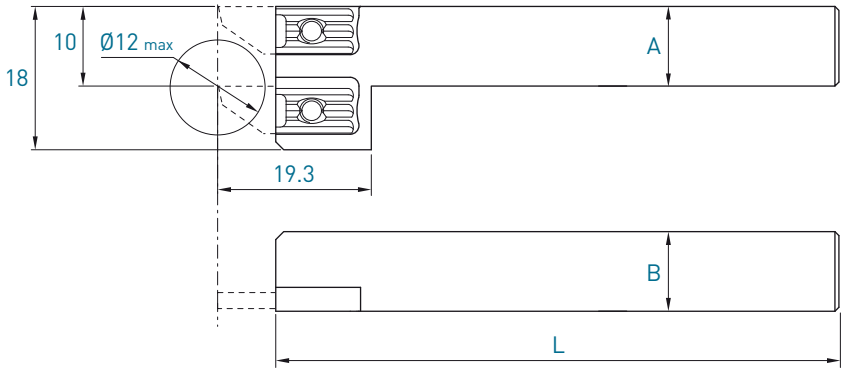
L (R)
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

AxB	L	L1	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	24	A	**130RC-8**
10 x 10	115	24	A	**130RC-10**
12 x 12	115	30	A	**130RC-12**



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

R



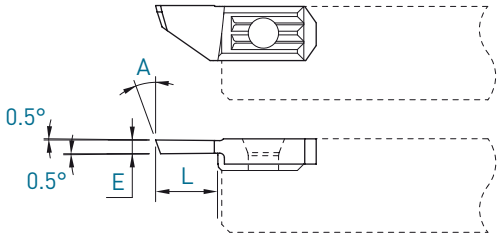


R

A x B	L	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	A+B	**140-8-H10-DUO**
10 x 10	115	A+B	**140-10-H10-DUO**
12 x 12	115	A+B	**140-12-H10-DUO**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Cut R





L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

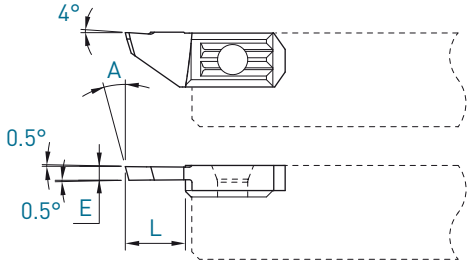
E	A	L	Art. N°	KTA	KST	KN (µk10-20)
1.0	20°	5	**131R-1.0-20**	●	●	●
1.2	20°	5	**131R-1.2-20**	●	●	●
1.5	20°	7	**131R-1.5-20**	●	●	●
2.0	20°	7	**131R-2.0-20**	●	●	●

131RX4

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

Cut R





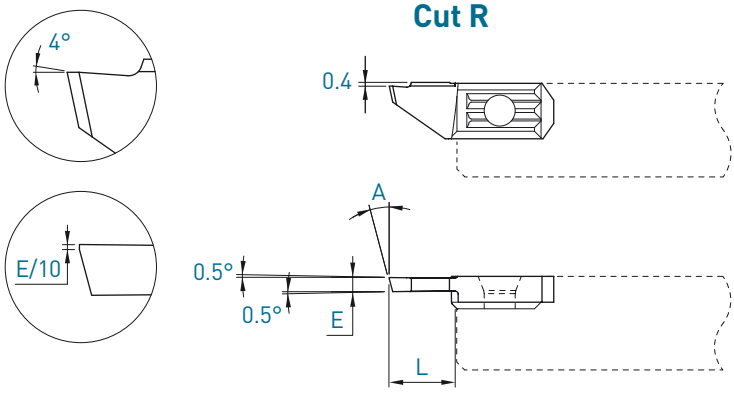


L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	Art. N°	KTA	KST	KN (µk10-20)
1.0	15°	5	**131RX4-1.0**	●	●	●
1.5	15°	7	**131RX4-1.5**	●	●	●

Cut R





L (R)

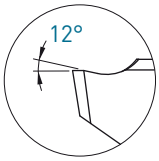
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

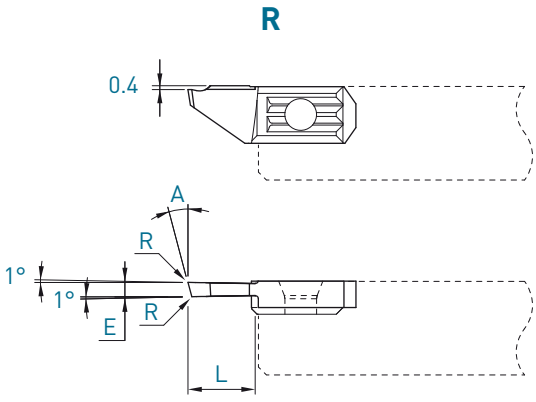
E	A	L	Art. N°	P M N S KTA	P M N S KST	P M N S KN (µk10-20)
1.0	15°	5	**131RXF-1.0**	●	●	●
1.5	15°	7	**131RXF-1.5**	●	●	●

131RX12

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off





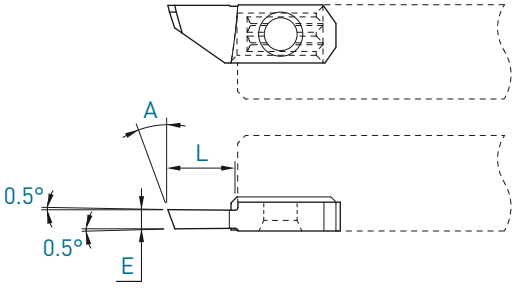


L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	R	Art. N°	KTA	KST	KN (µk10-20)
1.0	15°	5	0.03	**131RX12-1.0**	●	●	●
1.5	15°	7	0.03	**131RX12-1.5**	●	●	●

R



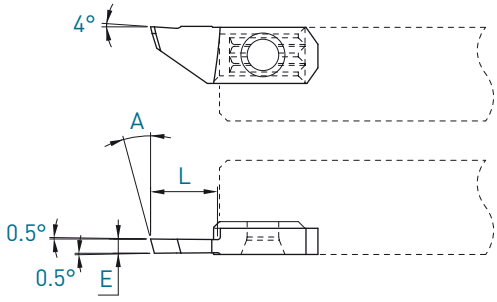




R

E	A	L	Art. N°	KTA	KST	KN (µk10-20)
0.6	20°	3	**141-0.6-20**	●	●	●
0.8	20°	5	**141-0.8-20**	●	●	●
1.0	20°	5	**141-1.0-20**	●	●	●
1.2	20°	5	**141-1.2-20**	●	●	●
1.5	20°	7	**141-1.5-20**	●	●	●
2.0	20°	7	**141-2.0-20**	●	●	●
2.5	20°	7	**141-2.5-20**	●	●	●

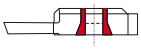
R



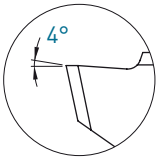


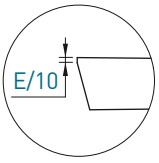
E	A	L	Art. N°	R KTA	R KST	R KN (µk10-20)
0.8	15°	5	**141X4-0.8**	●	●	●
1.0	15°	5	**141X4-1.0**	●	●	●
1.5	15°	7	**141X4-1.5**	●	●	●
2.0	15°	7	**141X4-2.0**	●	●	●

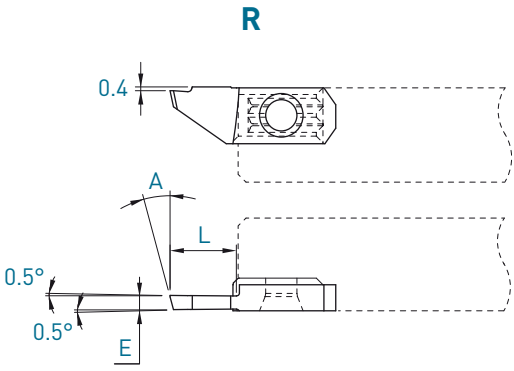
1XX-XX-B



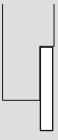
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04





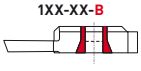




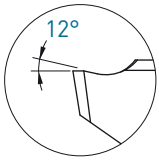


R

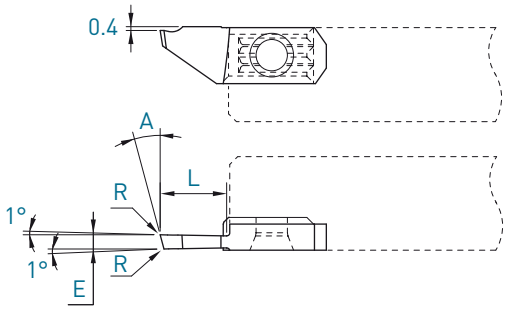
E	A	L	Art. N°	KTA	KST	KN (µk10-20)
1.0	15°	5	**141XF-1.0**	●	●	●
1.2	15°	5	**141XF-1.2**	●	●	●
1.5	15°	7	**141XF-1.5**	●	●	●



Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04



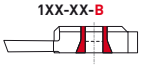
R



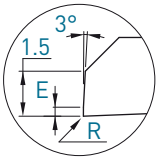


R

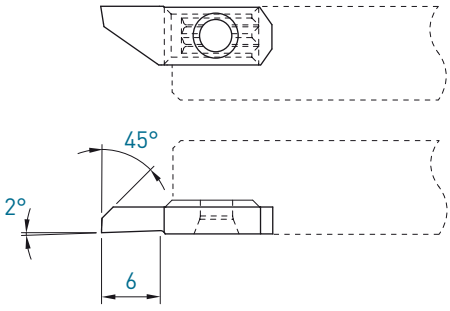
E	A	L	R	Art. N°	KTA	KST	KN (µk10-20)
0.5	15°	3	0.03	**141X12-0.5**	●	●	●
1.0	15°	5	0.03	**141X12-1.0**	●	●	●
1.5	15°	7	0.03	**141X12-1.5**	●	●	●



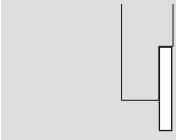
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04



R

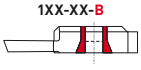






R

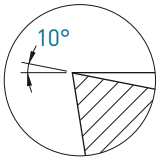
E	R	Art. N°	KTA	KST	KN (µk10-20)
0.3	0	**142-2**	●	●	●
0	0-0.01	**142-2-R01**	●	●	●
0	0.08	**142-2-R08**	●	●	●

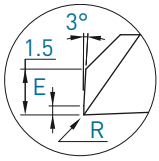


Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

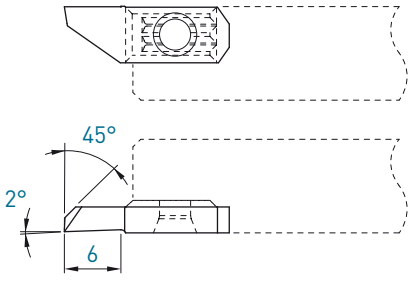
142X10

Tournage avant
Vorwärts drehen
Front turning





R

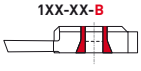




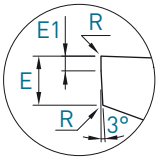


R

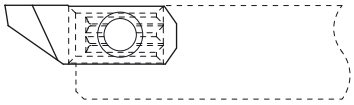
E	R	Art. N°	KTA	KST	KN (µk10-20)
0.3	0	**142X10-2**	●	●	●
0	0-0.01	**142X10-2-R01**	●	●	●
0	0.08	**142X10-2-R08**	●	●	●

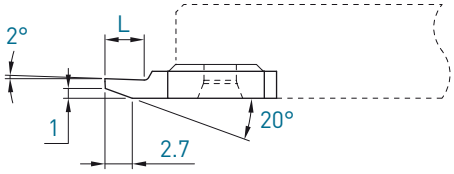


Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04



R



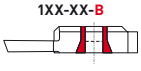






R

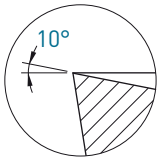
E	E1	L	R	Art. N°	KTA	KST	KN (µk10-20)
0.5	0.15	3	0	**143-0.5**	●	●	●
0.5	0	3	0-0.01	**143-0.5-R01**	●	●	●
0.5	0	3	0.08	**143-0.5-R08**	●	●	●
1.0	0.3	4	0	**143-1.0**	●	●	●
1.0	0	4	0	**143-1.0-R01**	●	●	●
1.0	0	4	0.08	**143-1.0-R08**	●	●	●

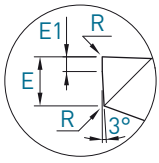


Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

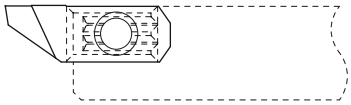
143X10

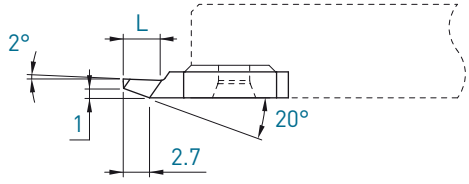
Tournage arrière
Rückwärts drehen
Back turning





R



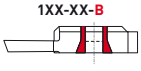




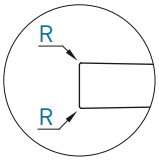


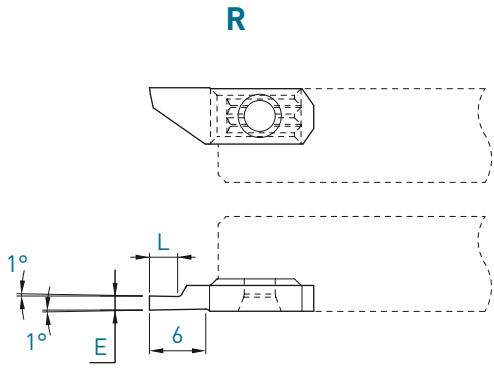
R

E	E1	L	R	Art. N°	KTA	KST	KN (µk10-20)
0.5	0.15	3	0	**143X10-0.5**	●	●	●
0.5	0	3	0-0.01	**143X10-0.5-R01**	●	●	●
0.5	0	3	0.08	**143X10-0.5-R08**	●	●	●
1.0	0.3	4	0	**143X10-1.0**	●	●	●
1.0	0	4	0-0.01	**143X10-1.0-R01**	●	●	●
1.0	0	4	0.08	**143X10-1.0-R08**	●	●	●

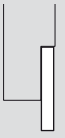


Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04



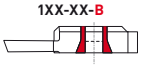




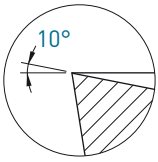


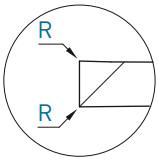
R

E	L	R	Art. N°	KTA	KST	KN (µk10-20)
0.5	1.5	0	**144-0.5**	●	●	●
0.6	1.8	0	**144-0.6**	●	●	●
0.8	2	0	**144-0.8**	●	●	●
1.0	2.5	0	**144-1.0**	●	●	●
1.0	3	0.08	**144-1.0-R08**	●	●	●
1.5	3	0	**144-1.5**	●	●	●
1.5	3	0.08	**144-1.5-R08**	●	●	●

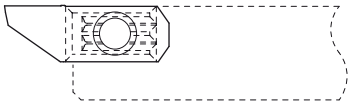


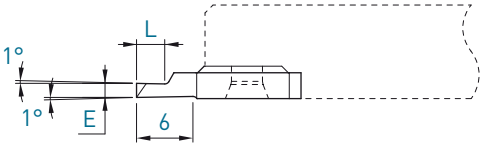
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04





R





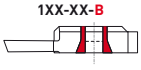




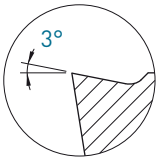
R

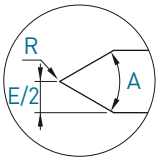
E	L	R	Art. N°	KTA	KST	KN (µk10-20)
0.8	2	0	**144X10-0.8**	●	●	●
1.0	2.5	0	**144X10-1.0**	●	●	●
1.0	2.5	0.08	**144X10-1.0-R08**	●	●	●
1.5	3	0	**144X10-1.5**	●	●	●
1.5	3	0.08	**144X10-1.5-R08**	●	●	●

1XX-XX-B

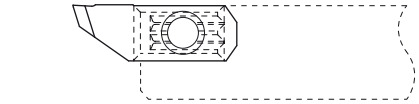


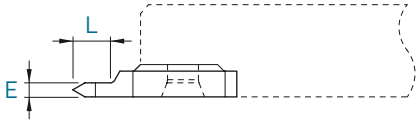
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04





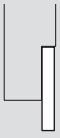
R







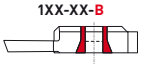
Profil partiel
Teilprofil
Partial profile



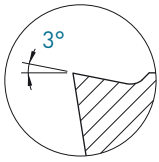
R

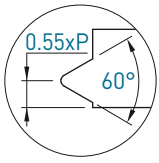
A	E	L	R	Pas mm Steigung mm Pitch mm P	Art. N°	P M N S KTA	P M N S KST	P M N S KN (µk10-20)
60°	1.5	4	0	-	**146X3-60-1.5**	●	●	●
60°	1.5	4	0.03	0.25-0.35	**146X3-60-1.5-R03**	●	●	●
60°	2.0	6	0.06	0.40-0.70	**146X3-60-2.0-R06**	●	●	●
60°	2.0	6	0.12	0.8-1.25	**146X3-60-2.0-R12**	●	●	●

A	E	L	R	Pas TPI Steigung TPI Pitch TPI P	Art. N°	KTA	KST	KN (µk10-20)
55°	1.5	4	0	-	**146X3-55-1.5**	●	●	●
55°	1.5	4	0.06	32-48	**146X3-55-1.5-R06**	●	●	●
55°	2.0	6	0.12	18-26	**146X3-55-2.0-R12**	●	●	●

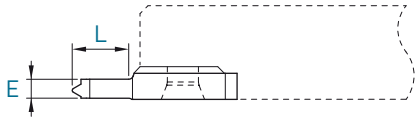


Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04



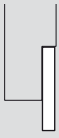


R



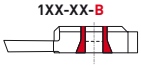


Profil complet métrique
Metrisches Vollprofil
Metric full profile



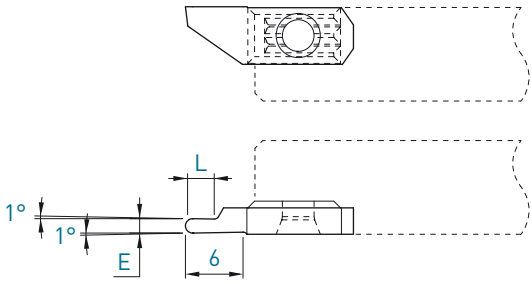
R

Pas Steigung Pitch P	E	L	Art. N°	P M N S KTA	P M N S KST	P M N S KN (µk10-20)
0.25	1.0	3	**146X3-M-0.25**	●	●	●
0.30	1.0	3	**146X3-M-0.30**	●	●	●
0.35	1.0	3	**146X3-M-0.35**	●	●	●
0.40	1.0	3	**146X3-M-0.40**	●	●	●
0.45	1.0	3	**146X3-M-0.45**	●	●	●
0.50	1.0	3	**146X3-M-0.50**	●	●	●
0.60	1.0	3	**146X3-M-0.60**	●	●	●
0.70	1.0	3	**146X3-M-0.70**	●	●	●
0.75	1.0	3	**146X3-M-0.75**	●	●	●
0.80	1.5	4.5	**146X3-M-0.80**	●	●	●
1.00	1.5	4.5	**146X3-M-1.00**	●	●	●
1.25	1.5	4.5	**146X3-M-1.25**	●	●	●
1.50	2.0	6	**146X3-M-1.50**	●	●	●
1.75	2.0	6	**146X3-M-1.75**	●	●	●

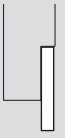


Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

R

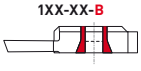






R

R	L	Art. N°	KTA	KST	KN (µk10-20)
0.25	1.5	**147-R0.25**	●	●	●
0.40	2	**147-R0.4**	●	●	●
0.50	2.5	**147-R0.5**	●	●	●
0.60	2.5	**147-R0.6**	●	●	●
0.75	3	**147-R0.75**	●	●	●
0.80	3	**147-R0.8**	●	●	●
1.0	4	**147-R1.0**	●	●	●

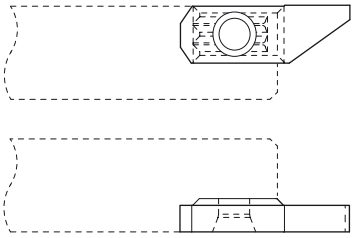


Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

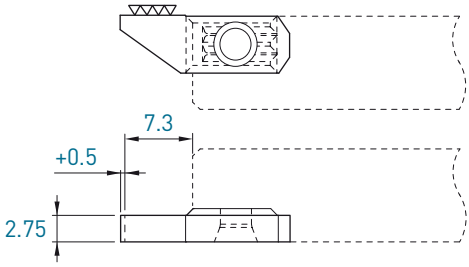
131-EP / 141-EP

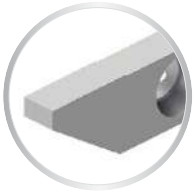
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

L



R

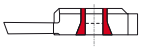




Face de coupe polie
Polierte Schnittfläche
Polished cutting face

L				R			
Art. N°	KTA	KST	KN (µK10-20)	Art. N°	KTA	KST	KN (µK10-20)
	P M N S	P M N S	P M N S		P M N S	P M N S	P M N S
131-EP	●	●	●	141-EP	●	●	●

1XX-XX-B



Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage type B Spannsystem Typ B Clamping system type B 	Options 
130	130-8 130-10 130-12	**V-M3x7-T8**	**C-T8**	**V-M2.5X7.8-T8**	**C-T8**
	130RC-8 130RC-10 130RC-12	**V-M3x5.5-T8**		-	
140	140-8 140-10 140-12 140-8-H10-DUO 140-10-H10-DUO 140-12-H10-DUO	**V-M3x7-T8**	**C-T8**	**V-M2.5X7.8-T8**	**C-T8**

ONE-Watch



APPLITEC
CUTTING TOOLS

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Infos et avantages Infos und Vorteile Infos and advantages			> 4.04
Nuances Sorten Grades			> 4.05
Porte-outils Halter Holder	130 / 140		> 4.07
Tronçonnage Abstechen Parting off	131SF / 141SF		> 4.10
Tournage avant Vorwärts drehen Front turning	142SF		> 4.13
Tournage arrière Rückwärts drehen Back turning	143SF		> 4.16
Filetage Gewinde drehen Threading	146SFX3		> 4.19
Plaquettes piqûre avant Fronteinstich WSP Front grooving inserts	148SF		> 4.20
Plaquettes piqûre arrière Rückeinstich WSP Back grooving inserts	149SF		> 4.21
Plaquettes ébauches WSP-Rohlinge Blank inserts	131-ESF / 141-ESF		> 4.22
Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories			> 4.23

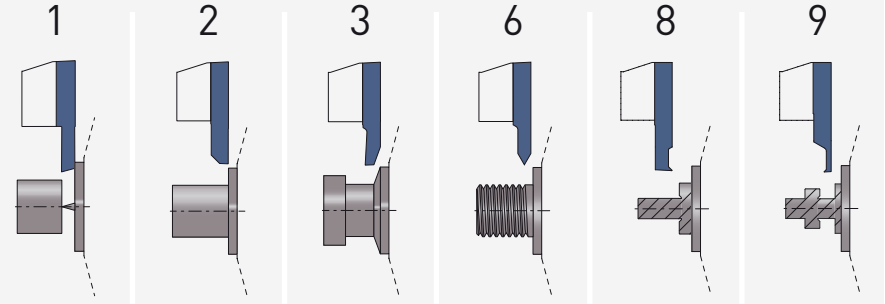
1	4	3	SF	-	3/3	-	45	-	KSTF

Super finish

Dimension
Abmessung
Dimension

Nuance
Sorte
Grade

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

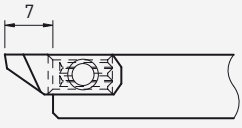


Gamme de produit	définit la compatibilité des plaquettes avec le porte-outils
Produktserie	bestimmt die WSP und Halter Kompatibilität
Product series	define the compatibility of the inserts with the toolholder

L = 3 (chiffre impair / ungerade Zahl / uneven number)

R = 4 (chiffre pair / gerade Zahl / even number)

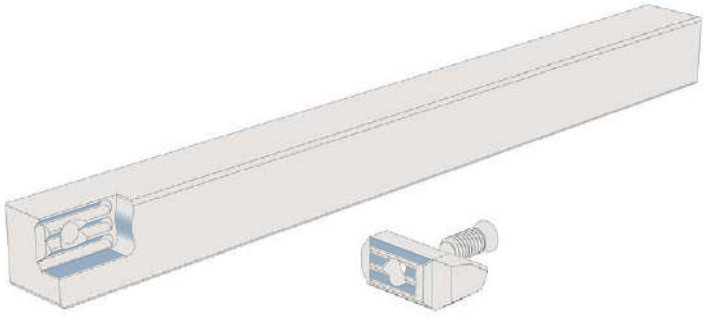
L	R
130	140

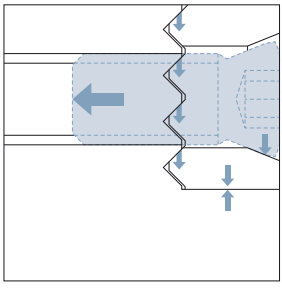


Applitec série 100	Système de serrage à denture décalée avec 1 vis de fixation
Applitec 100 Serie	Spannsystem mit 1 Schraube und verschobener Verzahnung
Applitec 100 series	Shifted teeth clamping system with 1 screw

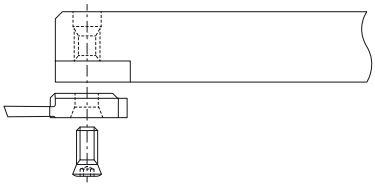
Rigid !

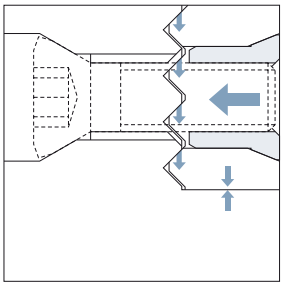
Système de serrage Applitec à denture décalée
Applitec-Spannsystem mit verschobener Verzahnung
Applitec clamping system with shifted teeth





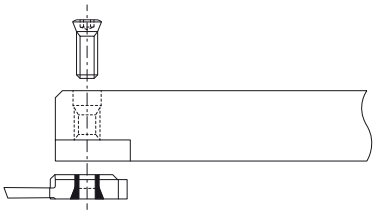
Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)





Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
-B nach der Artikelreferenz hinzufügen
add -B after the article number



Changement de la plaquette possible dans la machine, sans démontage du porte-outil
WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
The insert can be changed in the machine without removing the tool holder

* = sur demande / auf Anfrage / on request

µK10 - µK20

KTC



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF **F** M E

P ★★★★★
M ★★★☆☆
N ★★★★☆
S ★★★☆☆

- nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition
- **conseillé pour l'usinage de la matière 20AP + aciers de décolletage**

- verschleissfeste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen
- **empfohlen für die Bearbeitung von Material 20AP + Automatenstahl**

- wear resistant grade, low friction ratio, recommended for roughing and finishing
- **recommended for suitable for machining of 20AP material + Free-cutting steel**

µK10 - µK20

KTC-RE



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF F M E

P ★★★★★
M ★★★☆☆
N ★★★★☆
S ★★★☆☆

- nuance identique à KTC avec dépouilles rectifiées après revêtement pour des opérations de finition
- **conseillé pour l'usinage de la matière 20AP + aciers de décolletage**

- gleiche Sorte wie KTC nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- **empfohlen für die Bearbeitung von Material 20AP + Automatenstahl**

- same grade as KTC, after coating grounded clearance, recommended for finishing
- **recommended for suitable for machining of 20AP material + Free-cutting steel**

µK10 - µK20

KTAF



K10 - K20

µK10 - µK20 + revêtement PVD
µK10 - µK20 + PVD Beschichtung
µK10 - µK20 + PVD coating

TF **F** M E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance résistante à l'usure, recommandée pour des opérations d'ébauche et de finition
- **conseillé pour l'usinage des matières Finemac et inox 4c27a**

- verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen
- **empfohlen für die Bearbeitung von Finemac und Inox 4c27a rostfreiem Stahl**

- wear resistant grade, recommended for roughing and finishing
- **recommended for suitable for machining of Finemac and 4c27a stainless steel**

Nuances
Sorten
Grades

KTAF-RE



μK10 - μK20

K10 - K20

μK10 - μK20 + revêtement PVD
μK10 - μK20 + PVD Beschichtung
μK10 - μK20 + PVD coating

TF F M E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance identique à KTAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- **recommandé pour les matières Finemac et inox 4c27a**

- gleiche Sorte wie KTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- **empfohlen für die Bearbeitung von Finemac und Inox 4c27a rostfreiem Stahl**

- same grade as KTAF, with clearance angles rectify after coating, recommended for finishing
- **recommended for suitable for machining of Finemac and 4c27a stainless steel**

KSTF



μK10 - μK20

K10 - K20

μK10 - μK20 + revêtement PVD
μK10 - μK20 + PVD Beschichtung
μK10 - μK20 + PVD coating

TF **F** M E

P ★★★★★
M ★★★★★
N ★★★☆☆
S ★★★★★

- nuance très résistante à l'usure et à la température
- 1er choix pour les aciers > 50 HRC, les aciers à base de nickel, chrome-cobalt, inox et titane allié

- verschleißfeste Sorte, beständig gegen hohe Temperaturen
- erste Wahl für Stähle > 50 HRC, Nickelbasislegierungen, Chrom-Kobalt, rostfreien Stahl und legiertes Titan

- wear-resistant grade, highly resistant to temperature
- first choice for steels > 50 HRC, nickel-based alloys, chrome-cobalt, stainless steel, and alloyed titanium

KN



μK10 - μK20

K10 - K20

Non revêtu
Unbeschichtet
Uncoated

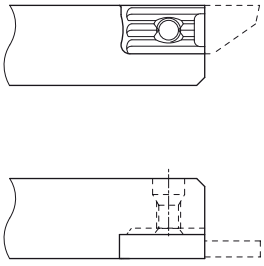
P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance de base non revêtue micro-grain, alliant une très bonne résistance à l'usure et une bonne ténacité
- recommandé pour l'usinage des matières ne nécessitant aucun revêtement, par exemple le titane pur

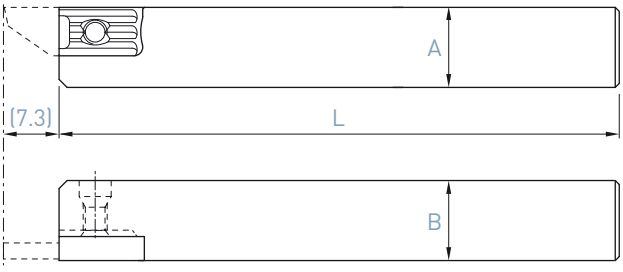
- verschleißfeste Feinkornsorte, unbeschichtet, mit hoher Zähigkeit und guter Widerstandsfähigkeit
- empfohlen für die Bearbeitung von Werkstoffen, die keine Beschichtung erfordern, zum Beispiel reines Titan

- wear-resistant micro-grain grade, uncoated, with high toughness and good resistance
- recommended for machining materials that do not require coating, such as pure titanium

L



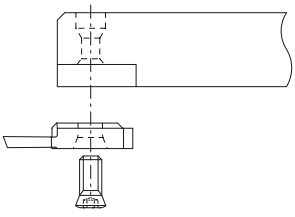
R



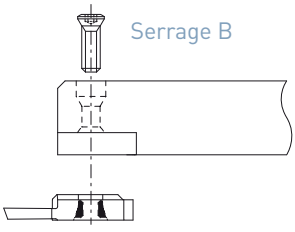


A x B	L	Serrage Spannsystem Clamping	L **Art. N°**	R **Art. N°**
8 x 8	115	A+B	**130-8**	**140-8**
10 x 10	115	A+B	**130-10**	**140-10**
12 x 12	115	A+B	**130-12**	**140-12**

Serrage A



Serrage B



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

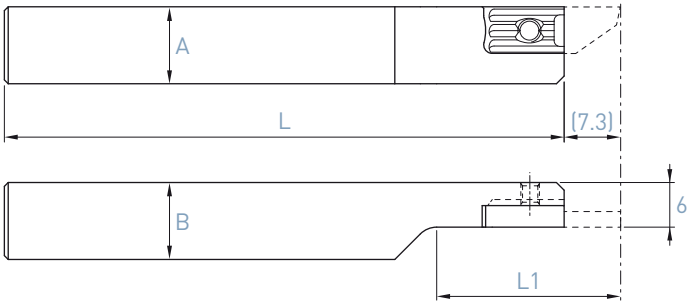
130RC

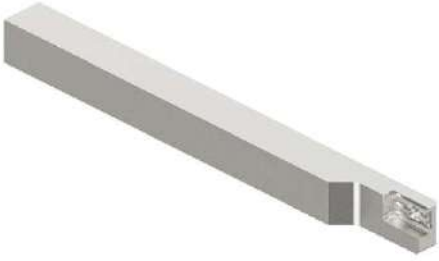
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Porte-outils
Halter
Holders

Utiliser des plaquettes type 131R
WSP Typ 131R verwenden
Use inserts type 131R

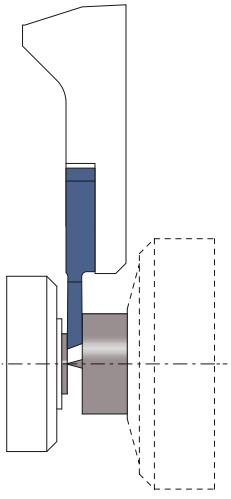
Voir pages 4.10 - 4.11
Siehe Seiten 4.10 - 4.11
See pages 4.10 - 4.11





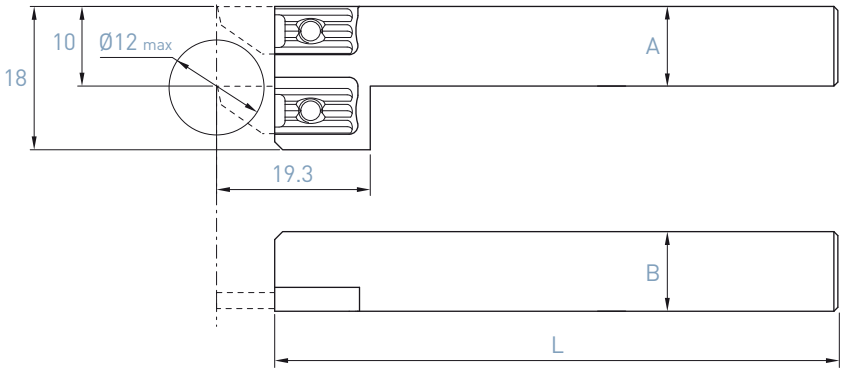
L (R)
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

AxB	L	L1	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	24	A	**130RC-8**
10 x 10	115	24	A	**130RC-10**
12 x 12	115	30	A	**130RC-12**

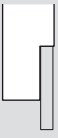


Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

R







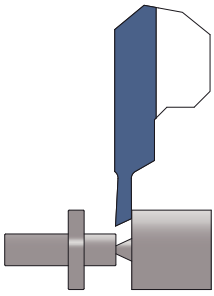
A x B	L	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	A+B	**140-8-H10-DUO**
10 x 10	115	A+B	**140-10-H10-DUO**
12 x 12	115	A+B	**140-12-H10-DUO**

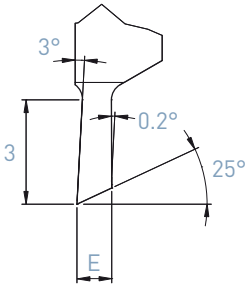
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

131RSF

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Tronçonnage
Abstechen
Parting off







L (R)

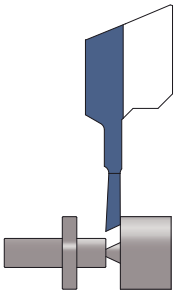
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

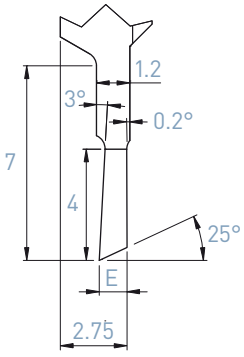
E	Art. N°	KTAF (P M N S)	KSTF (P M N S)	KN (µk10-20) (P M N S)
1.0	131RSF-1.0-25	●	●	●

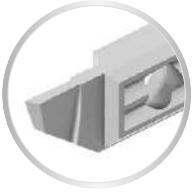
Tronçonnage
Abstechen
Parting off

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

131RDSF







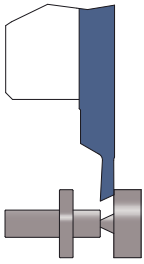
L (R)

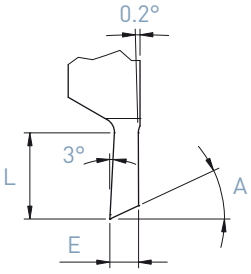
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	Art. N°	P M N S KTAF	P M N S KN (µk10-20)
1.0	**131RDSF-1.0-25**	●	●

141SF

Tronçonnage
Abstechen
Parting off







R

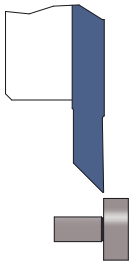
A	E	L	Art. N°	KTC	KTC-RE	KTAF	KTAF-RE	KSTF	KN (µk10-20)
	0.5	2	**141SF-0.5-25**	●	●	●	●	●	●
25°	0.8	3	**141SF-0.8-25**	●	●	●	●	●	●
	1.0	3	**141SF-1.0-25**	●	●	●	●	●	●
22°	1.2	5	**141SF-1.2-22**	●	●	●	●	●	●

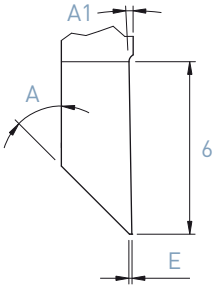
1XX-XX-B

Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

Tournage avant
Vorwärts drehen
Front turning

142SF



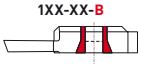




R

E	A	A1	Art. N°	KTC	KTC-RE	KTAF	KTAF-RE	KSTF	KN (µk10-20)
				P M N S	P M N S	P M N S	P M N S	P M N S	P M N S
0.03	45°	3°	**142SF-3/3-45**	●	●	●	●	●	●
0.05	45°	3°	**142SF-5/5-45**	●	●	●	●	●	●
0.08	45°	1°	**142SF-8/8-45**	●	●	●	●	●	●

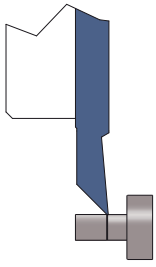
1XX-XX-B

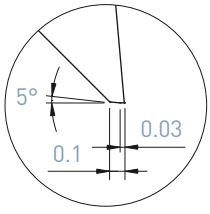


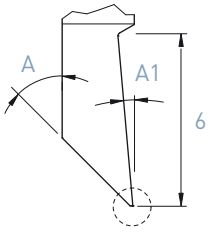
Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

142SF-10_3

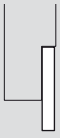
Tournage avant
Vorwärts drehen
Front turning







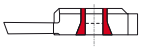




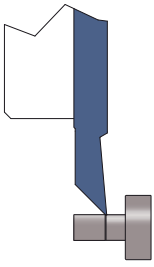
R

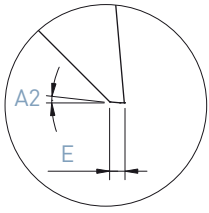
A	A1	Art. N°	KTC	KTC-RE	KTAF	KTAF-RE	KSTF	KN (µk10-20)
			P M N S	P M N S	P M N S	P M N S	P M N S	P M N S
45°	5°	142SF-10/3	●	●	●	●	●	●

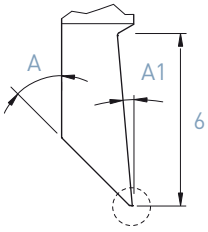
1XX-XX-B



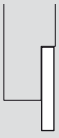
Sur demande pour serrage type B, voir page 4.04
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On request for B clamping system, see page 4.04





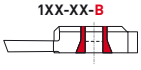






R

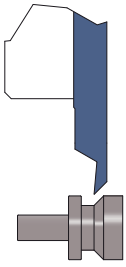
E	A	A1	A2	Art. N°	KTAF-RE	KSTF	KN (µk10-20)
					P M N S	P M N S	P M N S
0.1	45°	5°	5°	**142SF-10/0-5-45**	●	●	●
0.15	30°	3°	2°	**142SF-15/0-2-30**	●	●	●

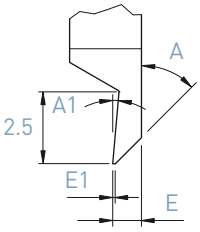


Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

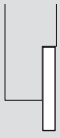
143SF

Tournage arrière
Rückwärts drehen
Back turning



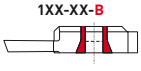




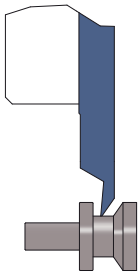


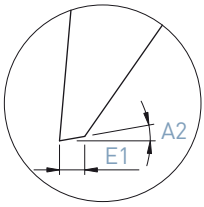
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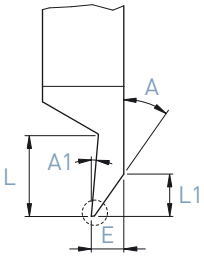
E1	E	A	A1	Art. N°	KTC	KTC-RE	KTAF	KTAF-RE	KSTF	KN (µk10-20)
					P M N S	P	P M N S	P M N S	P M N S	P M N S
0.03	1.0	45°	5°	**143SF-3/3-45-1.0**	●	●	●	●	●	●
0.03	1.2	45°	5°	**143SF-3/3-45-1.2**	●	●	●	●	●	●
0.10	1.0	45°	5°	**143SF-10/10-45-1.0**	●	●	●	●	●	●
0.05	0.8	30°	3°	**143SF-5/5-30-0.8**				●		



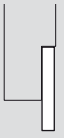
Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04





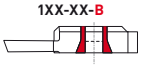






R

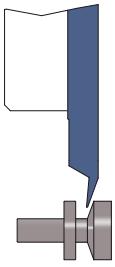
E1	E	L1	L	A	A1	A2	Art. N°	KTAF-RE	KN (μk10-20)
								P M N S	P M N S
0.08	1.0	1.6	2.5	30°	5°	2°	**143SF-8/0-2-30-1.0**	●	●
0.15	1.2	1.8	4.0	30°	3°	2°	**143SF-15/0-2-30-1.2**	●	●
0.10	1.0	1.3	2.5	35°	5°	10°	**143SF-10/0-10-35-1.0**	●	●

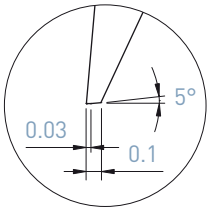


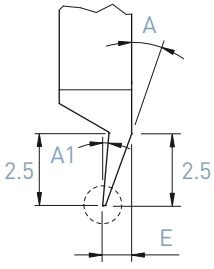
Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

143SF-10_3

Tournage arrière
Rückwärts drehen
Back turning



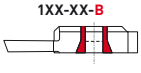




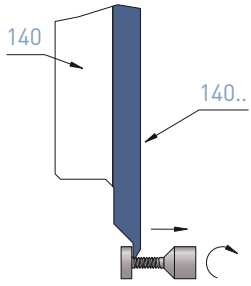


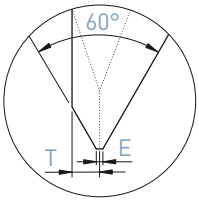
R

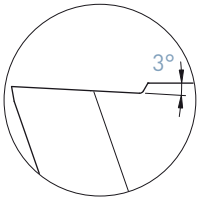
E	A	A1	Art. N°	KTC	KTC-RE	KTAF	KTAF-RE	KN (µk10-20)
				P M N S	P	P M N S	P M N S	P M N S
1.0	20°	5°	**143SF-10/3**		●	●	●	●



Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04









Filetage à droite
sens rotation machine M3

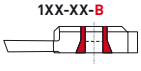
Rechtgewinde Drehrichtung
der Maschine M3

Right-hand thread rotating
machinery M3



R

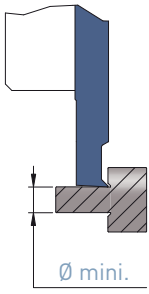
Filetage Gewinde drehen Threading	Pas Steigung Pitch P	T	E 0/-0.01	Art. N°	P M N S KTAF	P M N S KN (µk10-20)
S0.50	0.125	0.07	0.025	**146SFX3-A60-S0.50-AR**	●	●
S0.60	0.150	0.09	0.030	**146SFX3-A60-S0.60-AR**	●	●
S0.70	0.175	0.10	0.035	**146SFX3-A60-S0.70-AR**	●	●
S0.80	0.200	0.12	0.040	**146SFX3-A60-S0.80-AR**	●	●
S0.90	0.225	0.13	0.045	**146SFX3-A60-S0.90-AR**	●	●
S1.00	0.250	0.15	0.050	**146SFX3-A60-S1.00-AR**	●	●

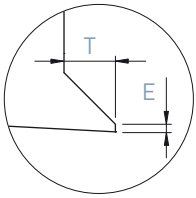


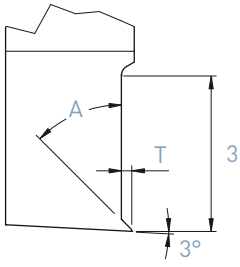
Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

148SF

Plaquettes piqûre avant
Fronteinstich WSP
Front grooving inserts





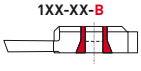




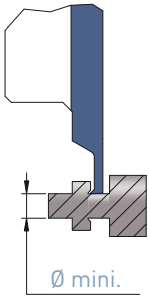


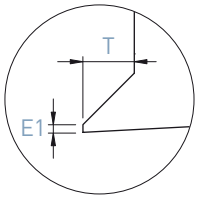
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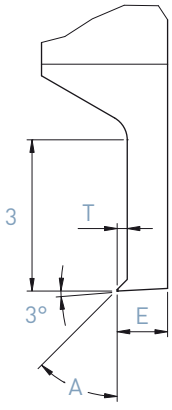
E	A	T	Ø mini.	Art. N°	KTC	KTC-RE	KTAF	KTAF-RE	KN (µk10-20)
					P M N S	P	P M N S	P M N S	P M N S
0.03	46°	0.2	0.3	**148SF-E03-A46-L20**	●	●	●	●	●
0.05	46°	0.3	0.4	**148SF-E05-A46-L30**	●	●	●	●	●
0.08	46°	0.5	0.5	**148SF-E08-A46-L50**	●	●	●	●	●

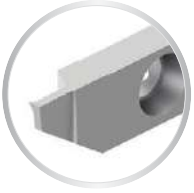


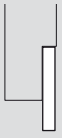
Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04





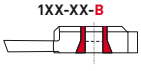






R

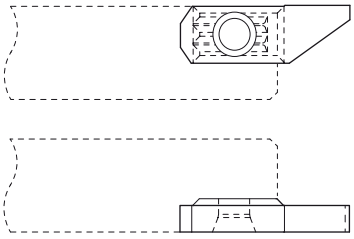
E1	A	T	E	Ø mini.	Art. N°	KTC	KTC-RE	KTAF	KTAF-RE	KN (µk10-20)
						P M N S	P	P M N S	P M N S	P M N S
0.03	46°	0.2	1.0	0.3	**149SF-E03-A46-L20-B100**	●	●	●	●	●
0.05	46°	0.3	1.0	0.4	**149SF-E05-A46-L30-B100**	●	●	●	●	●
0.08	46°	0.5	1.2	0.5	**149SF-E08-A46-L50-B120**	●	●	●	●	●



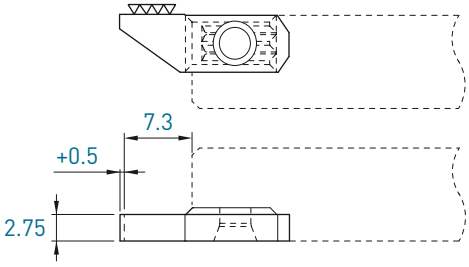
Sur demande pour serrage type B, voir page 4.04
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On request for B clamping system, see page 4.04

131-ESF / 141-ESF

L



R





Face de coupe polie
Polierte Schnittfläche
Polished cutting face

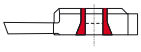
L

Art. N°	KTC	KTAF	KSTF	KCR-TF	KN (µk10-20)
	P M N S	P M N S	P M N S	N S	P M N S
131-ESF	●	●	●	●	●

R

Art. N°	KTC	KTAF	KSTF	KCR-TF	KN (µk10-20)
	P M N S	P M N S	P M N S	N S	P M N S
141-ESF	●	●	●	●	●

1XX-XX-B



Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage type B Spannsystem Typ B Clamping system type B 	Options 
130	130-8 130-10 130-12	**V-M3x7-T8**	**C-T8**	**V-M2.5X7.8-T8**	**C-T8**
	130RC-8 130RC-10 130RC-12	**V-M3x5.5-T8**		-	
140	140-8 140-10 140-12 140-8-H10-DUO 140-10-H10-DUO 140-12-H10-DUO	**V-M3x7-T8**	**C-T8**	**V-M2.5X7.8-T8**	**C-T8**

PRO-Line



APPLITEC
CUTTING TOOLS

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SERIES 630 / 640

Tournage et gorge

Drehen und Einstechen

Turning and grooving

Porte-outils
Halter
Holders  **630 / 640** > **5.12**

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Vorwärts drehen
Front turning **632 / 642**  > **5.14**

Tournage arrière
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Einstechen und drehen
Grooving and turning **634 / 644**  > **5.25**

Chanfreinage
Anfasen
Chamfering **635 / 645**  > **5.30**

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Radius Wendeplatten
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Plaquettes ébauches
WSP-Rohlinge
Blank inserts **631-EP / 641-EP**  > **5.36**

SERIES 650 / 660

Tronçonnage

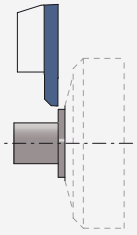
Abstechen

Parting off

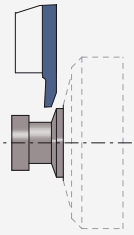
Porte-outils Halter Holders		**650 / 660**	> **5.37**
Tronçonnage Abstechen Parting off		**651 / 661**	> **5.40**
Tronçonnage - coupe déportée Abstechen - versetztes Schneiden Parting off - cut off line		**651R**	> **5.45**
Plaquettes ébauches WSP-Rohlinge Blank inserts		**651-EP / 661-EP**	> **5.50**

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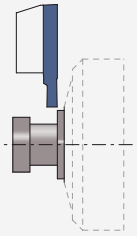
642



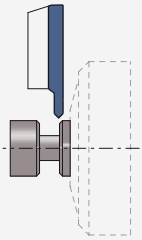
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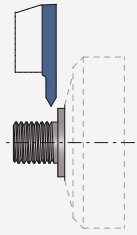
644



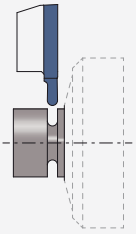
645



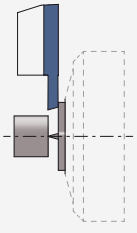
646



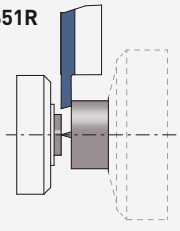
647



661



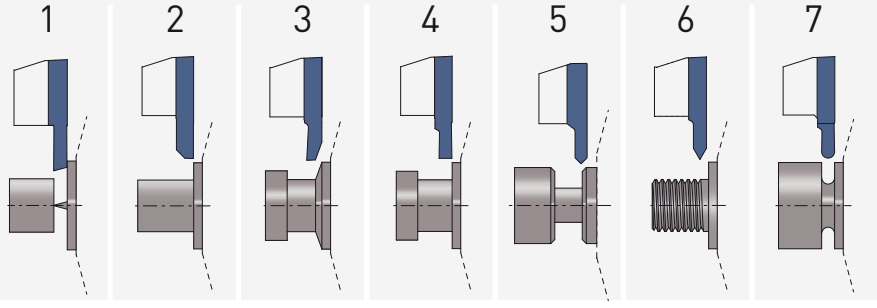
651R



6	4	4	X	–	2.0	–	R15	–	TiAlN
					Dimension **Abmessung** **Dimension**		**Rayon** **Radius** **Radius**		**Nuance** **Sorte** **Grade**

Géométrie de coupe **Schneidgeometrie** **Cutting geometry**	brise-copeaux Spanbrecher chip breaker	particularités Sondereigenschaften special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry



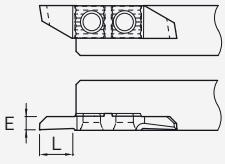
Gamme de produit **Produktserie** **Product series**	définit la compatibilité des plaquettes avec le porte-outil bestimmt die WSP und Halter Kompatibilität shows the inserts and holder compatibility
L = 3, 5	(chiffre impair / ungerade Zahl / uneven number)
R = 4, 6	(chiffre pair / gerade Zahl / even number)

SERIES

Tournage et gorge
Drehen und Einstechen
Turning and grooving

E max = 3 mm
L max = 8 mm

L	R
630	640

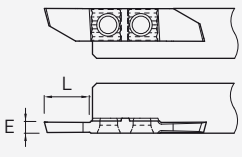


SERIES

Tronçonnage
Abstechen
Parting off

E max = 2.5 mm
L max = 11 mm

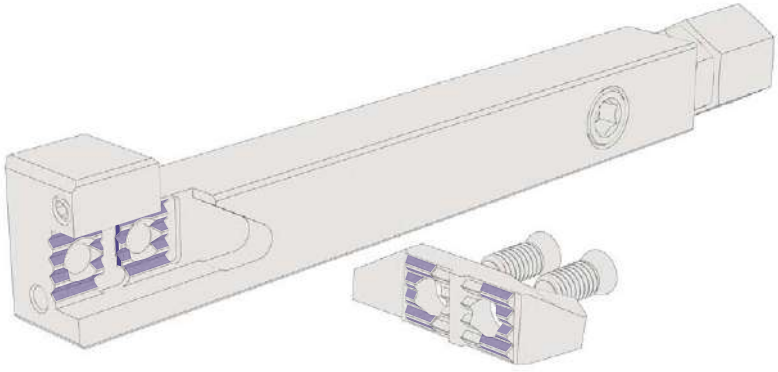
L	R
650	660



Applitec série 600 **Applitec 600 Serie** **Applitec 600 series**	Système de serrage à denture avec 2 vis de fixation Spannsystem mit Verzahnung und 2 Schrauben Teeth clamping system with 2 screws

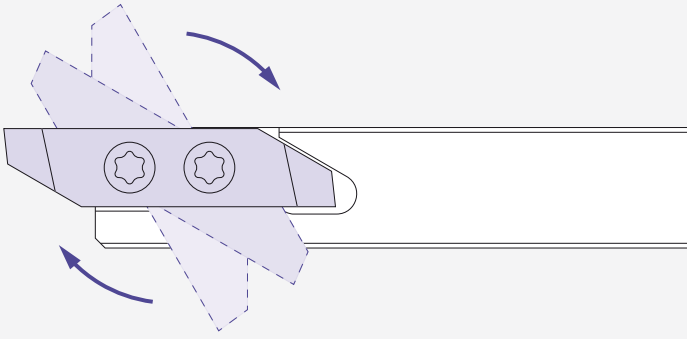
Rigid!

Système de serrage à denture Applitec avec repositionnement sur la nervure centrale.
Applitec-Verzahnungsspannsystem mit Neupositionierung auf der Zentralrippe.
Applitec toothed clamping system with repositioning on the central rib.



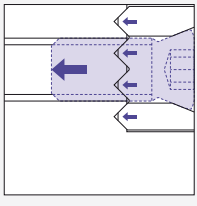
Ultra precision

Grande précision lors du retournement de la plaquette
Hohe Präzision beim Wenden der Platte
High precision when flipping the insert



Applitec toothing

Système de serrage en fond de denture
Klemmvorrichtung an der Prothesenbasis
Clamping system at the denture base



µK20

TiAlN



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- excellente nuance universelle
- 1er choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

µK20

N



K20

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance micro-grain tenace
- supporte les coupes interrompues et autres conditions d'usinage défavorables

- zähe Feinkornsorte
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen

- tough micro-grain grade
- suitable for interrupted cut and other unfavourable machining conditions

µK10

HTA



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

µK10

HN



K10

Non revêtu
Unbeschichtet
Uncoated

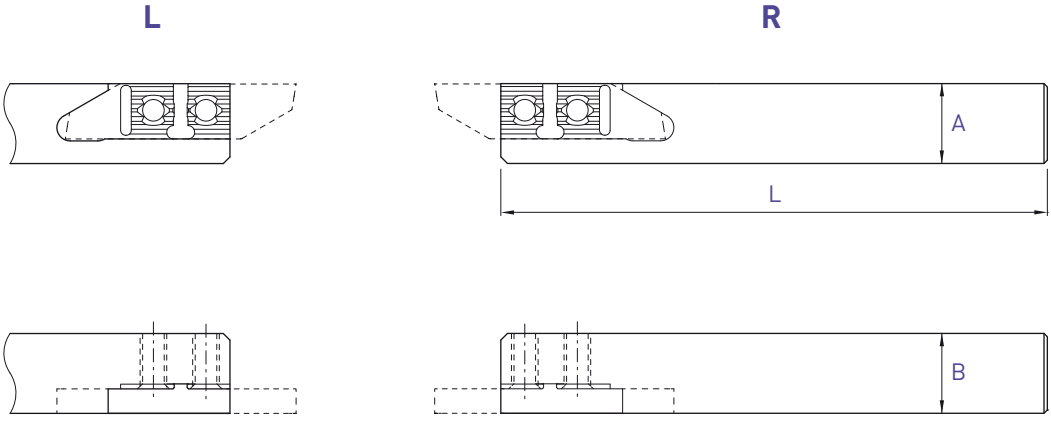
P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

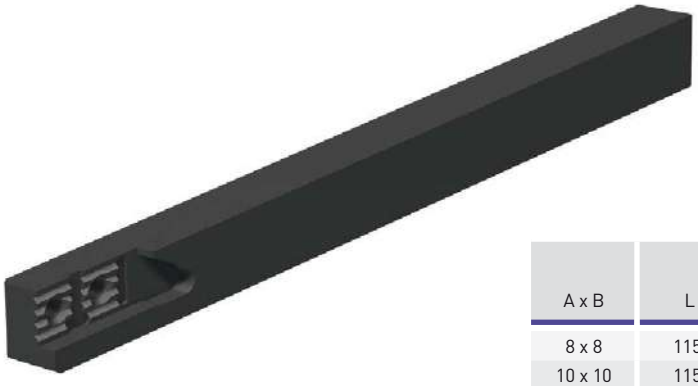
- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavourable machining conditions

		Tournage Drehen Turning **630/640**			Tronçonnage Abstechen Parting off **650/660**		
Matière Werkstoff Material		VC (m/min)	Prof. de passe Schnitttiefe Depth of cut (mm)	Avance Vorschub Feed (mm/U)	VC (m/min)	Largeur de coupe Abstechbreite Cutting width (mm)	Avance Vorschub Feed (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	80 - 150	0.50 - 1.50 1.50 - 2.50	0.01 - 0.08 0.03 - 0.15
Acier Stahl Steel < 600 N/mm²	P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	70 - 120	0.50 - 1.50 1.50 - 2.50	0.01 - 0.06 0.03 - 0.12
Acier Stahl Steel < 800 N/mm²	P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.05 0.03 - 0.10
Acier Stahl Steel > 800 N/mm²	P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	40 - 80	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Aluminium Si <12%	N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	180 - 400	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Aluminium Si >12%	N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	150 - 300	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35	100 - 300	0.50 - 1.50 1.50 - 2 .50	0.01 - 0.10 0.03 - 0.20
Titane Titan Titanium	S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15	30 - 50	0.50 - 1.50 1.50 - 2.50	0.01 - 0.03 0.03 - 0.06



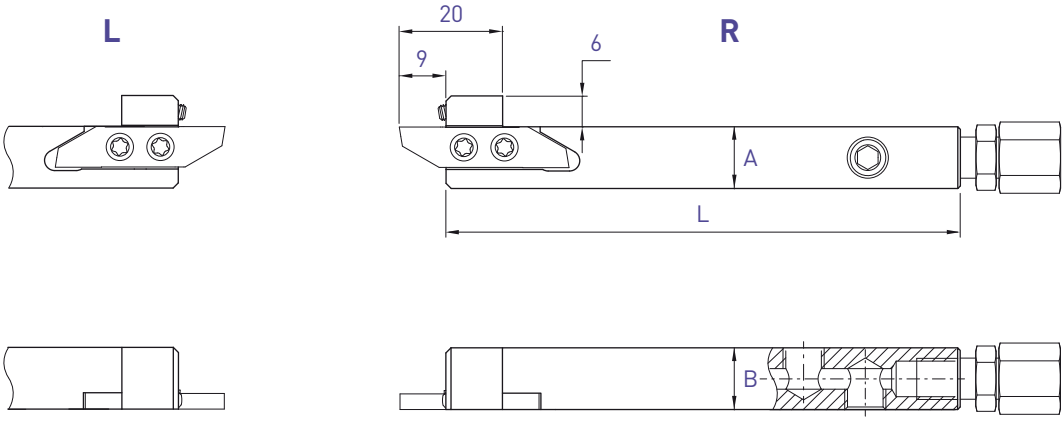


A x B	L	L Art. N°	R Art. N°
8 x 8	115	**630-8**	**640-8**
10 x 10	115	**630-10**	**640-10**
10 x 10	50	**630-10-50**	**640-10-50**
12 x 12	130	**630-12**	**640-12**
12 x 12	90	**630-12-90**	**640-12-90**
12.7 x 12.7	130	**630-12.7**	**640-12.7**
16 x 16	130	**630-16**	**640-16**
16 x 16	75	**630-16-75**	**640-16-75**
20 x 20	120	**630-20**	**640-20**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

630-JET / 640-JET



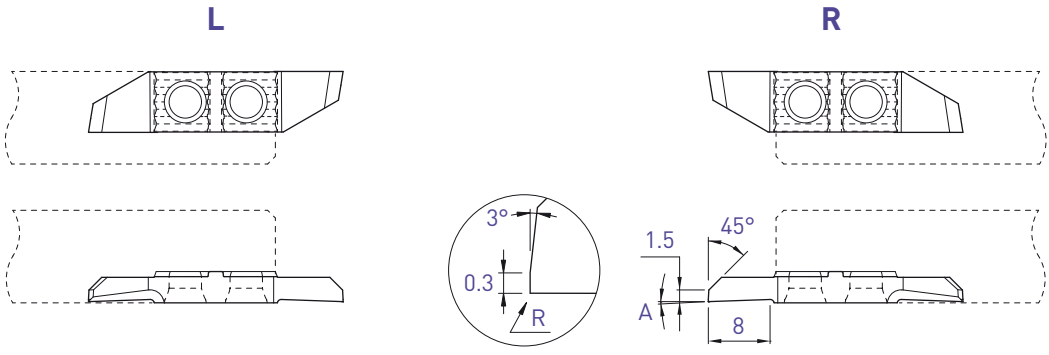


A x B	L	L Art. N°	R Art. N°
10 x 12	100	**630-1012-JET**	**640-1012-JET**
12 x 12	100	**630-12-JET**	**640-12-JET**
12.7 x 12.7	100	**630-12.7-JET**	**640-12.7-JET**
16 x 16	100	**630-16-JET**	**640-16-JET**
20 x 20	100	**630-20-JET**	**640-20-JET**

Chaque support est livré avec vis, raccord droit et buse d'arrosage Ø 1.5 mm. Les clés sont à commander séparément.
Jeder Halter wird mit Spannschraube(n), gerader Kühlmittelanschluss und Kühlmitteldüse Ø 1.5 mm geliefert. Die Schlüssel sind separat zu bestellen.
Screw(s), straight connector and coolant nozzle Ø 1.5 mm are included with each tool holder. The keys must be ordered separately.

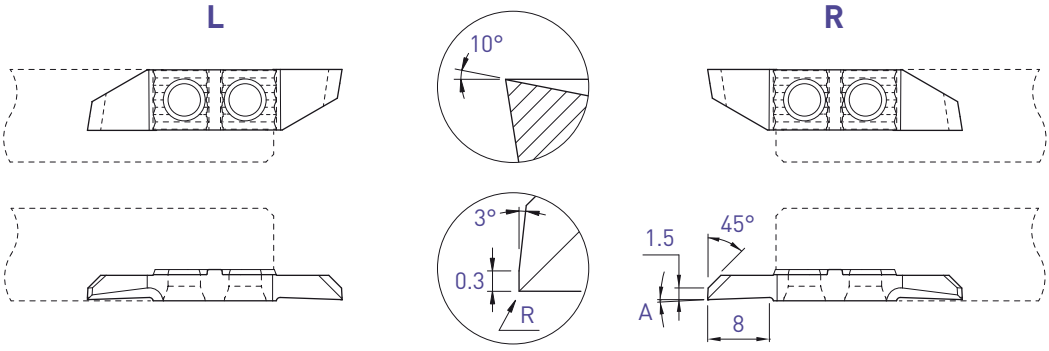
632 / 642

Tournage avant
Vorwärts drehen
Front turning





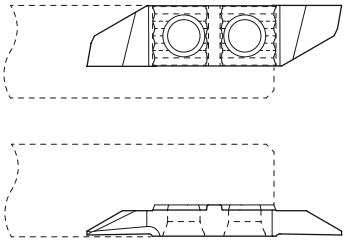
		L					R				
A	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0°	0	**632**	●	●			**642**	●	●		
0°	0.08	–					**642-R08**	●	●		
0°	0.15	–					**642-R15**	●	●	●	
2°	0	**632-2°**	●	●			**642-2°**	●	●	●	
2°	0.08	–					**642-2°-R08**	●	●		
2°	0.15	–					**642-2°-R15**	●	●		



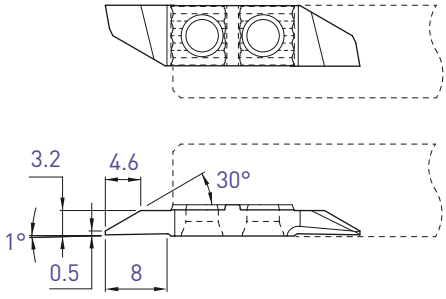


		L					R				
A	R	Art. N°	P M N S	N	P M N S	N	Art. N°	P M N S	N	P M N S	N
			TiAlN	N (µk20)	HTA	HN (µk10)		TiAlN	N (µk20)	HTA	HN (µk10)
0°	0	**632X10**	●	●			**642X10**	●	●		
0°	0.08	–					**642X10-R08**	●	●		
0°	0.15	–					**642X10-R15**	●	●		
2°	0	**632X10-2°**	●	●			**642X10-2°**	●	●		
2°	0.08	–					**642X10-2°-R08**	●	●		●
2°	0.15	–					**642X10-2°-R15**	●	●	●	●

L



R

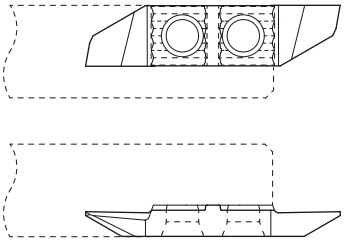




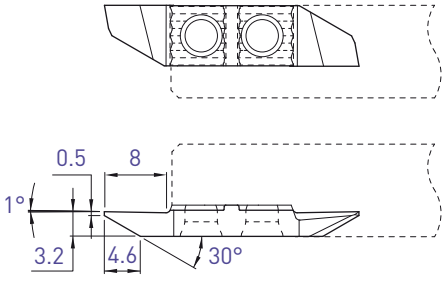
Tournage avant
Vorwärts drehen
Front turning

L					R				
Art. N°	P M N S	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	P M N S	TiAlN	N (µk20)	HTA	HN (µk10)
632S05		●	●			642S05		●	●	●	●

L



R





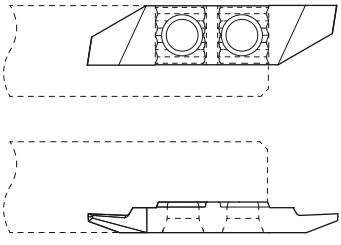
Tournage arrière
Rückwärts drehen
Back turning

L					R				
Art. N°	P M N S	N	P M N S	N	Art. N°	P M N S	N	P M N S	N
	TiAlN	N (µk20)	HTA	HN (µk10)		TiAlN	N (µk20)	HTA	HN (µk10)
633S05	●	●			643S05	●	●		●

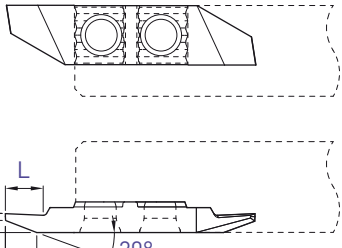
633 / 643

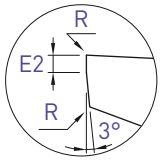
Tournage arrière
Rückwärts drehen
Back turning

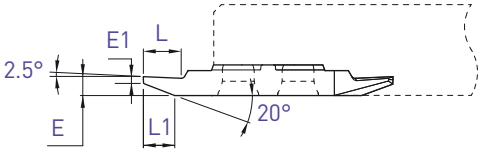
L



R

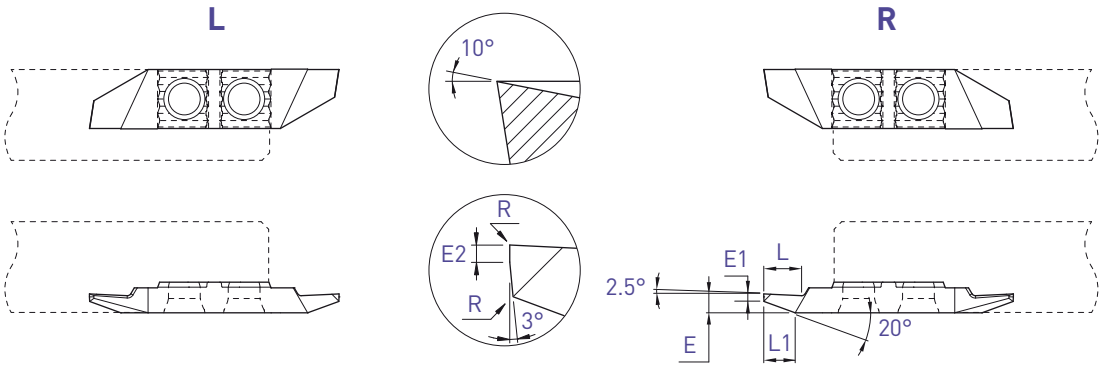








L											R				
E1	E2	L	L1	E	R	Art. N°	P M N S TiAlN	N (µk20)	P M N S HTA	N HN (µk10)	Art. N°	P M N S TiAlN	N N (µk20)	P M N S HTA	N HN (µk10)
0.5	0.25	3	2.8	1.5	0	**633-0.5**	●	●			**643-0.5**	●	●		●
0.5	0.25	3	2.8	1.5	0.08	-					**643-0.5-R08**	●	●		
0.8	0.40	4.5	3.3	2.0	0	-					**643-0.8**	●	●		
0.8	0.40	4.5	3.3	2.0	0.08	-					**643-0.8-R08**	●	●		
1.0	0.40	5	4.2	2.5	0	-					**643-1.0**	●	●		
1.0	0.40	5	4.2	2.5	0.08	-					**643-1.0-R08**	●	●		
1.5	0.50	6	4.2	3.0	0	-					**643-1.5**	●	●		
1.5	0.50	6	4.2	3.0	0.08	-					**643-1.5-R08**	●	●		

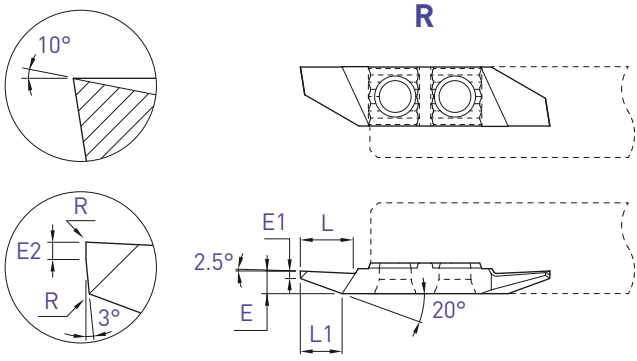




						L					R				
E1	E2	L	L1	E	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.5	0.25	3	2.8	1.5	0	**633X10-0.5**	●	●			**643X10-0.5**	●	●	●	●
0.5	0.25	3	2.8	1.5	0.08	-					**643X10-0.5-R08**	●	●		
0.8	0.40	4.5	3.3	2.0	0	-					**643X10-0.8**	●	●		
0.8	0.40	4.5	3.3	2.0	0.08	-					**643X10-0.8-R08**	●	●		
1.0	0.40	5	4.2	2.5	0	-					**643X10-1.0**	●	●		
1.0	0.40	5	4.2	2.5	0.08	-					**643X10-1.0-R08**	●	●		
1.5	0.50	6	4.2	3.0	0	-					**643X10-1.5**	●	●		
1.5	0.50	6	4.2	3.0	0.08	-					**643X10-1.5-R08**	●	●		

643XS

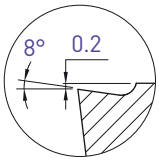
Tournage arrière
Rückwärts drehen
Back turning

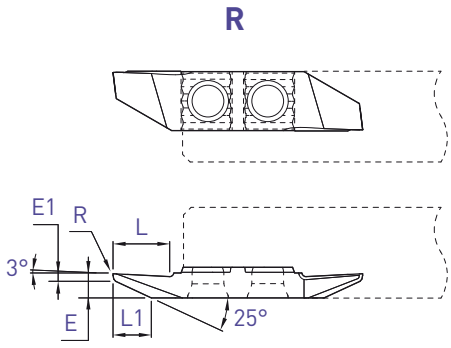




R

E1	E2	L	L1	E	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.0	0.4	7	5.5	3.0	0	**643X10S-1.0**	●	●		
1.0	0.4	7	5.5	3.0	0.08	**643X10S-1.0-R08**	●	●		





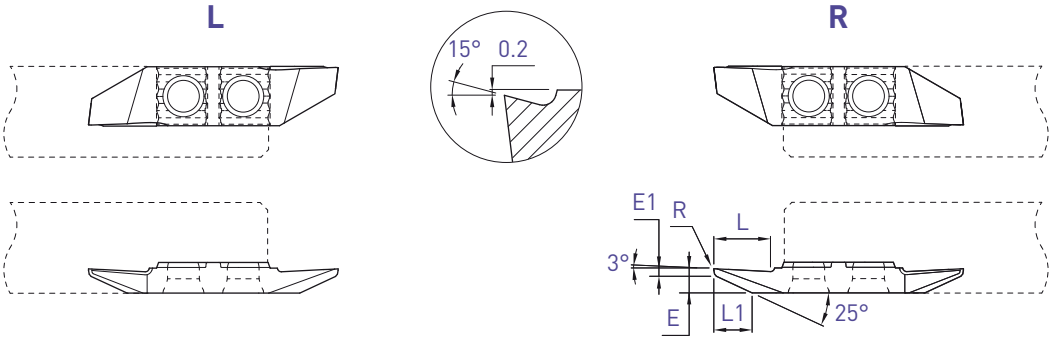


R

E1	L	L1	E	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.0	7.5	5.0	3.2	0	**643VX8**	●	●		
1.0	7.5	5.0	3.2	0.08	**643VX8-R08**	●	●		

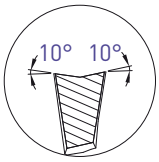
633VX15 / 643VX15

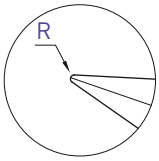
Tournage arrière
Rückwärts drehen
Back turning



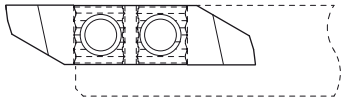


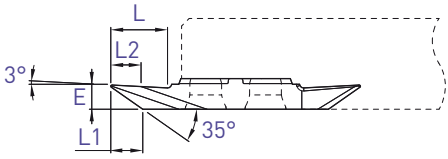
					L					R				
E1	L	L1	E	R	Art. N°	TiAlN	N (μk20)	HTA	HN (μk10)	Art. N°	TiAlN	N (μk20)	HTA	HN (μk10)
0.6	7.5	5.2	3.2	0	**633VX15**	●	●			**643VX15**	●	●		●
0.6	7.5	5.2	3.2	0.08	**-**					**643VX15-R08**	●	●		



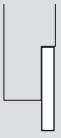


R







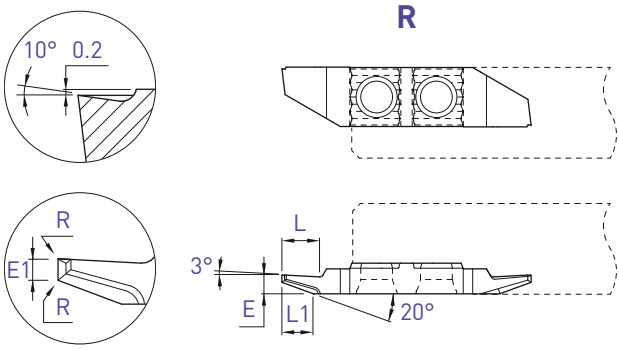


R

L	L1	L2	E	R	Art. N°	P M N S TiAlN	N (μk20)	P M N S HTA	N HN (μk10)
7.5	4.2	4.0	3.2	0.15	**643VUX10-R15**	●	●	●	●
7.5	3.8	3.8	3.2	0.35	**643VUX10-R35**	●	●		

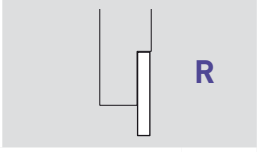
643ZX

Tournage arrière
Rückwärts drehen
Back turning

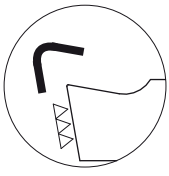




Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



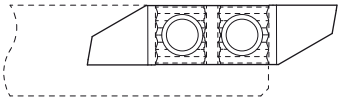
E1	L	L1	E	R	Art. N°	P M N S TiAlN	N N (µK20)
1.0	5	4	2.5	0.01	**643ZX10-1.0**	●	
1.0	5	4	2.5	0.08	**643ZX10-1.0-R08**	●	



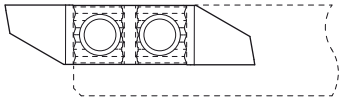
Arête de coupe honée
Gehonte Schneidkante
Honed edge

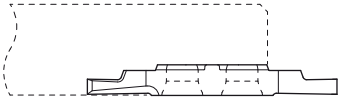
f min: 0.02 mm/U

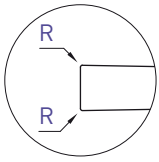
L

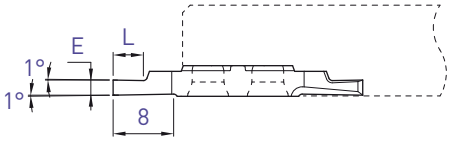


R



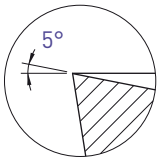


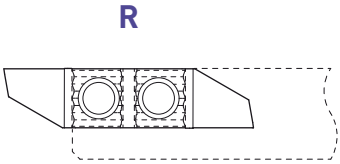


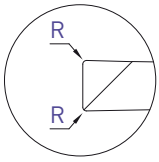


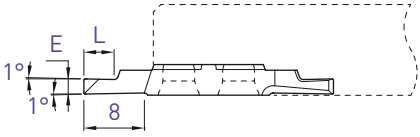


L							R			
E	L	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.5	1.5	0	**634-0.5**	●	●			**644-0.5**	●	●		
0.6	1.8	0	-					**644-0.6**	●	●		
0.75	2	0	-					**644-0.75**	●	●		●
0.8	2	0	**634-0.8**	●	●			**644-0.8**	●	●		
0.9	2.5	0	-					**644-0.9**	●	●		
0.95	3	0	-					**644-0.95**	●	●		
1.0	2.5	0	**634-1.0**	●	●			**644-1.0**	●	●		●
1.0	2.5	0.08	-					**644-1.0-R08**	●	●	●	●
1.2	3	0	**634-1.2**	●	●			**644-1.2**	●	●		
1.2	3	0.08	-					**644-1.2-R08**	●	●		●
1.5	3	0	**634-1.5**	●	●			**644-1.5**	●	●	●	●
1.5	3	0.08	-					**644-1.5-R08**	●	●	●	●
1.5	3	0.15	-					**644-1.5-R15**	●	●		
1.8	4	0	-					**644-1.8**	●	●	●	
2.0	4	0	**634-2.0**	●	●			**644-2.0**	●	●		
2.0	4	0.08	-					**644-2.0-R08**	●	●		●
2.0	4	0.15	-					**644-2.0-R15**	●	●		●
2.5	6	0	**634-2.5**	●	●			**644-2.5**	●	●		
2.5	6	0.08	-					**644-2.5-R08**	●	●		
2.5	6	0.15	-					**644-2.5-R15**	●	●		
3	6	0	**634-3.0**	●	●			**644-3.0**	●	●	●	
3	6	0.08	-					**644-3.0-R08**	●	●	●	●
3	6	0.15	-					**644-3.0-R15**	●	●		

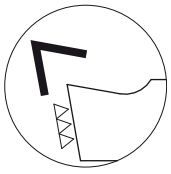






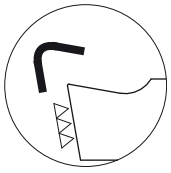






Arête de coupe vive
Scharfe Schneidkante
Sharp edge

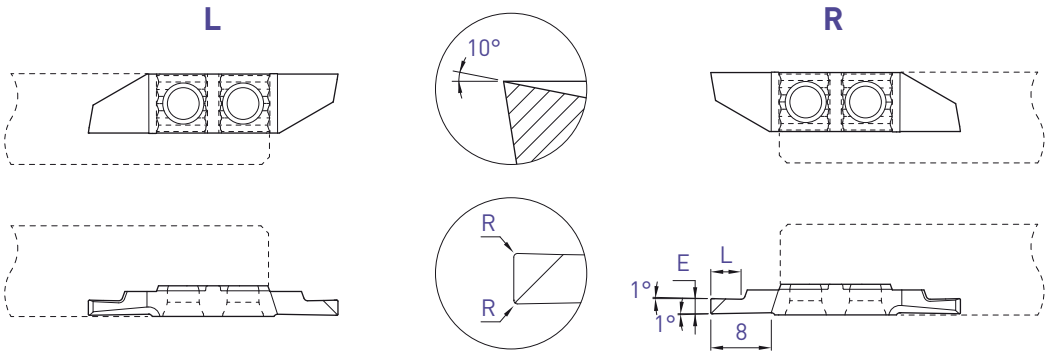
E	L	R	Art. N°	TiAlN	N (µK20)	HTA	HN (µK10)
1.5	3	0.08	**644X5-1.5-R08**	●	●		
2	4	0.08	**644X5-2.0-R08**	●	●		
2	4	0.15	**644X5-2.0-R15**	●	●		
2.5	6	0.08	**644X5-2.5-R08**	●	●		
2.5	6	0.15	**644X5-2.5-R15**	●	●		
3	6	0.08	**644X5-3.0-R08**	●	●		
3	6	0.15	**644X5-3.0-R15**	●	●		



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

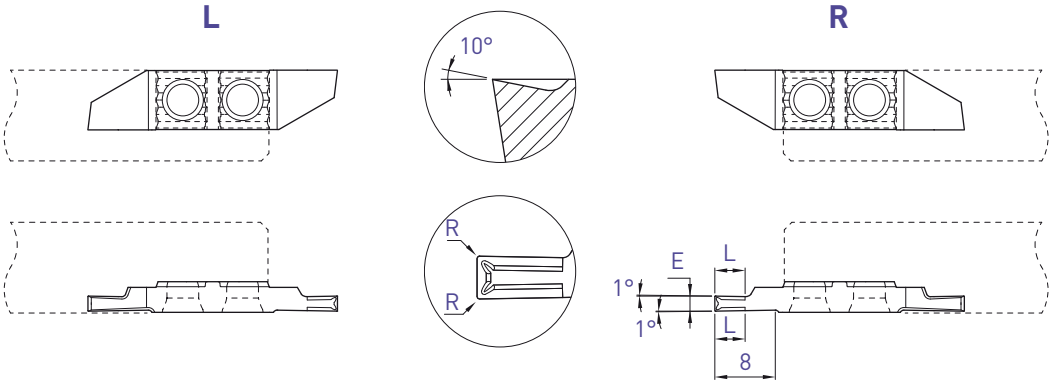
1.5	3	0.08	**644X5-1.5-R08-EP**	●	●		
2	4	0.08	**644X5-2.0-R08-EP**	●	●		
2	4	0.15	**644X5-2.0-R15-EP**	●	●		
2.5	6	0.08	**644X5-2.5-R08-EP**	●	●		
2.5	6	0.15	**644X5-2.5-R15-EP**	●	●		
3	6	0.08	**644X5-3.0-R08-EP**	●	●		
3	6	0.15	**644X5-3.0-R15-EP**	●	●		





			L				R			
E	L	R	Art. N°	P M N S TiAlN	N N (µK20)	P M N S HTA	N HN (µK10)	Art. N°	P M N S TiAlN	N N (µK20)	P M N S HTA	N HN (µK10)
0.8	2	0	634X10-0.8	●	●			644X10-0.8	●	●	●	●
1.0	2.5	0	634X10-1.0	●	●			644X10-1.0	●	●		
1.0	2.5	0.08	634X10-1.0-R08	●	●			644X10-1.0-R08	●	●		
1.2	3	0	-					644X10-1.2	●	●		●
1.2	3	0.08	-					644X10-1.2-R08	●	●		
1.5	3	0	634X10-1.5	●	●			644X10-1.5	●	●		●
1.5	3	0.08	634X10-1.5-R08	●	●			644X10-1.5-R08	●	●		●
1.5	3	0.15	634X10-1.5-R15	●	●			644X10-1.5-R15	●	●		
1.8	4	0	-					644X10-1.8	●	●		
2	4	0	634X10-2.0	●	●			644X10-2.0	●	●		
2	4	0.08	634X10-2.0-R08	●	●			644X10-2.0-R08	●	●		
2	4	0.15	634X10-2.0-R15	●	●			644X10-2.0-R15	●	●		
2.5	6	0	634X10-2.5	●	●			644X10-2.5	●	●		
2.5	6	0.08	634X10-2.5-R08	●	●			644X10-2.5-R08	●	●		
2.5	6	0.15	634X10-2.5-R15	●	●			644X10-2.5-R15	●	●		
3	6	0	634X10-3.0	●	●			644X10-3.0	●	●		
3	6	0.08	634X10-3.0-R08	●	●			644X10-3.0-R08	●	●		
3	6	0.15	634X10-3.0-R15	●	●			644X10-3.0-R15	●	●		

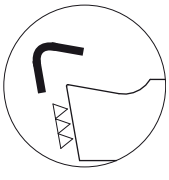
634ZXB / 644ZXB





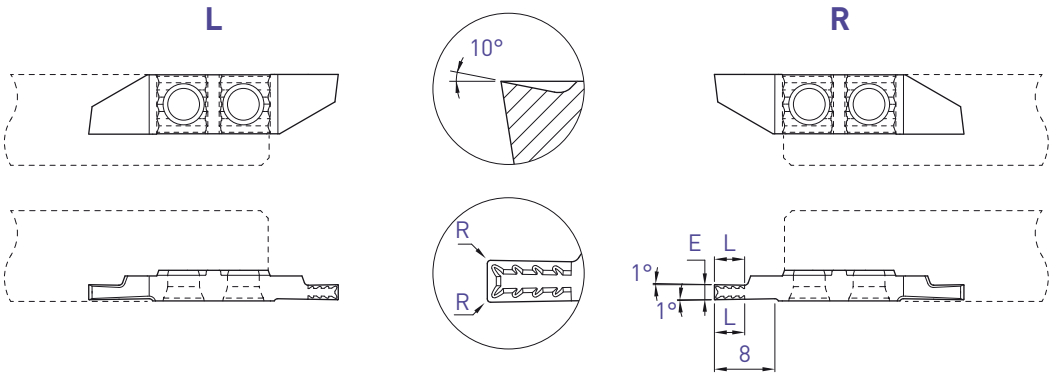
Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control

			L			R		
E	L	R	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.0	2.5	0.01	**634ZXB10-1.0**	●		**644ZXB10-1.0**	●	
1.5	4	0.01	**634ZXB10-1.5**	●		**644ZXB10-1.5**	●	
1.5	4	0.08	**634ZXB10-1.5-R08**	●		**644ZXB10-1.5-R08**	●	
2.0	4	0.01	**634ZXB10-2.0**	●		**644ZXB10-2.0**	●	
2.0	4	0.08	**634ZXB10-2.0-R08**	●		**644ZXB10-2.0-R08**	●	
2.0	4	0.15	**634ZXB10-2.0-R15**	●		**644ZXB10-2.0-R15**	●	
2.5	5	0.08	**634ZXB10-2.5-R08**	●		**644ZXB10-2.5-R08**	●	
2.5	5	0.15	**634ZXB10-2.5-R15**	●		**644ZXB10-2.5-R15**	●	
3.0	6	0.08	**634ZXB10-3.0-R08**	●		**644ZXB10-3.0-R08**	●	
3.0	6	0.15	**634ZXB10-3.0-R15**	●		**644ZXB10-3.0-R15**	●	
3.0	6	0.35	**634ZXB10-3.0-R35**	●		**644ZXB10-3.0-R35**	●	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

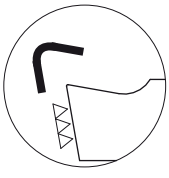
f min: 0.02 mm/U





Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control

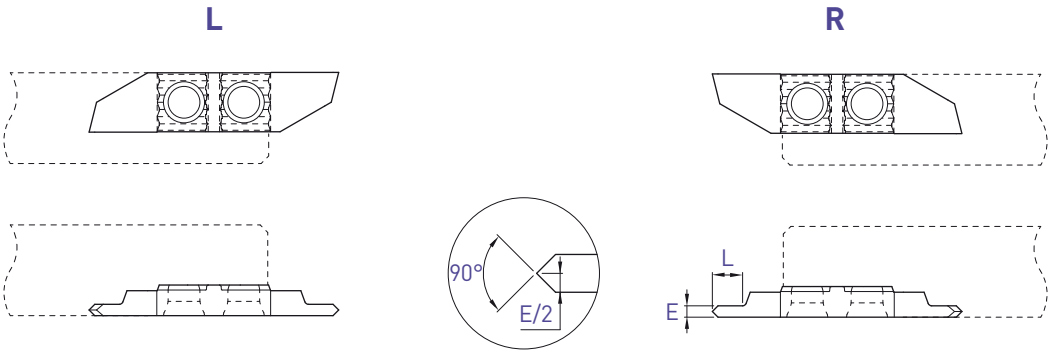
			L			R		
E	L	R	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.0	2.5	0.01	**634ZXT10-1.0**	●		**644ZXT10-1.0**	●	
1.5	4	0.01	**634ZXT10-1.5**	●		**644ZXT10-1.5**	●	
1.5	4	0.08	**634ZXT10-1.5-R08**	●		**644ZXT10-1.5-R08**	●	
2.0	4	0.01	**634ZXT10-2.0**	●		**644ZXT10-2.0**	●	
2.0	4	0.08	**634ZXT10-2.0-R08**	●		**644ZXT10-2.0-R08**	●	
2.0	4	0.15	**634ZXT10-2.0-R15**	●		**644ZXT10-2.0-R15**	●	
2.5	5	0.08	**634ZXT10-2.5-R08**	●		**644ZXT10-2.5-R08**	●	
2.5	5	0.15	**634ZXT10-2.5-R15**	●		**644ZXT10-2.5-R15**	●	
3.0	6	0.08	**634ZXT10-3.0-R08**	●		**644ZXT10-3.0-R08**	●	
3.0	6	0.15	**634ZXT10-3.0-R15**	●		**644ZXT10-3.0-R15**	●	
3.0	6	0.35	-			**644ZXT10-3.0-R35**	●	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

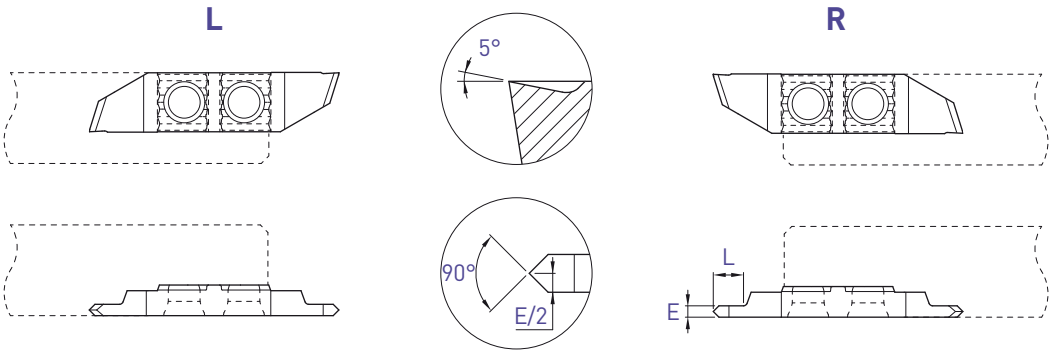
f min: 0.02 mm/U

635-90 / 645-90



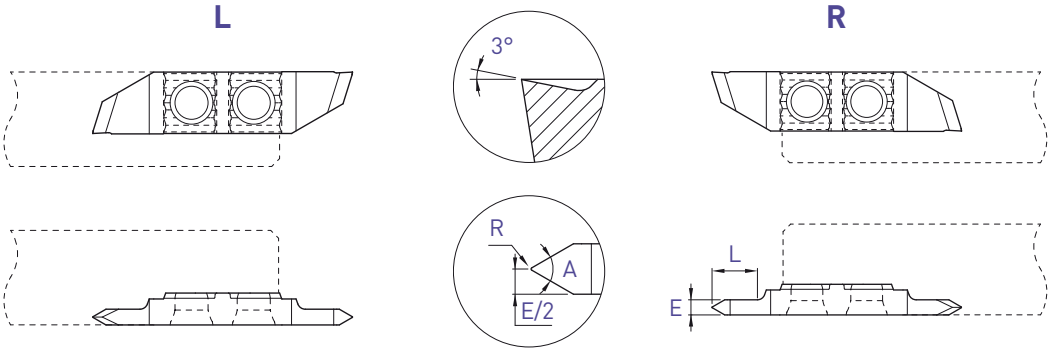


		L			R		
E	L	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.5	4	**635-90-1.5**	●	●	**645-90-1.5**	●	●





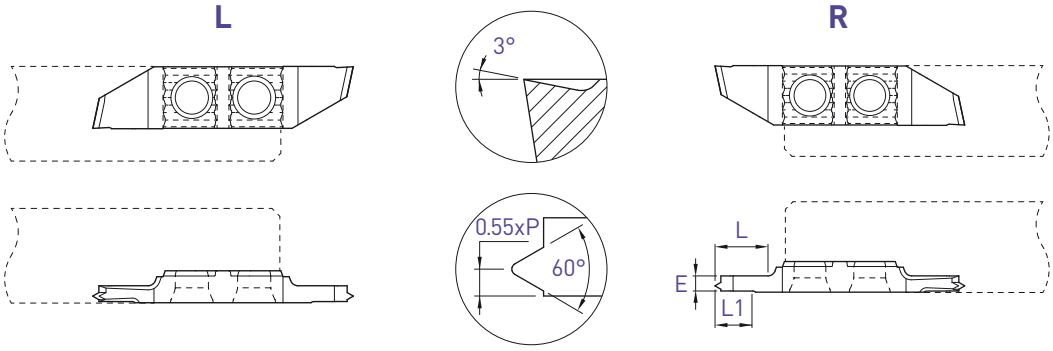
		L			R		
E	L	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.5	4	635X5-90-1.5	●	●	645X5-90-1.5	●	●





Profil partiel
Teilprofil
Partial profile

				L			R		
A	E	L	R	Art. N°	TiAlN	N (μk20)	Art. N°	TiAlN	N (μk20)
55°	1.5	4	0	636X3-55-1.5	●	●	646X3-55-1.5	●	●
55°	2.0	6	0.03	636X3-55-2.0-R03	●	●	646X3-55-2.0-R03	●	●
60°	1.5	4	0	636X3-60-1.5	●	●	646X3-60-1.5	●	●
60°	2.0	6	0.03	636X3-60-2.0-R03	●	●	646X3-60-2.0-R03	●	●
60°	2.0	6	0.06	636X3-60-2.0-R06	●	●	646X3-60-2.0-R06	●	●
60°	3.0	8	0.06	636X3-60-3.0-R06	●	●	646X3-60-3.0-R06	●	●
60°	3.0	8	0.12	636X3-60-3.0-R12	●	●	646X3-60-3.0-R12	●	●

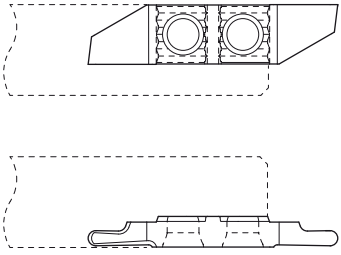




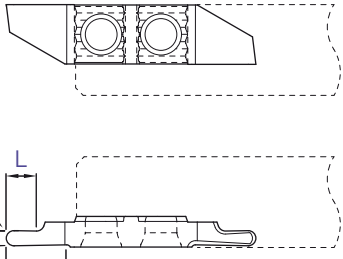
Profil complet métrique
Metrisches Vollprofil
Metric full profile

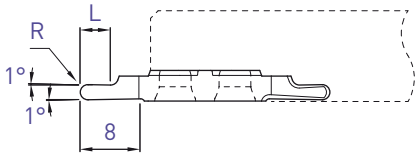
				L			R		
E	L	L1	Pas Steigung Pitch P	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.0	3	3	0.25	**636X3-M-0.25**	●	●	**646X3-M-0.25**	●	●
1.0	3	3	0.30	**636X3-M-0.30**	●	●	**646X3-M-0.30**	●	●
1.0	3	3	0.35	**636X3-M-0.35**	●	●	**646X3-M-0.35**	●	●
1.0	3	3	0.40	**636X3-M-0.40**	●	●	**646X3-M-0.40**	●	●
1.0	3	3	0.45	**636X3-M-0.45**	●	●	**646X3-M-0.45**	●	●
1.0	3	3	0.50	**636X3-M-0.50**	●	●	**646X3-M-0.50**	●	●
1.5	5	5	0.60	**636X3-M-0.60**	●	●	**646X3-M-0.60**	●	●
1.5	5	5	0.70	**636X3-M-0.70**	●	●	**646X3-M-0.70**	●	●
1.5	5	5	0.75	**636X3-M-0.75**	●	●	**646X3-M-0.75**	●	●
1.5	5	5	0.80	**636X3-M-0.80**	●	●	**646X3-M-0.80**	●	●
2.0	7	5	1.00	**636X3-M-1.00**	●	●	**646X3-M-1.00**	●	●
2.0	7	5	1.25	**636X3-M-1.25**	●	●	**646X3-M-1.25**	●	●
2.0	7	5	1.50	**636X3-M-1.50**	●	●	**646X3-M-1.50**	●	●

L



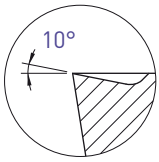
R

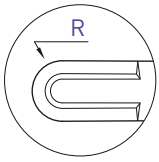




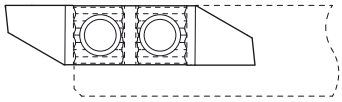


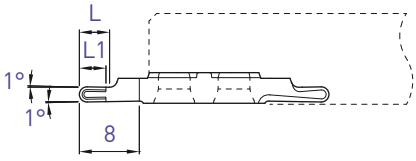
		L						R				
R	L	Art. N°	P M N S	N	P M N S	N	HN (µk10)	Art. N°	P M N S	N	P M N S	HN (µk10)
0.25	1.5	-						647-R0.25	●	●		
0.4	2	-						647-R0.4	●	●		
0.5	2.5	637-R0.5	●	●				647-R0.5	●	●	●	●
0.6	2.5	-						647-R0.6	●	●		
0.75	3	-						647-R0.75	●	●		
0.8	3	-						647-R0.8	●	●		
1.0	4	637-R1.0	●	●				647-R1.0	●	●		
1.5	6	-						647-R1.5	●	●		





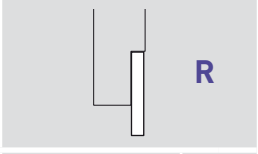
R





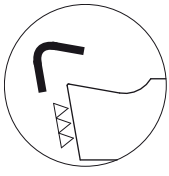


Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



R

R	L	L1	Art. N°	P M N S TiAlN	N N (µk20)
1.0	4	3.5	**647ZX10-R1.0**	●	
1.5	6	4	**647ZX10-R1.5**	●	

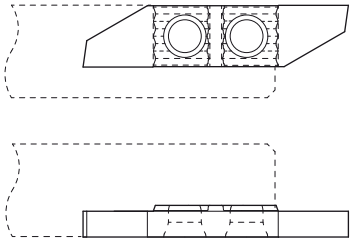


Arête de coupe honée
Gehonte Schneidkante
Honed edge

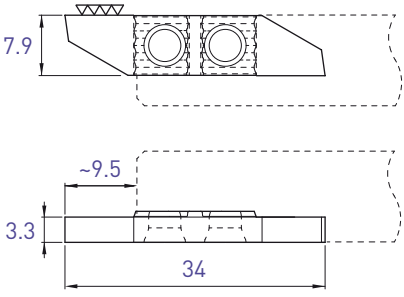
f min: 0.02 mm/U

631-EP / 641-EP

L

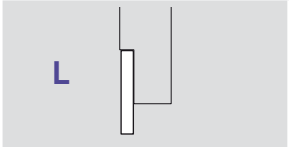


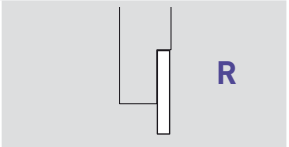
R





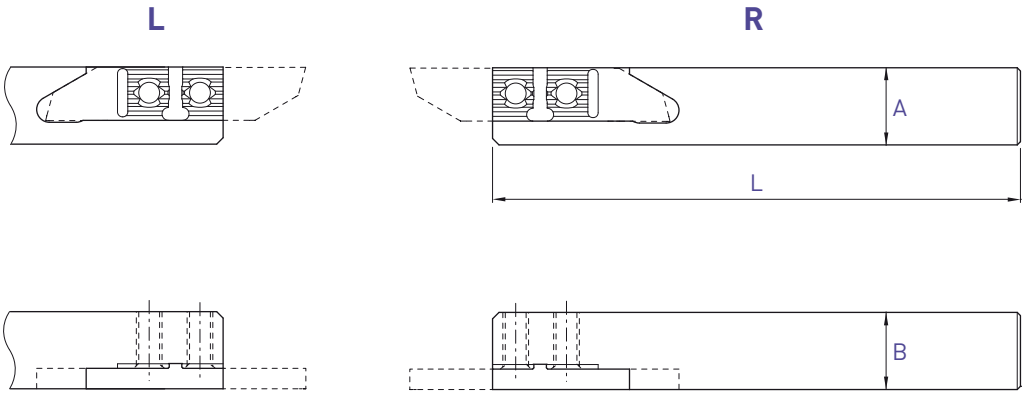
Face de coupe polie
Polierte Schneidfläche
Polished cutting face





Art. N°	P M N S TiAlN	N (µk20)	P M N S HTA	HN (µk10)
631-EP	●	●	●	●

Art. N°	P M N S TiAlN	N (µk20)	P M N S HTA	HN (µk10)
641-EP	●	●	●	●





A x B	L	L Art. N°	R Art. N°
8 x 8	115	**650-8**	**660-8**
10 x 10	115	**650-10**	**660-10**
10 x 10	50	**650-10-50**	**660-10-50**
12 x 12	130	**650-12**	**660-12**
12 x 12	90	**650-12-90**	**660-12-90**
12.7 x 12.7	130	**650-12.7**	**660-12.7**
16 x 16	130	**650-16**	**660-16**
16 x 16	75	**650-16-75**	**660-16-75**
20 x 20	120	**650-20**	**660-20**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

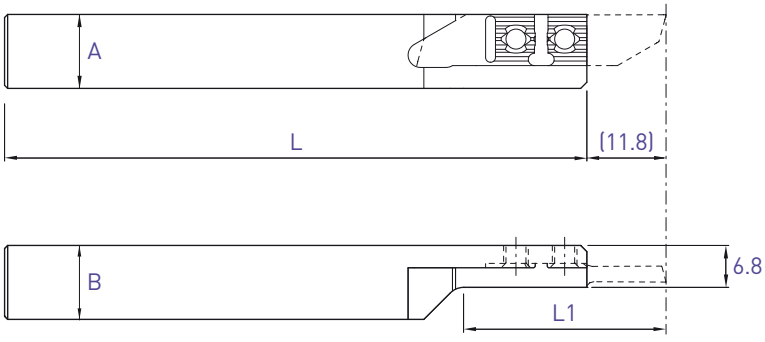
650 RC

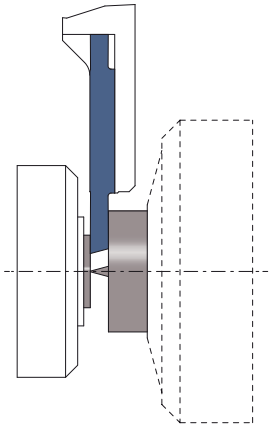
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Porte-outils
Halter
Holders

Utiliser des plaquettes type 651R
WSP Typ 651R verwenden
Use inserts type 651R

Voir dès page 5.39
Siehe ab Seite 5.39
See from page 5.39







L (R)

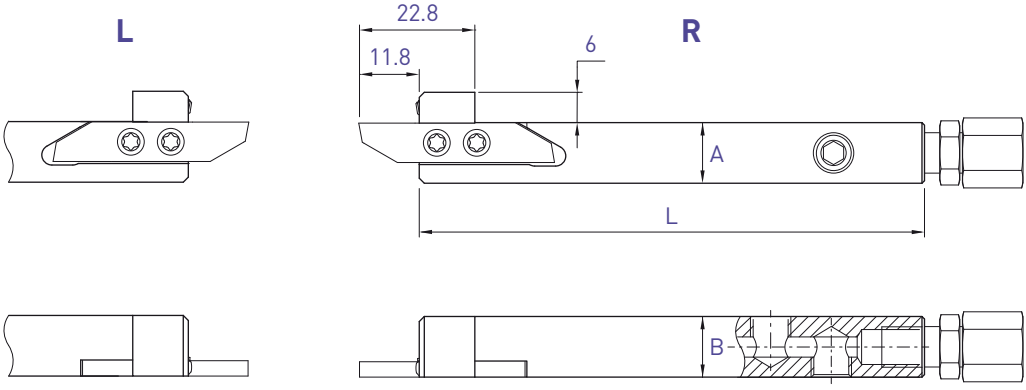
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

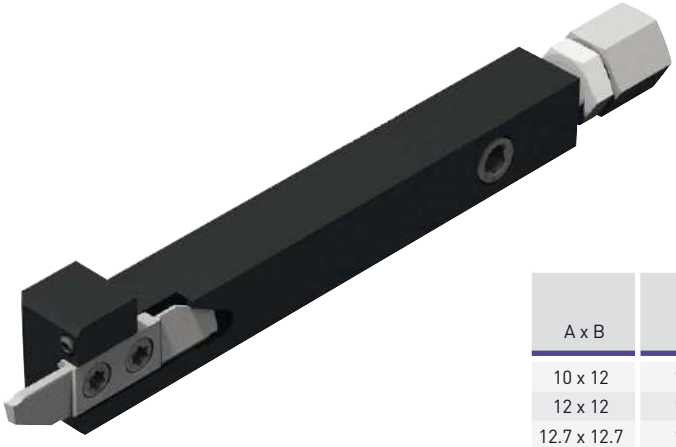
A x B	L	L1	Art. N°
10 x 10	115	32	**650RC-10**
12 x 12	130	32	**650RC-12**
16 x 16	130	42	**650RC-16**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils avec arrosage intégré
Halter mit integrierter Kuhlmittelzufuhr
Holders with integrated coolant supply

650-JET / 660-JET

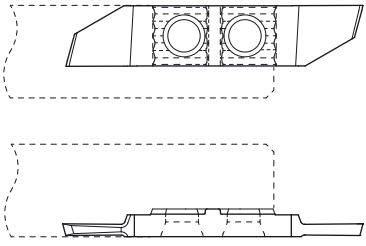




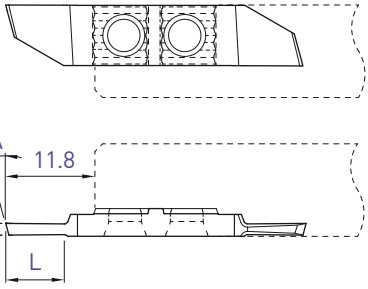
A x B	L	L Art. N°	R Art. N°
10 x 12	100	**650-1012-JET**	**660-1012-JET**
12 x 12	100	**650-12-JET**	**660-12-JET**
12.7 x 12.7	100	**650-12.7-JET**	**660-12.7-JET**
16 x 16	100	**650-16-JET**	**660-16-JET**
20 x 20	100	**650-20-JET**	**660-20-JET**

Chaque support est livré avec vis, raccord droit et buse d'arrosage Ø 1.5 mm. Les clés sont à commander séparément.
Jeder Halter wird mit Spannschraube(n), gerader Kühlmittelanschluss und Kühlmitteldüse Ø 1.5 mm geliefert. Die Schlüssel sind separat zu bestellen.
Screw(s), straight connector and coolant nozzle Ø 1.5 mm are included with each tool holder. The keys must be ordered separately.

L

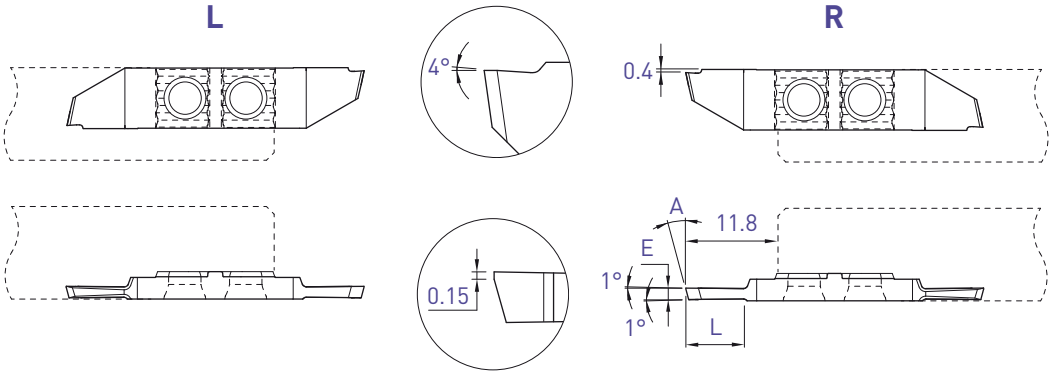


R





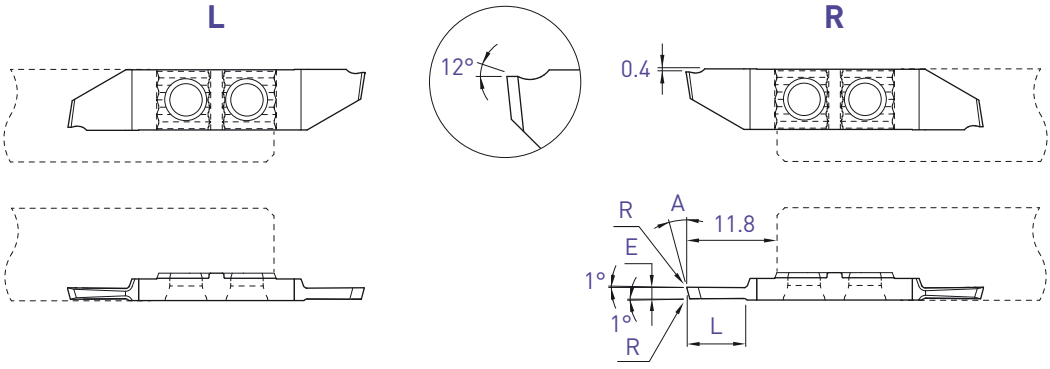
L							R				
E	A	L	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.8	20°	5	**651-0.8-20°**	●	●			**661-0.8-20°**	●	●	●	●
1.0	15°	5	–					**661-1.0-15°**	●	●		
1.0	20°	5	**651-1.0-20°**	●	●			**661-1.0-20°**	●	●		
1.2	15°	5	–					**661-1.2-15°**	●	●		
1.2	20°	5	**651-1.2-20°**	●	●			**661-1.2-20°**	●	●		
1.5	15°	7.5	**651-1.5-15°**	●	●			**661-1.5-15°**	●	●		
1.5	20°	7.5	–					**661-1.5-20°**	●	●		
1.8	15°	9	**651-1.8-15°**	●	●			**661-1.8-15°**	●	●		
2.0	15°	11	**651-2.0-15°**	●	●	●		**661-2.0-15°**	●	●	●	●
2.5	15°	11	**651-2.5-15°**	●	●			**661-2.5-15°**	●	●		





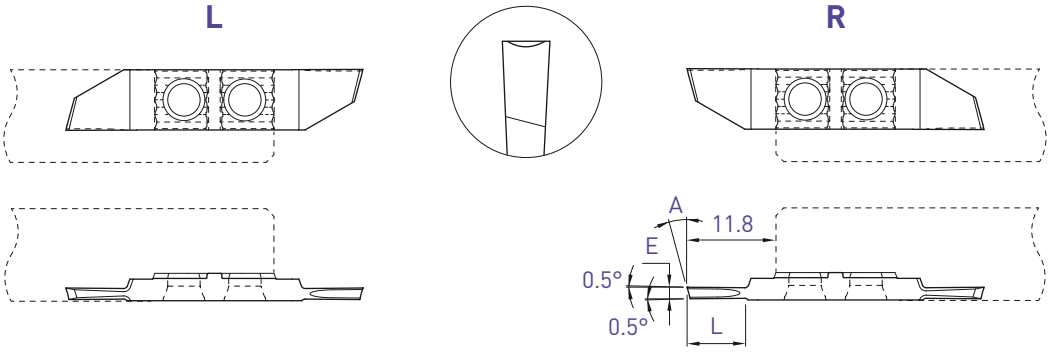
L								R				
E	A	L	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.5	15°	7.5	**651XF-1.5**	●	●			**661XF-1.5**	●	●		
2.0	15°	11	**651XF-2.0**	●	●			**661XF-2.0**	●	●		

651X12 / 661X12



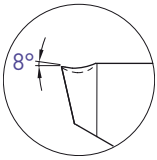


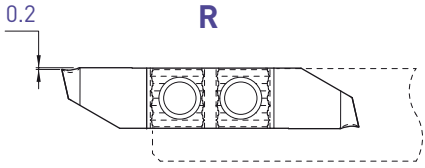
				L					R				
E	A	L	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.0	15°	5	0.03	**651X12-1.0**	●	●			**661X12-1.0**	●	●		
1.5	15°	7.5	0.03	**651X12-1.5**	●	●			**661X12-1.5**	●	●		
2.0	15°	11	0.03	**651X12-2.0**	●	●			**661X12-2.0**	●	●		

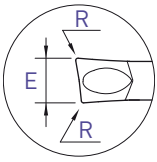


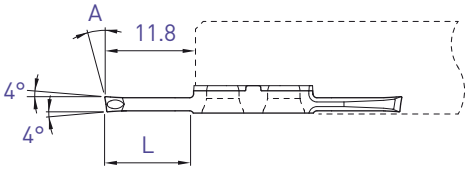


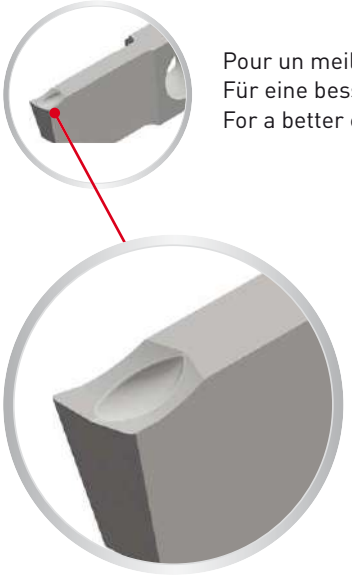
			L			R		
E	A	L	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.5	15°	7.5	**651U-1.5**	●	●	**661U-1.5**	●	●
2.0	15°	11	**651U-2.0**	●	●	**661U-2.0**	●	●



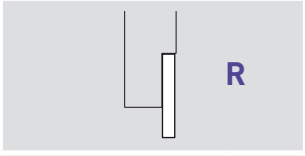




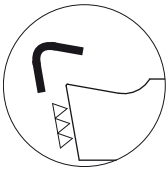




Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



E	A	L	R	Art. N°	TiAlN	N (µK20)
2.0	8°	11	0.10	**661ZU8-2.0-8°-R10**	●	

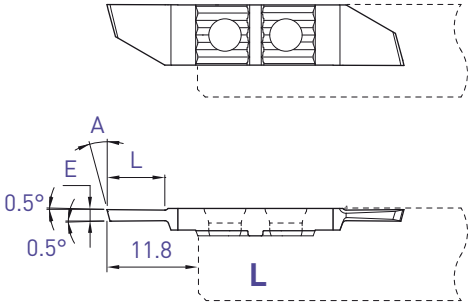


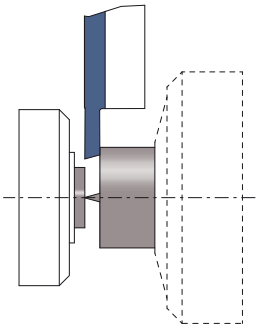
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



Cut R







L (R)

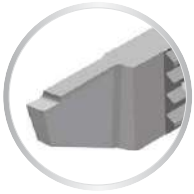
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

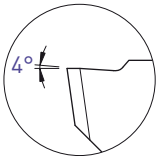
E	A	L	Art. N°	TiAlN	N (μk20)	HTA	HN (μk10)
1.0	15°	5	**651R-1.0-15°**	●	●		
1.2	15°	5	**651R-1.2-15°**	●	●		
1.5	15°	7.5	**651R-1.5-15°**	●	●		
2.0	15°	11	**651R-2.0-15°**	●	●		
2.5	15°	11	**651R-2.5-15°**	●	●		

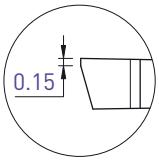
651RXF

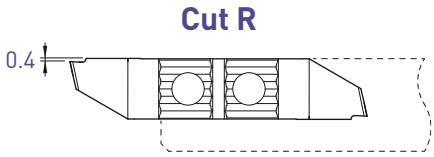
Coupe déportée
Versetztes Schneiden
Cut off line

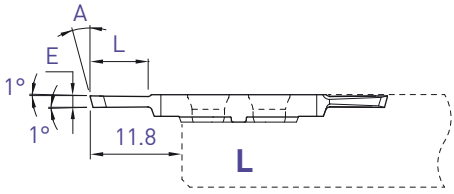
Tronçonnage
Abstechen
Parting off

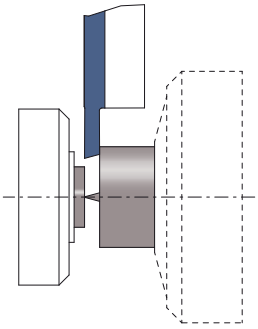












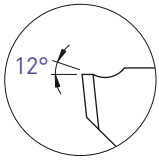


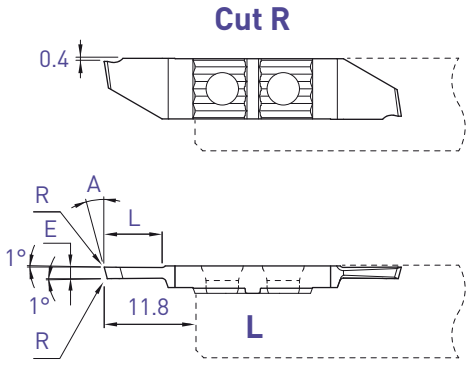
L (R)

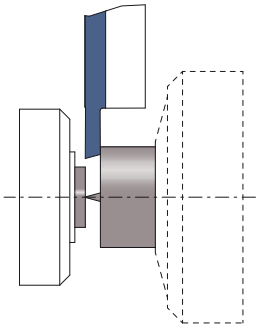
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	Art. N°	P M N S TiAlN	N (µk20)	P M N S HTA	HN (µk10)
1.5	15°	7.5	**651RXF-1.5**	●	●		
2.0	15°	11	**651RXF-2.0**	●	●		











L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

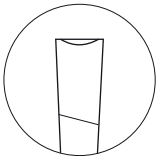
E	A	L	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.5	15°	7.5	0.03	**651RX12-1.5**	●	●		
2.0	15°	11	0.03	**651RX12-2.0**	●	●		

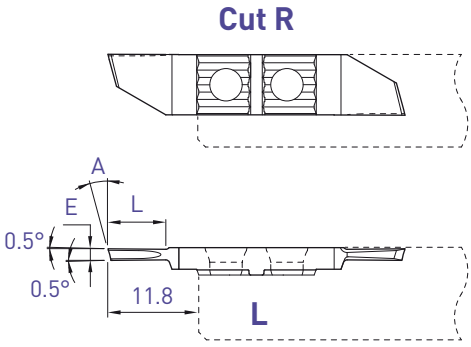
651RU

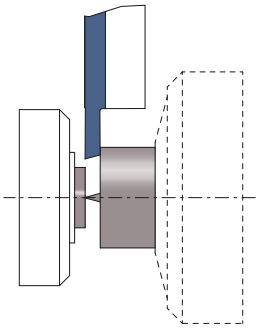
Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off





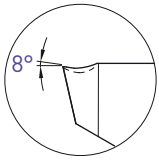


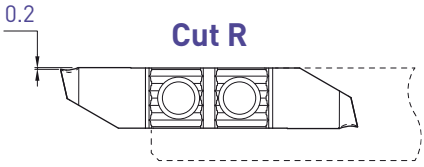


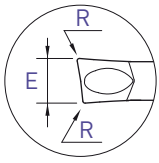
L (R)

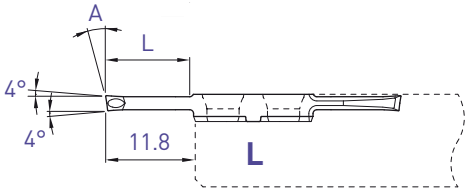
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

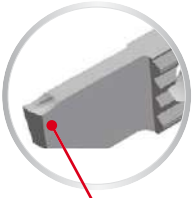
E	A	L	Art. N°	TiAlN	N (µK20)
1.5	15°	7.5	**651RU-1.5**	●	●
2.0	15°	11	**651RU-2.0**	●	●



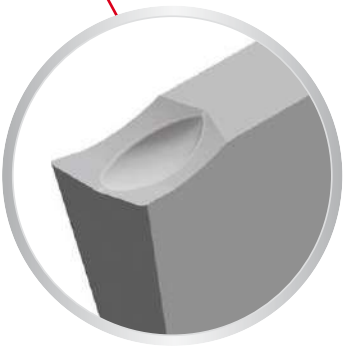








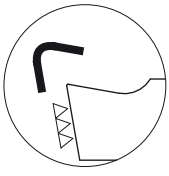
Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



L (R)

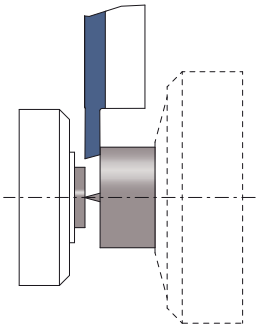
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	R	Art. N°	P M N S TiAlN	N N (µK20)
2.0	8°	11	0.10	**651RZU8-2.0-8°-R10**	●	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

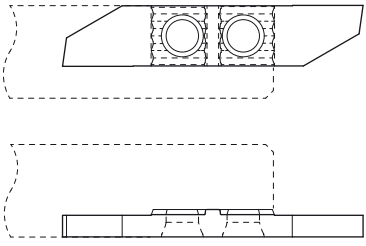
f min: 0.02 mm/U



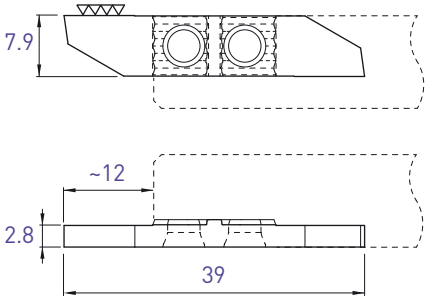
651-EP / 661-EP

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

L

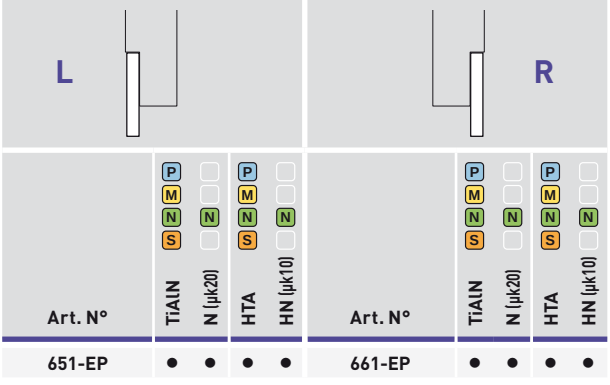


R





Face de coupe polie
Polierte Schneidfläche
Polished cutting face



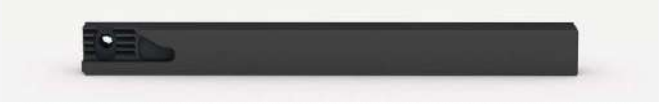
Porte-outils Halter Holders					Options		
							
						Art. N°	Recommandation de serrage Empfehlung zum Spannen Clamping recommendation
630 640	**V-M4X9-T15**	-	-	-	**C-T15**	**SET-NM3.0-TX15**	3 Nm
630-JET 640-JET		**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**			
650 660		-	-	-			
650-RC	**V-M4X6.5-T15**	-	-	-			
650-JET 660-JET	**V-M4X9-T15**	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**			

ECO-Line



APPLITEC
CUTTING TOOLS

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Fonçage-tournage Einstechen und drehen Grooving and turning	254 / 264 	> 6.24
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Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories		> 6.31

2	6	4	X	-	2.0	-	R20	-	AP302

Dimension
Abmessung
Dimension

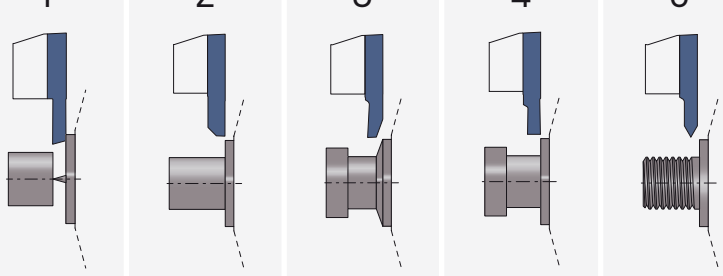
Rayon
Radius
Radius

Nuance
Sorte
Grade

Géométrie de coupe	brise-copeaux	particularités
Schneidgeometrie	Spanbrecher	Sondereigenschaften
Cutting geometry	chip breaker	special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

1 2 3 4 6

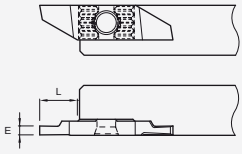


Gamme de produit définit la compatibilité des plaquettes avec le porte-outil
Produktserie bestimmt die WSP und Halter Kompatibilität
Product series shows the inserts and holder compatibility

L = 5 (chiffre impair / ungerade Zahl / uneven number)

R = 6 (chiffre pair / gerade Zahl / even number)

L	R
250	260

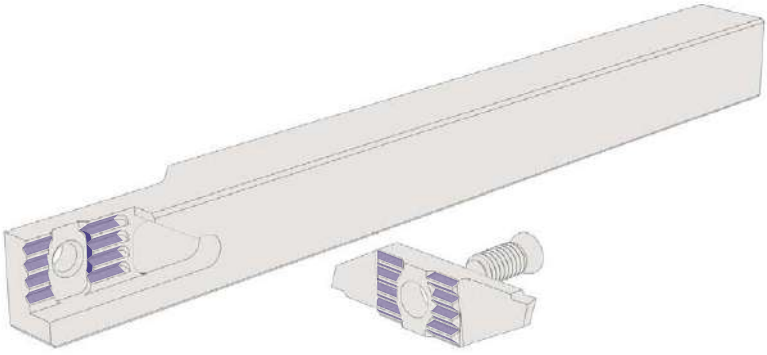


E max = 3.0 mm
L max = 8.5 mm

Applitec série 200 Système de serrage à denture avec 1 vis de fixation
Applitec 200 Serie Spannsystem mit Verzahnung und 1 Schraube
Applitec 200 series Teeth clamping system with 1 screw

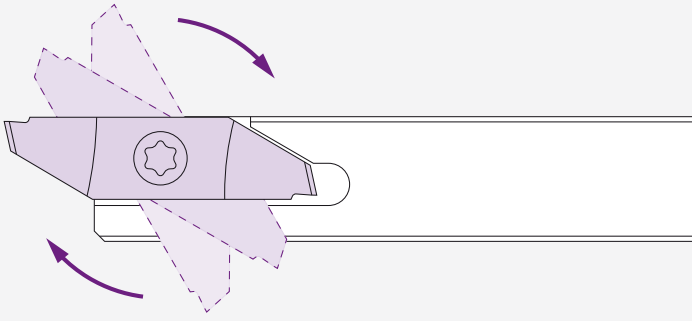
Economic performance!

Système de serrage à denture Applitec avec repositionnement au centre
Applitec-Zahnklemmsystem mit zentraler Neupositionierung
Applitec toothed clamping system with central repositioning



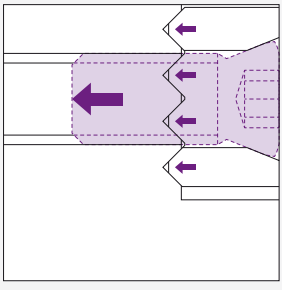
High precision

Grande précision lors du retournement de la plaquette
Hohe Präzision beim Wenden der Platte
High precision when flipping the insert



Applitec toothing

Système de serrage en fond de denture
Klemmvorrichtung an der Prothesenbasis
Clamping system at the denture base



µK20

AP302



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- excellente nuance universelle
- 1er choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

µK20

AP202



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF F **M** E

P ★★★★☆
M ★★★★☆
N ★★★☆☆
S ★★★☆☆

- nuance particulièrement adaptée aux faibles vitesses de coupe
- ancienne nuance, disponible uniquement sur demande

- besonders geeignete Sorte für niedrige Schnittgeschwindigkeiten
- ältere Sorte, nur auf Anfrage erhältlich

- grade particularly suitable for low cutting speeds
- previous grade, available on request only

µK20

N



K20

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance micro-grain tenace
- supporte les coupes interrompues et autres conditions d'usinage défavorables

- zähe Feinkornsorte
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen

- tough micro-grain grade
- suitable for interrupted cut and other unfavourable machining conditions

Nuances
Sorten
Grades

µK10

AH302



K10

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titanes

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

µK10

HN



K10

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

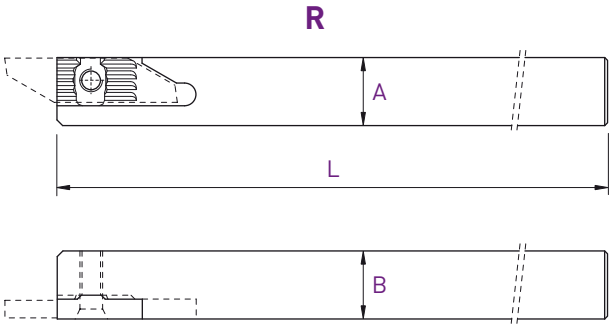
- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavourable machining conditions

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

		Tournage Drehen Turning		Tronçonnage Abstechen Parting off	
Matière **Werkstoff** **Material**		VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.01 - 0.20	80 - 150	0.01 - 0.15
Acier Stahl Steel < 600 N/mm²	P	80 - 160	0.01 - 0.18	70 - 120	0.01 - 0.12
Acier Stahl Steel < 800 N/mm²	P	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.10
Acier Stahl Steel > 800 N/mm²	P	50 - 100	0.01 - 0.12	40 - 80	0.01 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.08
Aluminium	N	180 - 800	0.01 - 0.30	150 - 300	0.01 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.01 - 0.30	100 - 300	0.01 - 0.20
Titane Titan Titanium	S	30 - 70	0.01 - 0.12	30 - 50	0.01 - 0.06





A x B	L	L Art. N°	R Art. N°
8 x 8	115	**250-8**	**260-8**
10 x 10	115	**250-10**	**260-10**
12 x 12	130	**250-12**	**260-12**
12 x 12	90	**250-12-90**	**260-12-90**
12.7 x 12.7	130	**250-12.7**	**260-12.7**
16 x 16	130	**250-16**	**260-16**
16 x 16	75	**250-16-75**	**260-16-75**
20 x 20	120	**250-20**	**260-20**

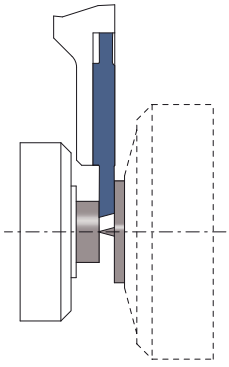
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

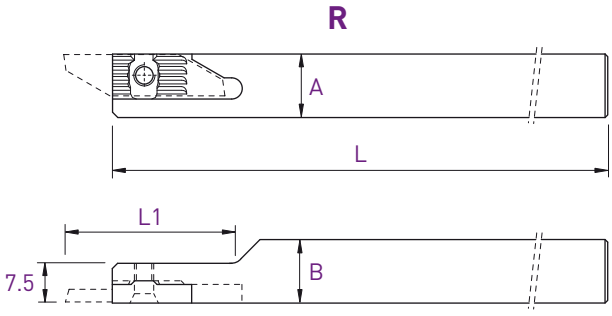
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

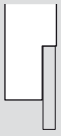
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils
Halter
Holders

260-C





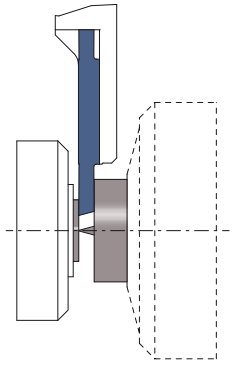


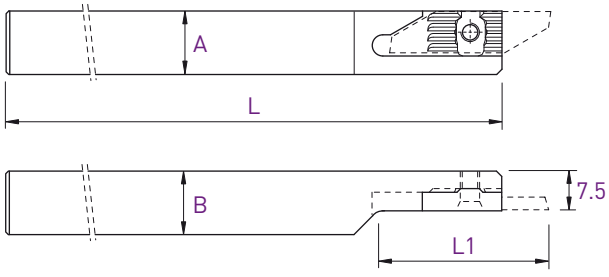
A x B	L	L1	Art. N°
12 x 12	130	30	**260-C-12**

Porte-outils
Halter
Holders

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

250RC

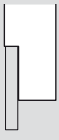




Utiliser des plaquettes type 251R
WSP Typ 251R verwenden
Use inserts type 251R

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line



A x B	L	L1	Art. N°
12 x 12	130	30	**250RC-12**
16 x 16	130	40	**250RC-16**

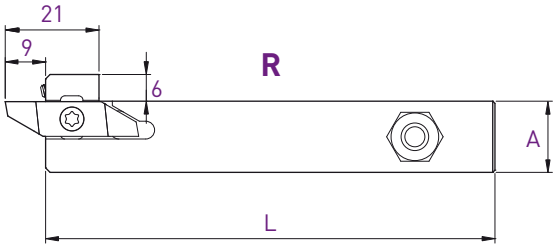
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

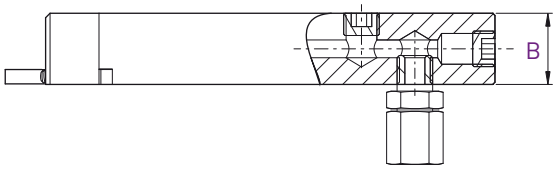
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

250-JET / 260-JET

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply





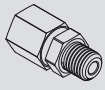


		L	R
A x B	L	**Art. N°**	**Art. N°**
10 x 12	100	**250-1012-JET**	**260-1012-JET**
12 x 12	100	**250-12-JET**	**260-12-JET**
16 x 16	100	**250-16-JET**	**260-16-JET**
20 x 20	100	**250-20-JET**	**260-20-JET**

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

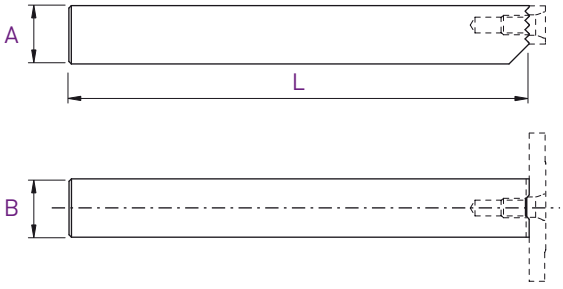
Each holder is supplied with one or more screws.
The keys must be ordered separately.

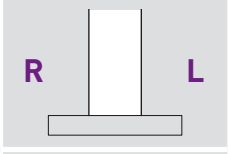
Pièces de rechange Ersatzteile Spare parts			Buse Düse Nozzle 
	Art. N°	**Art. N°**	**Art. N°**
250-JET / 260-JET	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**

Porte-outils
Halter
Holders

260/250F

L / R



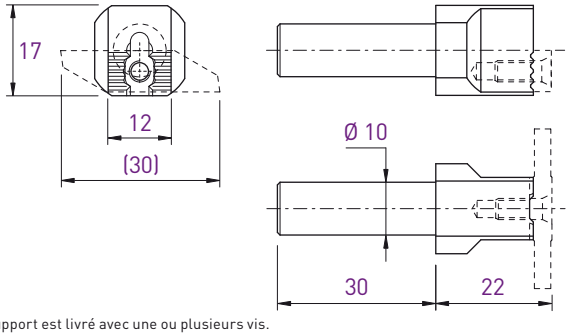


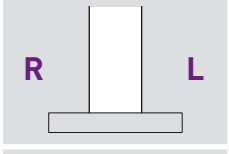
A x B	L	Art. N°
10 x 12	120	**260/250F-1012**
12 x 12	120	**260/250F-1212**

Porte-outils
Halter
Holders

260/250-D

L / R





Art. N°
260/250-D10

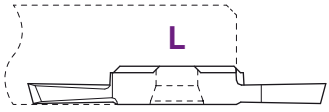
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

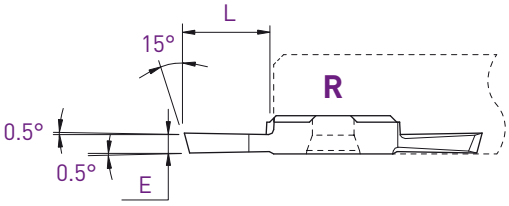
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

251 / 261

Tronçonnage
Abstechen
Parting off





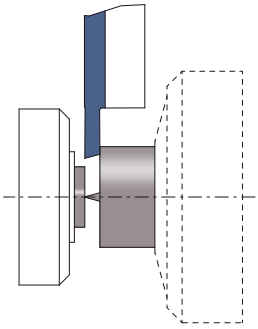


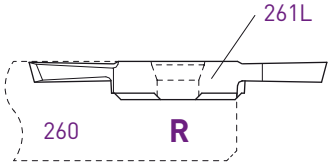
		L				R			
E	L	Art. N°	AP302	AP202	N (µK20)	Art. N°	AP302	AP202	N (µK20)
0.8	4	**251-0.8**	●	●	●	**261-0.8**	●	●	●
1.0	5	**251-1.0**	●	●	●	**261-1.0**	●		●
1.2	5	**251-1.2**	●	●	●	**261-1.2**	●	●	●
1.5	7	**251-1.5**	●		●	**261-1.5**	●		●
2.0	8.5	**251-2.0**	●		●	**261-2.0**	●		●
2.5	8.5	**251-2.5**	●	●	●	**261-2.5**	●		●

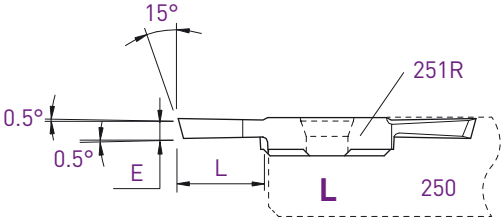
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

261L / 251R



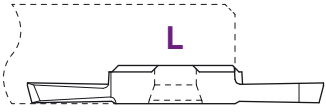




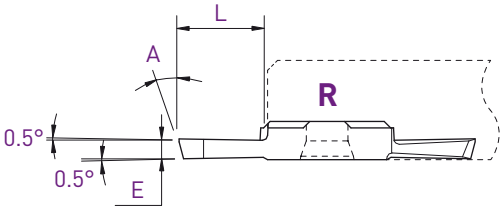


		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
1.0	5	-				**251R-1.0**	●		●
1.5	7	-				**251R-1.5**	●	●	●
2.0	8.5	**261L-2.0**	●	●	●	**251R-2.0**	●		●

251XF / 261XF

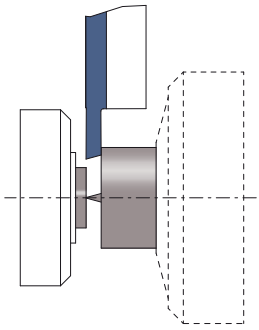




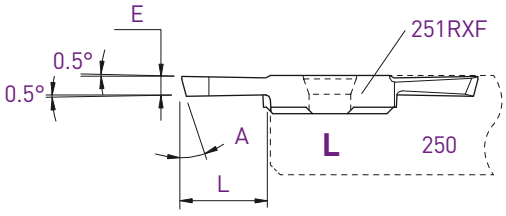




				L				R			
a	E	L	A	Art. N°	AP302	AP202	N (µK20)	Art. N°	AP302	AP202	N (µK20)
4°	1.0	4	15°	-				261XF-1.0	●		●
6°	1.0	4	8°	-				261XF6°-1.0-8°	●		●
4°	1.5	7	15°	251XF-1.5	●		●	261XF-1.5	●	●	●
4°	2.0	8.5	15°	251XF-2.0	●	●	●	261XF-2.0	●	●	●











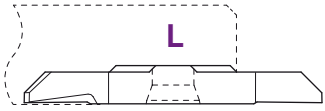
L (R)

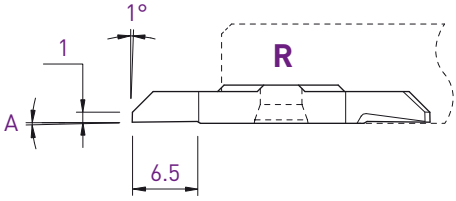
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

a	E	L	A	Art. N°	AP302	AP202	N (µK20)
6°	1.0	4	8°	**251RXF6°-1.0-8°**	●		●
4°	1.5	7	15°	**251RXF-1.5**	●	●	●
4°	2.0	8.5	15°	**251RXF-2.0**	●		●

252 / 262

Tournage avant
Vorwärts drehen
Front turning



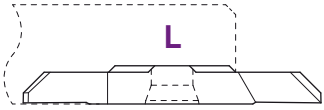


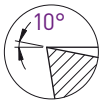


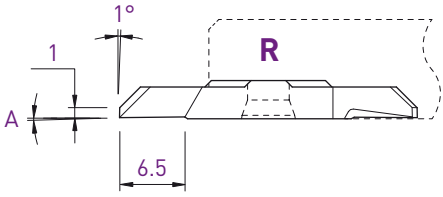
	L				R			
A	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
0°	252	●	●	●	262	●		●
2°	252-2°	●	●	●	262-2°	●	●	●

Tournage avant
Vorwärts drehen
Front turning

252X / 262X





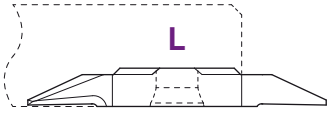


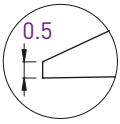


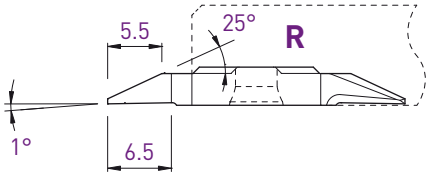
	L				R			
A	Art. N°	AP302	AP202	N (µK20)	Art. N°	AP302	AP202	N (µK20)
0°	252X	●	●	●	262X	●		●
2°	252X-2°	●	●	●	262X-2°	●	●	●

252S / 262S

Tournage avant
Vorwärts drehen
Front turning

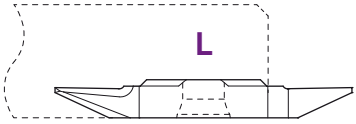


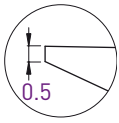


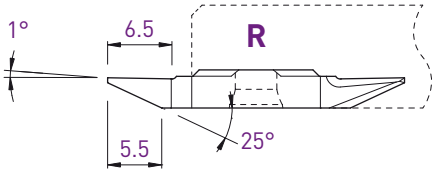




L				R			
Art. N°	AP302	AP202	N (µK20)	Art. N°	AP302	AP202	N (µK20)
	P M N S	P M N S	N		P M N S	P M N S	N
252S05	●	●	●	262S05	●	●	●





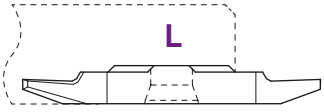


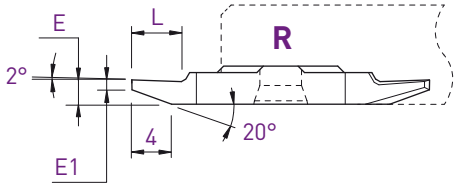


L				R			
Art. N°	AP302	AP202	N (µK20)	Art. N°	AP302	AP202	N (µK20)
253S05	●	●	●	263S05	●	●	●

253 / 263

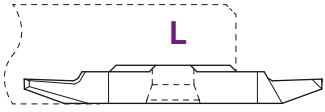
Tournage arrière
Rückwärts drehen
Back turning

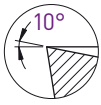


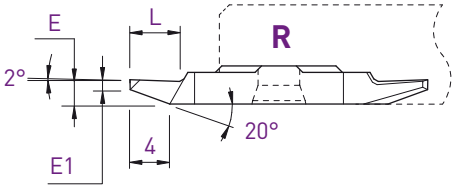




			L				R			
E	E1	L	Art. N°	P M N S AP302	P M N S AP202	N N (µK20)	Art. N°	P M N S AP302	P M N S AP202	N N (µK20)
2.0	0.5	4	**253-0.5**	●	●	●	**263-0.5**	●		●
2.5	1.0	5	**253-1.0**	●	●	●	**263-1.0**	●		●





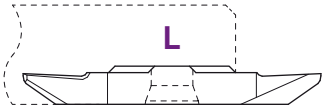


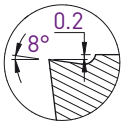


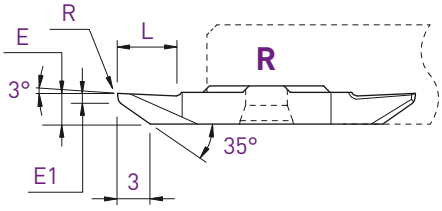
			L				R			
E	E1	L	Art. N°	AP302	AP202	N (µK20)	Art. N°	AP302	AP202	N (µK20)
2.0	0.5	5	**253X-0.5**	●	●	●	**263X-0.5**	●	●	●
2.5	1.0	5	**253X-1.0**	●	●	●	**263X-1.0**	●		●

253VX-8° / 263VX-8°

Tournage arrière
Rückwärts drehen
Back turning





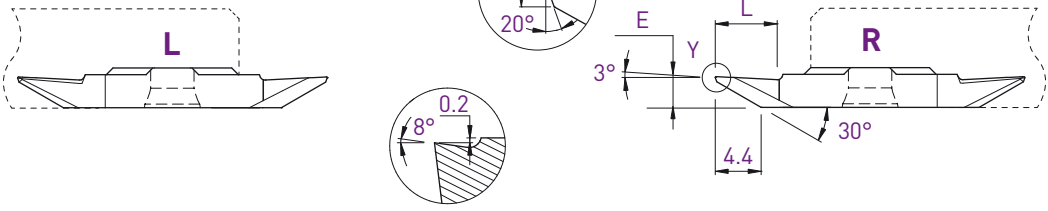




				L				R					
E	E1	L	R	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)
3.1	1.0	6	0	**253VX-8°**	●	●	●	**263VX-8°**	●		●		
3.1	1.0	6	0.08	-				**263VX-8°-R08**	●	●	●	●	●
3.1	1.0	6	0.20	-				**263VX-8°-R20**	●		●	●	●

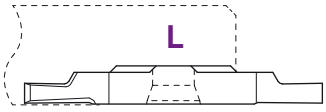
Tournage arrière
Rückwärts drehen
Back turning

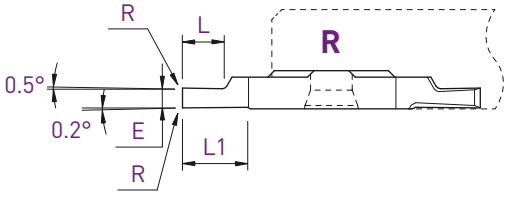
253VX-805 / 263VX-805





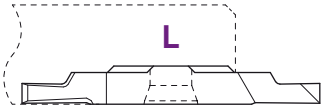
				L				R					
E	E1	L	R	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)
3.0	0.5	6	0.08	**253VX-805-R08**	●	●	●	**263VX-805-R08**	●		●	●	●

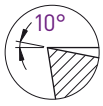


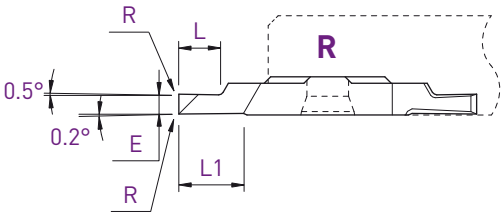




				L				R			
E	L	L1	R	Art. N°	AP302	AP202	N (µK20)	Art. N°	AP302	AP202	N (µK20)
0.8	2	4	0	**254-0.8**	●		●	**264-0.8**	●		●
1.0	2.5	4	0	**254-1.0**	●	●	●	**264-1.0**	●		●
1.2	3	4	0	**254-1.2**	●	●	●	**264-1.2**	●	●	●
1.5	3	4	0	**254-1.5**	●	●	●	**264-1.5**	●		●
1.8	4	6.5	0	-				**264-1.8**	●	●	●
2.0	4	6.5	0	**254-2.0**	●	●	●	**264-2.0**	●	●	●
2.5	6	6.5	0	**254-2.5**	●	●	●	**264-2.5**	●	●	●
3.0	6.5	6.5	0	**254-3.0**	●	●	●	**264-3.0**	●	●	●

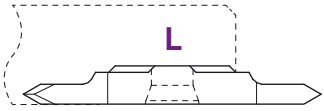


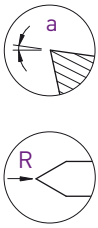


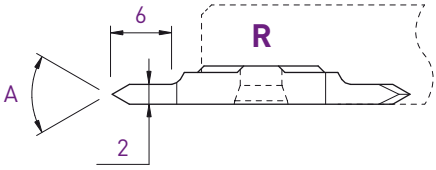




				L				R					
E	L	L1	R	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)
0.8	2	4	0	**254X-0.8**	●	●	●	**264X-0.8**	●	●	●		
1.0	2.5	4	0	**254X-1.0**	●	●	●	**264X-1.0**	●	●	●		
1.0	2.5	4	0.08	-				**264X-1.0-R08**	●	●	●	●	●
1.2	3	4	0	**254X-1.2**	●	●	●	**264X-1.2**	●	●	●		
1.5	3	4	0	**254X-1.5**	●	●	●	**264X-1.5**	●		●		
1.5	3	4	0.08	-				**264X-1.5-R08**	●	●	●	●	●
1.5	3	4	0.20	-				**264X-1.5-R20**	●	●	●	●	●
2.0	4	6.5	0	**254X-2.0**	●		●	**264X-2.0**	●	●	●		
2.0	4	6.5	0.08	-				**264X-2.0-R08**	●	●	●	●	●
2.0	4	6.5	0.20	-				**264X-2.0-R20**	●		●	●	●
2.5	6	6.5	0	**254X-2.5**	●	●	●	**264X-2.5**	●	●	●		
2.5	6.5	6.5	0.08	-				**264X-2.5-R08**	●	●	●	●	●
2.5	6.5	6.5	0.20	-				**264X-2.5-R20**	●	●	●	●	●
3.0	6.5	6.5	0	**254X-3.0**	●	●	●	**264X-3.0**	●		●		
3.0	6.5	6.5	0.08	-				**264X-3.0-R08**	●	●	●	●	●
3.0	6.5	6.5	0.20	-				**264X-3.0-R20**	●	●	●	●	●

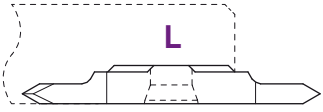


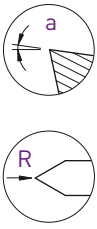


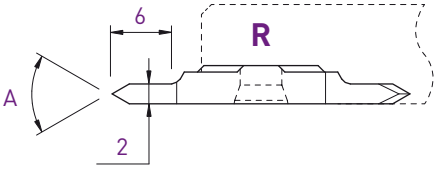




			L				R			
A	R	a	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
60°	0	0°	**256-60-2.0**	●		●	**266-60-2.0**	●		●
60°	0.06	3°	**256-AG60°**	●	●	●	**266-AG60°**	●		●





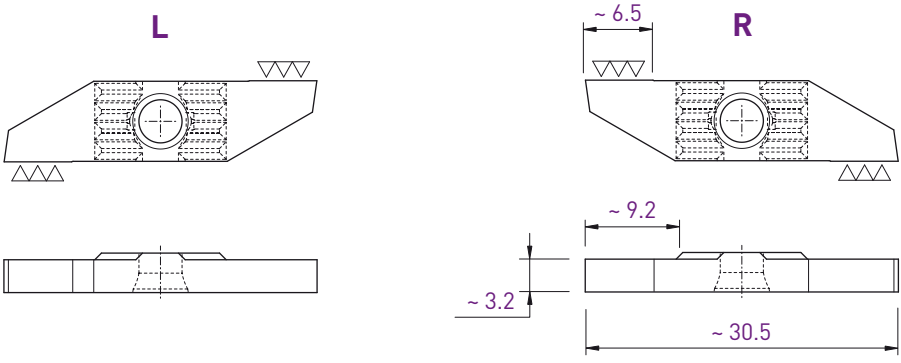




			L				R			
A	R	a	Art. N°	AP302	AP202	N (µK20)	Art. N°	AP302	AP202	N (µK20)
55°	0	0°	**256-55-2.0**	●	●	●	**266-55-2.0**	●	●	●
55°	0.06	3°	**256-AG55°**	●	●	●	**266-AG55°**	●	●	●

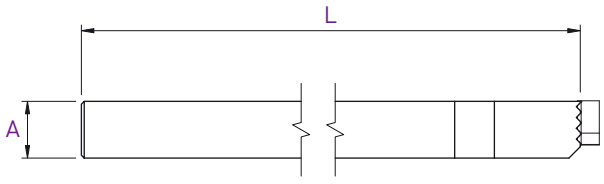
251-E / 261-E

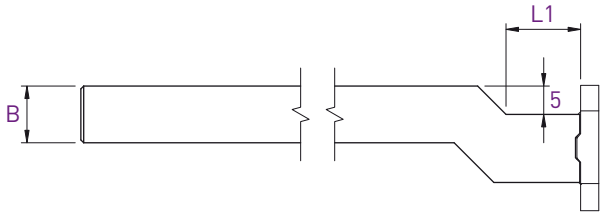
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

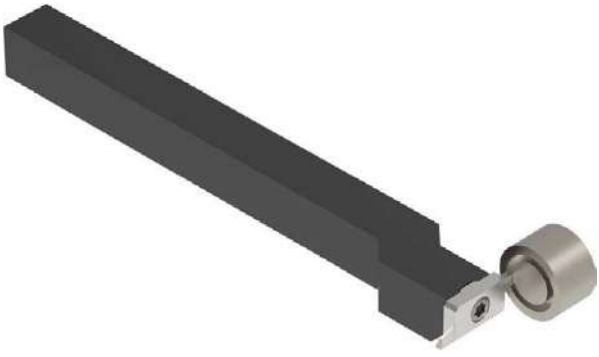


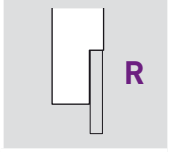


L						R					
Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)	Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)
251-E	●	●	●	●	●	261-E	●		●	●	●

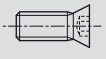
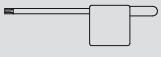








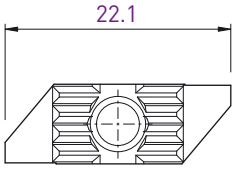
A x B	L	L1	Art. N°
8x10	130	13	**250RFG-0810**
10x10	130	13	**250RFG-1010**
12x12	130	13	**250RFG-1212**
16x16	130	16	**250RFG-1616**

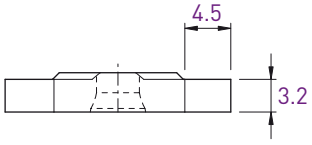
Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	**Art. N°**
V-M4X9-T15	**C-T15**

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

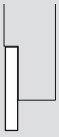
Each holder is supplied with one or more screws.
The keys must be ordered separately.





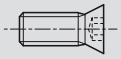
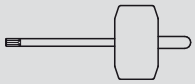


L



Art. N°	AP302	N (μK20)
	P M N S	N
251RFG-EP	●	●

Plaquette ébauche pour porte-outils axial RFG (p. 6.29)
WSP-Rohling für axialen Halter RFG (S. 6.29)
Blank insert for axial holder RFG (p. 6.29)

Porte-outils Halter Holders		Options		
			 **Option** **Art. N°**	Recommandation de serrage Drehmoment Empfehlung Clamping recommendation
250-8 / 260-8	**V-M3.5X7.3-T15**	**C-T15**	**SET-NM3.0-TX15**	3 Nm
250-... / 260-...				
260/250-...	**V-M4X9-T15**			
250RFG				
250RC / 260-C	**V-M4X7.3-T15**			

TRIO-Line



APPLITEC
CUTTING TOOLS

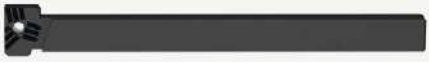
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Designation system
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> 7.06

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Holders

> 7.08

GX Plaquettes de gorge pour circlips
Einstechwendeplatte für Seegerring
Grooving inserts for retaining ring
DIN6799 & DIN471


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FT Tournage avant
Vorwärts drehen
Front turning



> 7.10

GT Fonçage-tournage
Einstechen und drehen
Grooving and turning



> 7.11

GTX Fonçage-tournage avec coupe positive
Einstechen und drehen mit positivem Spanwinkel
Grooving and turning with positive cut



> 7.12

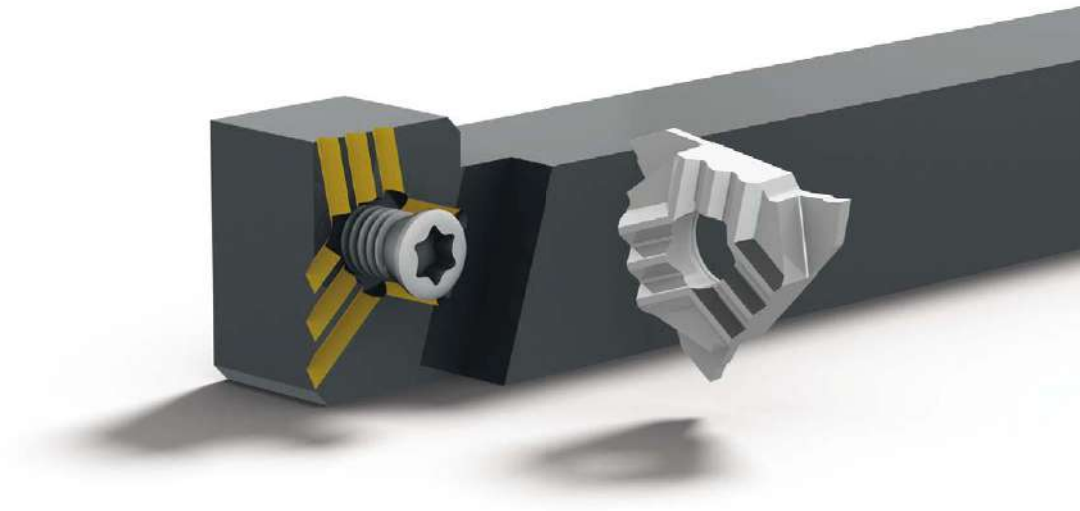
EP Plaquettes ébauches
WSP-Rohlinge
Blank inserts

> 7.13

Accessoires
Zubehöre
Accessories

> 7.13

Rigid clamping system with the famous Applitec teeth clamping



Avantages Vorteile Advantages		
• dimensions spécifiques • système de serrage à denture à 1 vis • pour opération de faible profondeur • solution optimisée (proportion réduite de carbure pour un équilibre parfait entre coût et performance)	• spezifische Abmessungen • Spannsystem mit 1 Schraube • für geringe Tiefenbearbeitung • optimierte Lösung (reduzierte Hartmetallschicht für ein perfektes Gleichgewicht zwischen Kosten und Leistung)	• specific dimensions • clamping system with 1 screw • for shallow operation • optimized solution (reduced carbide layer for a perfect balance between cost and performance)

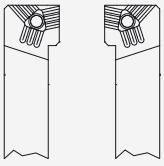
Codification des porte-outils
Kodifizierung für Halter
Coding guide for holders

T	2	1	6	–	H	0	8	1	0	R	–	90

Ou / Oder / Or

Porte-outils
Halter
Holders

L **R**

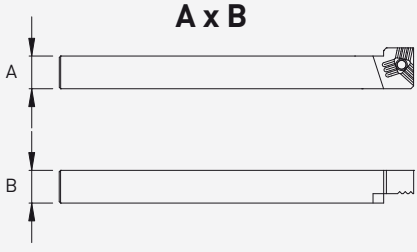


Longueur
Länge
Length

A x B	L
8x10	115
10x10	130
12x12	130
16x16	120
20x20	130



A x B



Applitec TRIO-Line	Système de serrage à denture avec 1 vis de fixation
Applitec TRIO-Line	Spannsystem mit Verzahnung mit 1 Spannschraube
Applitec TRIO-Line	Teeth clamping system with 1 screw

T	2	1	6	R	–	GX	026	–	HTA

L **R**

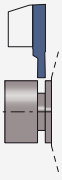
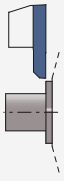
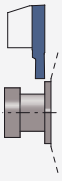
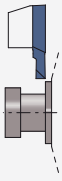


Nuance
Sorte
Grade

Épaisseur de coupe
Schnittbreite
Cutting thickness



Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

GX	FT	GT	GTX	EP
Grooving	**Front turning**	**Grooving / turning**	**Grooving / turning positiv**	**Blank**
				

Applitec TRIO-Line	Système de serrage à denture avec 1 vis de fixation
Applitec TRIO-Line	Spannsystem mit Verzahnung mit 1 Spannschraube
Applitec TRIO-Line	Teeth clamping system with 1 screw

Nuances
Sorten
Grades

HN

µK10



K10

Non revêtu
Unbeschichtet
Uncoated

P	★
M	★
N	★★★
S	★★★

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du laiton, de l'aluminium et du titane faiblement allié
- pour pièces fragiles de très petits diamètres

- sehr verschleissfeste Feinkornsorte
- für die Bearbeitung von Messing und niedrig legiertem Aluminium und Titan empfehlenswert
- für empfindliche und sehr kleine Werkstücke

- very wear resistant micro-grain grade
- suitable for the machining of brass and low alloyed aluminium and titanium
- for fragile and very small work pieces

HTA

µK10



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F **M** E

P	★★★★★
M	★★★★★
N	★★★★
S	★★★★

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data



Tournage
Drehen
Turning

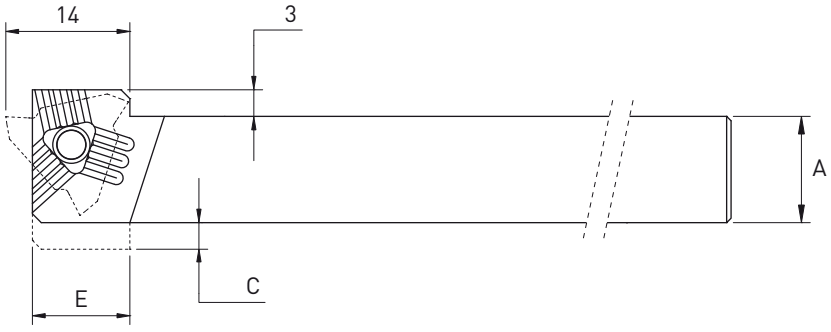


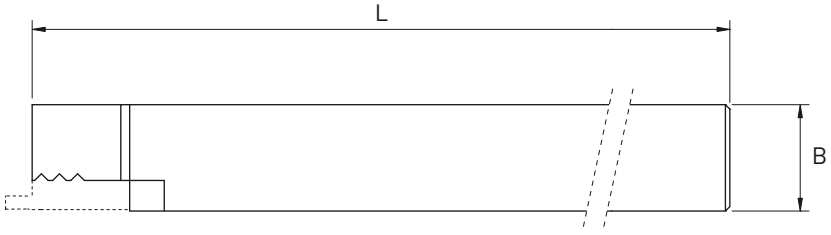
Foncer
Einstechen
Grooving

Matière **Werkstoff** **Material**		VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.01 - 0.20	80 - 150	0.01 - 0.15
Acier Stahl < 600 N/mm² Steel	P	80 - 160	0.01 - 0.18	70 - 120	0.01 - 0.12
Acier Stahl < 800 N/mm² Steel	P	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.10
Acier Stahl > 800 N/mm² Steel	P	50 - 100	0.01 - 0.12	40 - 80	0.01 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.08
Aluminium	N	180 - 800	0.01 - 0.30	150 - 300	0.01 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.01 - 0.30	100 - 300	0.01 - 0.20
Titane Titan Titanium	S	30 - 70	0.01 - 0.12	30 - 50	0.01 - 0.06

T216-L/R

Porte-outils
Halter
Holders







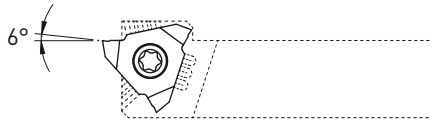
AxB	C	E	L	L Art. N°	R Art. N°
8x10	4	11	115	**T216-H0810L**	**T216-H0810R**
10x10	2	8	130	**T216-H1010L**	**T216-H1010R**
12x12	-	-	130	**T216-H1212L**	**T216-H1212R**
12x12	-	-	90	**T216-H1212L-90**	**T216-H1212R-90**
16x16	-	-	120	**T216-H1616L**	**T216-H1616R**
20x20	-	-	130	**T216-H2020L**	**T216-H2020R**

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

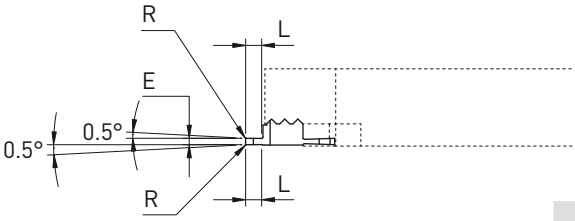
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

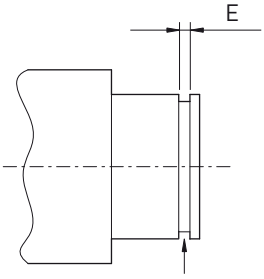
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Plaquettes de gorge pour circlips
Einstechwendeplatte für Seegerring
Grooving inserts for retaining ring









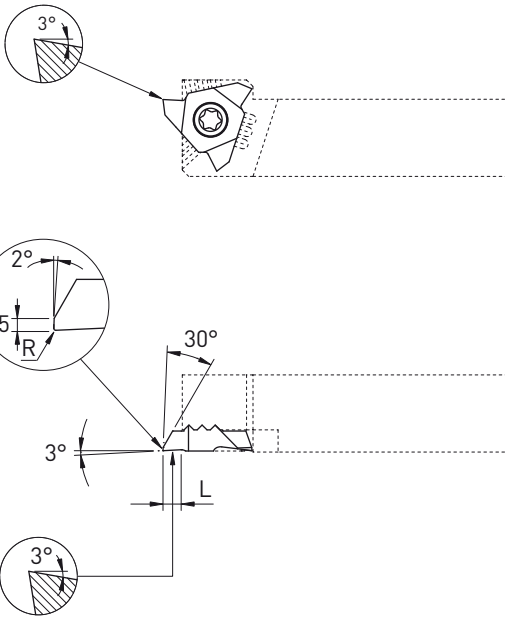
Selon DIN6799 et DIN471
Gemäss DIN6799 und DIN471
According to DIN6799 and DIN471



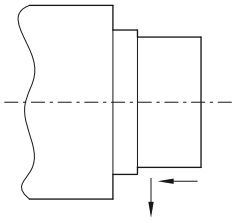
			L			R		
E ±0.01	L	R	Art. N°	HTA	HN (µk10)	Art. N°	HTA	HN (µk10)
0.26	0.8	0.03	T216L-GX026	●	●	T216R-GX026	●	●
0.36	0.8	0.03	T216L-GX036	●	●	T216R-GX036	●	●
0.46	0.8	0.03	T216L-GX046	●	●	T216R-GX046	●	●
0.50	1.5	0.03	T216L-GX050	●	●	T216R-GX050	●	●
0.57	1.5	0.03	T216L-GX057	●	●	T216R-GX057	●	●
0.67	1.5	0.03	T216L-GX067	●	●	T216R-GX067	●	●
0.77	2.0	0.03	T216L-GX077	●	●	T216R-GX077	●	●
0.87	2.0	0.03	T216L-GX087	●	●	T216R-GX087	●	●
0.97	2.5	0.03	T216L-GX097	●	●	T216R-GX097	●	●
1.00	2.5	0.03	T216L-GX100	●	●	T216R-GX100	●	●
1.10	2.5	0.03	T216L-GX110	●	●	T216R-GX110	●	●
1.20	2.5	0.03	T216L-GX120	●	●	T216R-GX120	●	●
1.30	2.5	0.03	T216L-GX130	●	●	T216R-GX130	●	●
1.50	2.5	0.03	T216L-GX150	●	●	T216R-GX150	●	●
1.60	2.5	0.03	T216L-GX160	●	●	T216R-GX160	●	●
1.85	2.5	0.03	T216L-GX185	●	●	T216R-GX185	●	●
2.00	2.5	0.03	T216L-GX200	●	●	T216R-GX200	●	●
2.50	2.5	0.03	T216L-GX250	●	●	T216R-GX250	●	●

FT

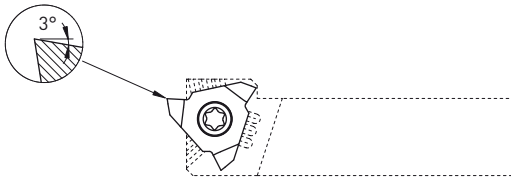
Tournage avant
Vorwärts drehen
Front turning



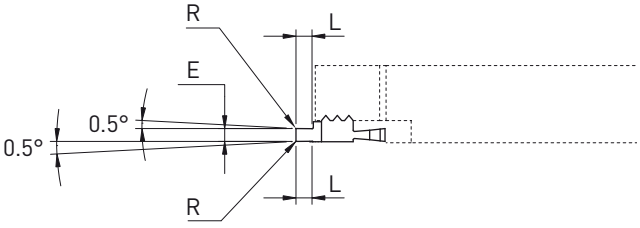


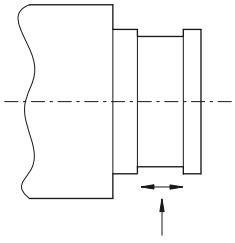


		L			R		
L	R	Art. N°	HTA	HN (µk10)	Art. N°	HTA	HN (µk10)
3.0	0.03	**T216L-FT**	●	●	**T216R-FT**	●	●
3.0	0.08	**T216L-FT-R08**	●	●	**T216R-FT-R08**	●	●





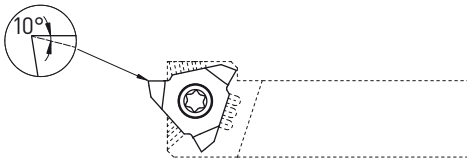




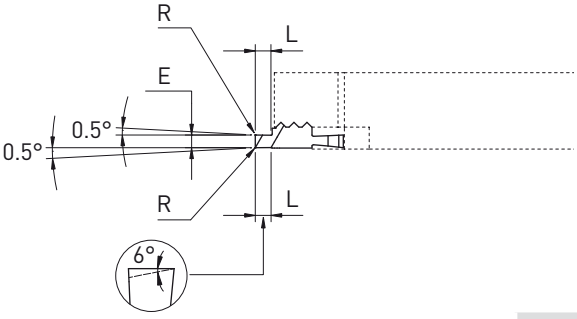
			L			R		
E	L	R	Art. N°	HTA	HN (µk10)	Art. N°	HTA	HN (µk10)
0.5	1.5	0.03	**T216L-GT050**	●	●	**T216R-GT050**	●	●
1.0	2.5	0.03	**T216L-GT100**	●	●	**T216R-GT100**	●	●
1.0	2.5	0.08	**T216L-GT100-R08**	●	●	**T216R-GT100-R08**	●	●
1.5	2.5	0.03	**T216L-GT150**	●	●	**T216R-GT150**	●	●
1.5	2.5	0.08	**T216L-GT150-R08**	●	●	**T216R-GT150-R08**	●	●
1.5	2.5	0.15	**T216L-GT150-R15**	●	●	**T216R-GT150-R15**	●	●
2.0	2.5	0.03	**T216L-GT200**	●	●	**T216R-GT200**	●	●
2.0	2.5	0.08	**T216L-GT200-R08**	●	●	**T216R-GT200-R08**	●	●
2.0	2.5	0.15	**T216L-GT200-R15**	●	●	**T216R-GT200-R15**	●	●
2.5	2.5	0.15	**T216L-GT250-R15**	●	●	**T216R-GT250-R15**	●	●

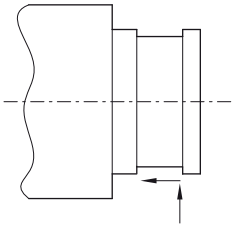
GTX

Fonçage-tournage avec coupe positive
Einstechen und drehen mit positivem Spanwinkel
Grooving and turning with positive cut

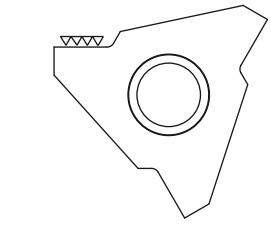








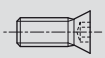
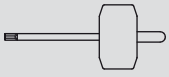
			L			R		
E	L	R	Art. N°	HTA	HN (µk10)	Art. N°	HTA	HN (µk10)
1.0	2.5	0.03	**T216L-GTX100**	●	●	**T216R-GTX100**	●	●
1.0	2.5	0.08	**T216L-GTX100-R08**	●	●	**T216R-GTX100-R08**	●	●
1.5	2.5	0.03	**T216L-GTX150**	●	●	**T216R-GTX150**	●	●
1.5	2.5	0.08	**T216L-GTX150-R08**	●	●	**T216R-GTX150-R08**	●	●
1.5	2.5	0.15	**T216L-GTX150-R15**	●	●	**T216R-GTX150-R15**	●	●
2.0	2.5	0.03	**T216L-GTX200**	●	●	**T216R-GTX200**	●	●
2.0	2.5	0.08	**T216L-GTX200-R08**	●	●	**T216R-GTX200-R08**	●	●
2.0	2.5	0.15	**T216L-GTX200-R15**	●	●	**T216R-GTX200-R15**	●	●
2.5	2.5	0.15	**T216L-GTX250-R15**	●	●	**T216R-GTX250-R15**	●	●





		L			R		
E	L	Art. N°	HTA	HN (µk10)	Art. N°	HTA	HN (µk10)
~3	3	**T216L-EP**	●		**T216R-EP**	●	

Accessoires
Zubehöre
Accessories

Porte-outils Halter Holders		Options	
			
T216-H...	**V-M4X9-T15**	**C-T15**	**SET-NM3.0-TX15**

Recommandation de serrage
Drehmoment Empfehlung
Clamping recommendation

3.0 Nm

TURN-Line



APPLITEC
CUTTING TOOLS

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Kodifizierung
Coding guide
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Infos und Vorteile
Infos and advantages
> 8.05

Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations
> 8.06

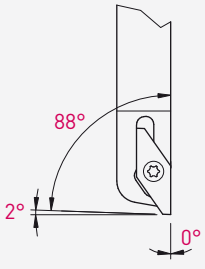
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Paramètres de coupe indicatifs
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Standard machining data
> 8.11

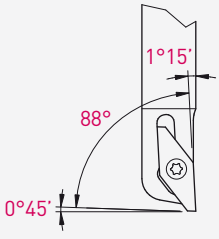
88°

Tournage avant
Vorwärts drehen
Front turning

310 / 320



310-BC / 320-BC



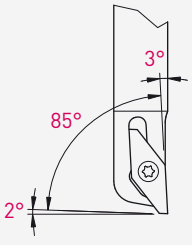


> 8.12

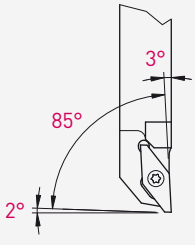
85°

Tournage avant
Vorwärts drehen
Front turning

330 / 340



340-JET





> 8.16

Codification des porte-outils
Kodifizierung für Halter
Coding guide for holders

3	2	0	-	12	-	90	-	JET / BC

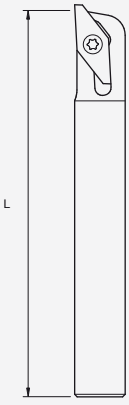
Ou / Oder / Or

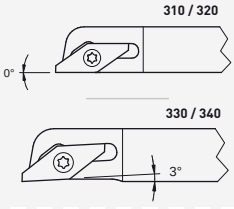
Porte-outil
Halter
Holders

A x B

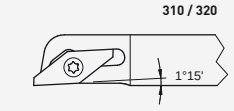


Longueur
Länge
Length

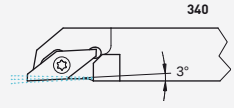




BC



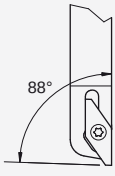
JET



Gamme de produit **Produktserie** **Product series**	définit la compatibilité des plaquettes avec le porte-outil bestimmt die WSP und Halter Kompatibilität shows the inserts and holder compatibility
L = 1, 3	(chiffre impair / ungerade Zahl / uneven number)
R = 2, 4	(chiffre pair / gerade Zahl / even number)

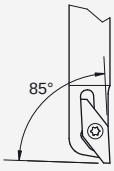
L	R
310	320

pour machine à cames
für kurvengesteuerte Maschinen
for cam driven machines



L	R
330	340

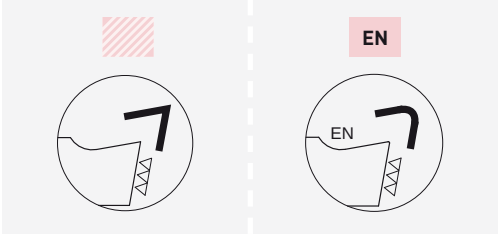
main series



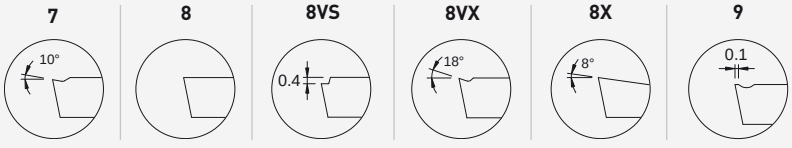
Applitec série 300	Système de serrage à 3 points de contact
Applitec 300 Serie	Spannsystem mit 3 Kontaktpunkten
Applitec 300 series	Three-point clamping system

Codification des plaquettes
Kodifizierung für WSP
Coding guide for inserts

3	4	7	-	EN	-	R10	-	TIALX
				Ou / Oder / Or		Rayon Radius Radius		Nuance Sorte Grade



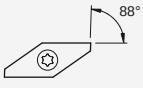
Géométrie de coupe **Schneidgeometrie** **Cutting geometry**	brise-copeau Spanbrecher chip breaker	particularités Sondereigenschaften special features



Gamme de produit **Produktserie** **Product series**	définit la compatibilité des plaquettes avec le porte-outil bestimmt die WSP und Halter Kompatibilität shows the inserts and holder compatibility

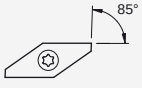
L = 1, 3 (chiffre impair / ungerade Zahl / uneven number)
R = 2, 4 (chiffre pair / gerade Zahl / even number)

L 310 | R 320



pour machine à cames
für kurvengesteuerte Maschinen
for cam driven machines

L 330 | R 340

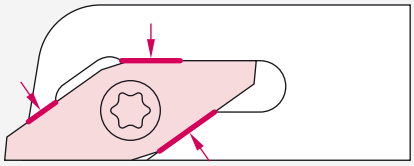


main series

Applitec série 300	Système de serrage à 3 points de contact
Applitec 300 Serie	Spannsystem mit 3 Kontaktpunkten
Applitec 300 series	Three-point clamping system

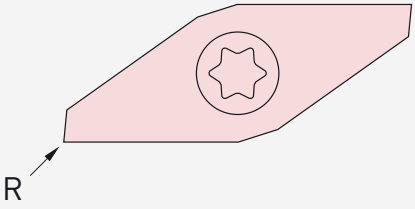
3 contact points

Pour de meilleures performances
Für bessere Leistung
For better performance



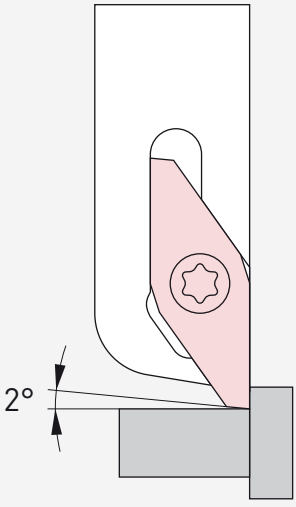
R min = 0

Disponible avec et sans rayon
Verfügbar mit und ohne Radius
Available with and without radius



Wiper effect

Pour un meilleur état de surface
Für eine bessere Oberflächengüte
For a better surface finish



Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations

Géométries de coupe Spanformgeometrien Cutting geometry		P Acier de décolletage Automatenstahl Free-cutting steel	P Acier Stahl Steel	M Acier inoxydable Rostfreistahl Stainless steel	N Aluminium	N Laiton, bronze Messing, Bronze Brass, bronze	N Cuivre Kupfer Copper	S Titane Titane Titanium	★ 1er choix 1. Wahl 1st choice ☆ Recommandé Empfohlen Recommended ✓ Pour pièces fragiles de très petits diamètres Für zerbrechliche Teile mit sehr kleinen Durchmessern For fragile and very small work pieces
	3_7	★	★	★	★		★	☆	Géométrie universelle, très bonne maîtrise du copeau Allgemeine Geometrie, sehr gute Spankontrolle All-round insert with efficient chip control
	3_7-EN	☆	★	☆					Arête renforcée (augmente l'effort de coupe) Verstärkte Schneidkante (Schneidkrafterhöhung) Reinforced cutting edge (increases cutting force) f min : 0.02 mm/U
	3_8	✓	✓	✓		★			Géométrie plate classique Standard flache Geometrie Standard flat geometry
	3_8VS	☆		☆	✓		✓	✓	Brise-copeau pour usinage léger en finition Spanbrecher für leichte Schlichtbearbeitung Chip-breaker for light finishing operation
	3_8VX	★	★	★	★		★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	3_8X	★	★	★	☆		☆	★	Coupe positive traditionnelle Standard positive Geometrie Standard positive geometry
	3_9	☆	☆	☆		☆			Témoin plat sur la coupe pour réduire les vibrations Vibrationsreduzierung durch einer Flachfase und der Schneidkante Vibration reduction through flat ended cutting edge

µK20

TiAlN



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF — F — **M** — E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- excellente nuance universelle
- 1er choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- erste Wahl für die Bearbeitung von Stahl, rostfreien Stähle und Titanlegierungen
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

µK20

TiAlX



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF — **F** — M — E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant : chrome nickel, vanadium, molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte, für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend : Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade, recommended for following material : Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing : Chrome-nickel, Vanadium, Molybdenum, ...

µK20

ST



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF — F — **M** — E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

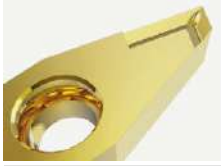
- nuance résistante à la température, destinée à l'usinage des matières suivantes : Inox, titane allié, alliages à base de nickel, chrome cobalt, les matières avec une dureté supérieure à > 50 HRC

- verschleissfeste und temperaturbeständige Sorte, für folgende Materialien empfohlen : Inox, legiertes Titan, Nickellegierungen, Chrom-Kobalt, Materialien härter als > 50 HRC

- wear and temperature-resistant grade, recommended for following materials : Inox, titanium alloys, nickel-based alloys, chrome-cobalt, and materials harder than > 50 HRC

µK20

TiN



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

TF F **M** E

P ★★★★☆
M ★★★★☆
N ★★★☆☆
S ☆☆☆☆☆

- nuance pour l'usinage des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Bearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden
- sehr geringer Reibwert
- bei der Bearbeitung von Titan zu vermeiden

- grade for the machining of low resistance materials which causes edge build-up
- very low friction ratio
- not suitable for titanium machining

µK20

N



K20

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- supporte les coupes interrompues et autres conditions d'usinage défavorables

- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet

- suitable for interrupted cut and other unfavourable machining conditions

µK10

HTA



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stähle, rostfreien Stähle und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

µK10

HTAX



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF **F** M E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance très résistante à l'usure et à la température, pour l'usinage en finition avec faible avance de petites pièces. Recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant : chrome nickel, vanadium, molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte, für Feinbearbeitung von kleinen Teilen mit geringer Vorschub. Für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend : Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade, for light machining of small parts with low cutting feed. Recommended for following material : Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing : Chromenickel, Vanadium, Molybdenum, ...

µK10

HST



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance résistante à la température et à l'usure pour des opérations de finition
- recommandé pour l'usinage des matières suivantes : Inox, titane allié, alliages à base de nickel, chrome cobalt, les matières avec une dureté supérieure à > 50 HRC

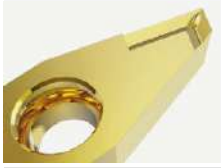
- verschleissfeste und temperaturbeständige Sorte für Feinbearbeitungen
- für folgende Materialien empfohlen : Inox, legiertes Titan, Nickellegierungen, Chrom-Kobalt, Materialien härter als > 50 HRC

- wear- and temperature-resistant grade for finishing operations
- recommended for the following materials : Inox, titanium alloys, nickel-based alloys, chrome-cobalt, and materials harder than > 50 HRC

Nuances
Sorten
Grades

µK10

HTiN



K10

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

TF F **M** E

P ★★★★☆
M ★★★★☆
N ★★★☆☆
S ☆☆☆☆☆

- nuance pour l'usinage en finition des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Feinbearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden
- sehr geringer Reibwert
- für die Bearbeitung von Titan nicht geeignet

- grade for light machining of low resistance materials which causes edge build-up
- very low friction ratio
- not suitable for titanium machining

µK10

HN



K10

Non revêtu
Unbeschichtet
Uncoated

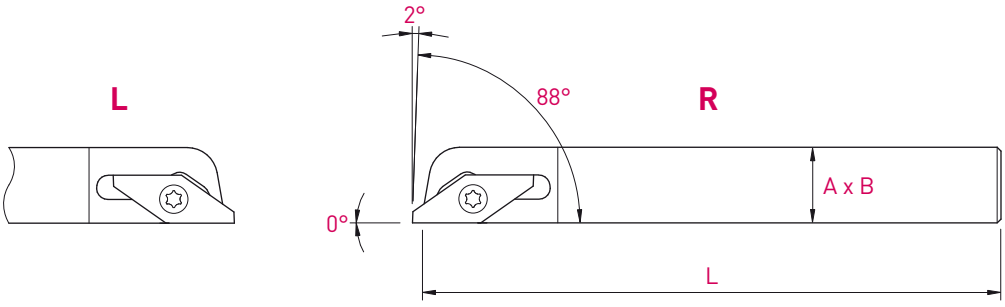
P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

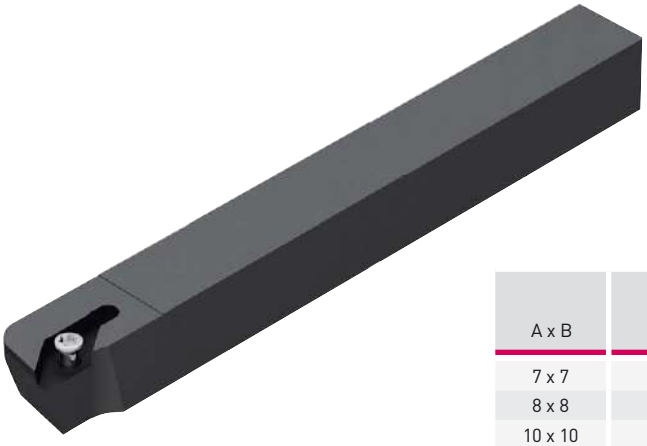
- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavourable machining conditions

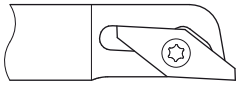
Matière Werkstoff Material			Tournage Drehen Turning VC (m/min)	Prof. de passe Schnitttiefe Depth of cut (mm)	Avance Vorschub Feed (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel		P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25
Acier Stahl Steel	< 600 N/mm²	P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25
Acier Stahl Steel	< 800 N/mm²	P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20
Acier Stahl Steel	> 800 N/mm²	P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15
Acier inoxydable Rostfreistahl Stainless steel		M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15
Aluminium Si <12%		N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40
Aluminium Si >12%		N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze		N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35
Titane Titan Titanium		S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15

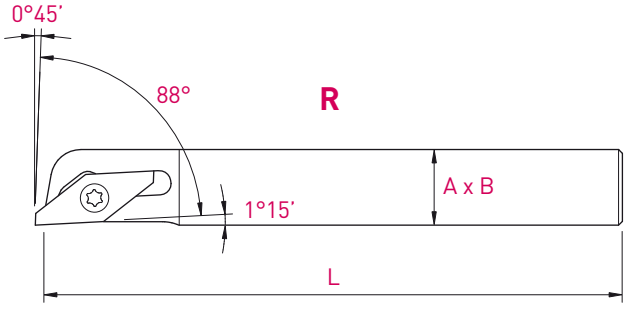


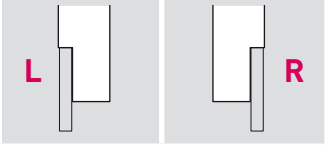


A x B	L	L Art. N°	R Art. N°
7 x 7	115	**310-7**	**320-7**
8 x 8	115	**310-8**	**320-8**
10 x 10	115	**310-10**	**320-10**
10 x 10	140	**-**	**320-10-140**
12 x 12	115	**310-12**	**320-12**
12 x 12	90	**310-12-90**	**320-12-90**
12 x 12	140	**310-12-140**	**320-12-140**
12.7 x 12.7	140	**310-12.7**	**320-12.7**
16 x 16	100	**310-16**	**320-16**
16 x 16	140	**310-16-140**	**320-16-140**
20 x 20	120	**310-20**	**320-20**

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.







A x B	L	Art. N°	Art. N°
7 x 7	115	**310-7-BC**	**320-7-BC**
8 x 8	115	**310-8-BC**	**320-8-BC**
10 x 10	115	**310-10-BC**	**320-10-BC**
10 x 10	140	**-**	**320-10-140-BC**
12 x 12	115	**310-12-BC**	**320-12-BC**
12 x 12	90	**310-12-90-BC**	**320-12-90-BC**
12 x 12	140	**310-12-140-BC**	**320-12-140-BC**
12.7 x 12.7	140	**310-12.7-BC**	**320-12.7-BC**
16 x 16	100	**310-16-BC**	**320-16-BC**
16 x 16	140	**310-16-140-BC**	**320-16-140-BC**
20 x 20	120	**310-20-BC**	**320-20-BC**

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Option
310-7 / 320-7	**V-M2.5X6.5-T8**	**C-T8**
310-8 - 310-20 320-8 - 320-20	**V-M2.5X7.8-T8**	

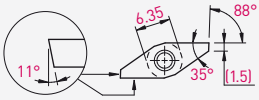
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

310 / 320

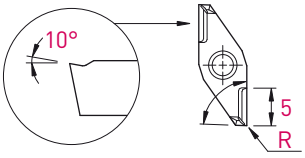
88°



Tournage avant
Vorwärts drehen
Front turning

317 / 327

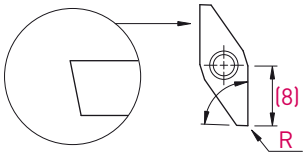


R	L Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)	R Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)
0	317	●	●	●	●	●	●	327	●	●	●	●	●	●
0.03	317-R03	●	●	●	●	●	●	327-R03	●	●	●	●	●	●
0.08	317-R08	●	●	●	●	●	●	327-R08	●	●	●	●	●	●
0.10	317-R10	●	●	●	●	●	●	327-R10	●	●	●	●	●	●
0.20	317-R20	●	●	●	●	●	●	327-R20	●	●	●	●	●	●

318 / 328

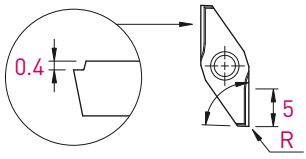


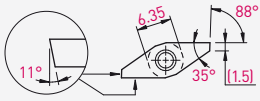
R	L Art. N°	HTA	HTiN	HN (µK10)	R Art. N°	HTA	HTiN	HN (µK10)
0	318	●	●	●	328	●	●	●
0.05	318-R05	●	●	●	328-R05	●	●	●
0.10	318-R10	●	●	●	328-R10	●	●	●
0.20	318-R20	●	●	●	328-R20	●	●	●
0.40	318-R40	●	●	●	328-R40	●	●	●

318VS / 328VS

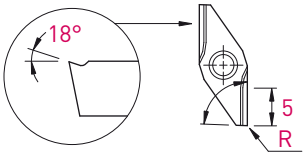


R	L Art. N°	HTA	HTiN	HN (µK10)	R Art. N°	HTA	HTiN	HN (µK10)
0	318VS	●	●	●	328VS	●	●	●
0.10	318VS-R10	●	●	●	328VS-R10	●	●	●



318VX / 328VX

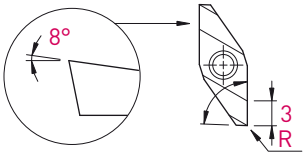






R	L Art. N°	HTA	HTiN	HN (µk10)	R Art. N°	HTA	HTiN	HN (µk10)
0	318VX	●	●	●	328VX	●	●	●
0.05	318VX-R05	●	●	●	328VX-R05	●	●	●
0.10	318VX-R10	●	●	●	328VX-R10	●	●	●
0.20	-				328VX-R20	●	●	●
0.40	-				328VX-R40	●		●

318X / 328X

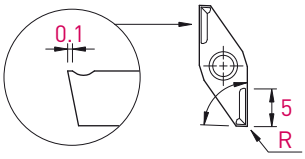






R	L Art. N°	HTA	HTiN	HN (µk10)	R Art. N°	HTA	HTiN	HN (µk10)
0	318X	●	●	●	328X	●	●	●
0.10	318X-R10	●	●	●	328X-R10	●	●	●

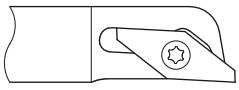
319 / 329

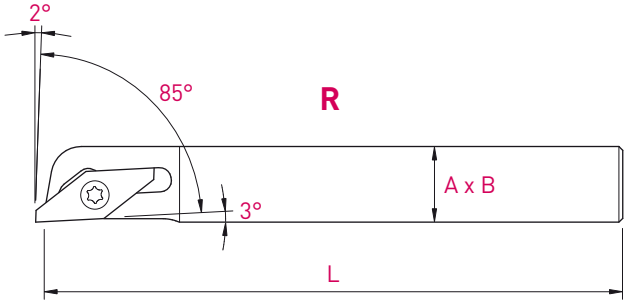


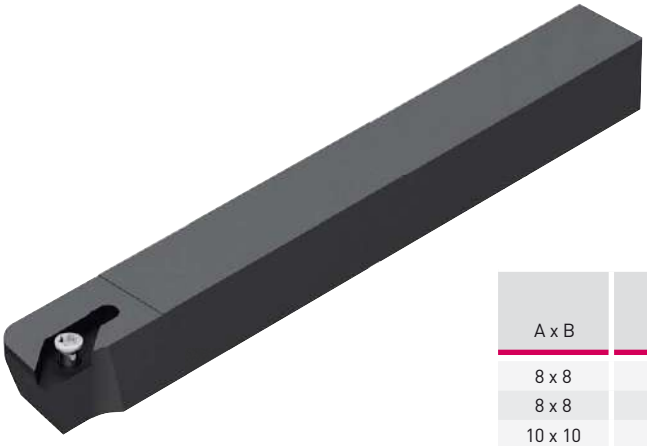


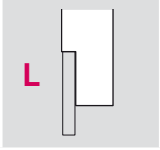


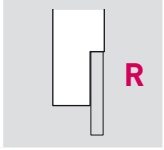
R	L Art. N°	HTA	HTiN	HN (µk10)	R Art. N°	HTA	HTiN	HN (µk10)
0	319	●	●	●	329	●	●	●
0.10	319-R10	●	●	●	329-R10	●	●	●
0.20	319-R20	●	●	●	329-R20	●	●	●











A x B	L	Art. N°	Art. N°
8 x 8	90	-	**340-8-90**
8 x 8	115	**330-8**	**340-8**
10 x 10	115	**330-10**	**340-10**
10 x 10	140	-	**340-10-140**
12 x 12	115	**330-12**	**340-12**
12 x 12	90	**330-12-90**	**340-12-90**
12 x 12	140	**330-12-140**	**340-12-140**
12.7 x 12.7	140	**330-12.7**	**340-12.7**
16 x 16	100	**330-16**	**340-16**
16 x 16	140	**330-16-140**	**340-16-140**
20 x 20	120	**330-20**	**340-20**

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Option
330	**V-M2.5X7.8-T8**	**C-T8**
340		

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

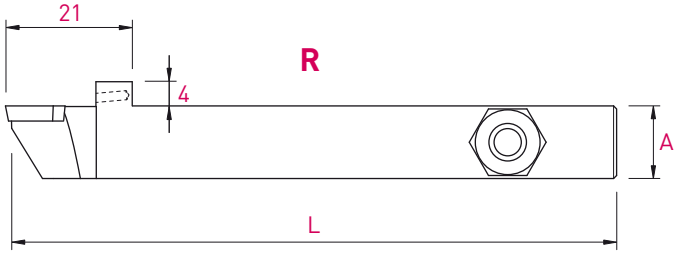
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

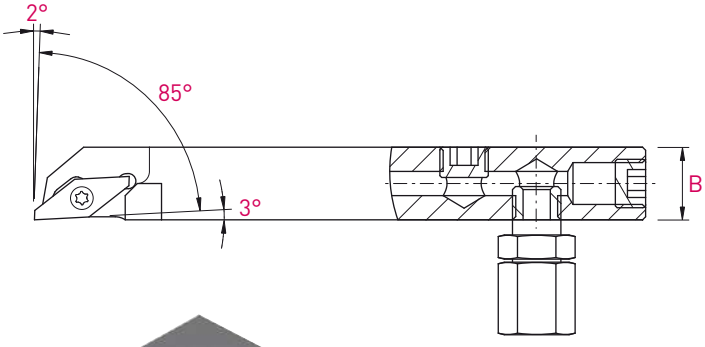
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

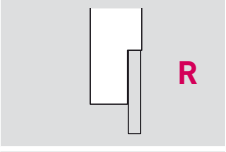
85°

340-JET

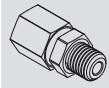
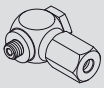








A x B	L	Art. N°
8 x 10	100	**340-0810-JET**
10 x 12	100	**340-1012-JET**
12 x 12	100	**340-12-JET**
12.7 x 12.7	100	**340-12.7-JET**
16 x 16	100	**340-16-JET**
20 x 20	100	**340-20-JET**

Pièces de rechange Ersatzteile Spare parts		Option 	
	Art. N°	**Art. N°**	**Art. N°**
340-0810-JET	**J-M5-D5**	**JC-M5-D5**	**JB-M5**
340-JET	**J-M8X1-D6**	**–**	**JB-M8X1**

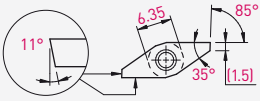
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

330 / 340

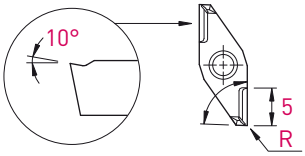
85°



Tournage avant
Vorwärts drehen
Front turning

337 / 347



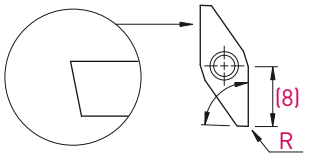




R	L Art. N°	P M N S TiAlN	P M N S TiAlX	P M N S TiN	P M N S N (µK20)	P M N S HTA	P M N S HTAX	P M N S HTiN	P N S HN (µK10)	R Art. N°	P M N S ST	P M N S TiAlN	P M N S TiAlX	P M N S TiN	P M N S N (µK20)	P M N S HST	P M N S HTA	P M N S HTAX	P M N S HTiN	P N S HN (µK10)
0	337	●		●	●	●		●	●	347	●	●	●	●	●	●	●	●	●	●
0.03	337-R03	●		●	●	●		●	●	347-R03	●	●	●	●	●	●	●	●	●	●
0.08	337-R08	●		●	●	●		●	●	347-R08	●	●	●	●	●	●	●	●	●	●
0.10	337-R10	●		●	●	●		●	●	347-R10	●	●	●	●	●	●	●	●	●	●
0.20	337-R20	●		●	●	●		●	●	347-R20	●	●	●	●	●	●	●	●	●	●
0.35	-									347-R35	●	●	●	●	●	●	●	●	●	●
0	337-EN	●		●	●					347-EN	●	●	●	●	●	●	●	●		●
0.03	337-EN-R03	●			●	●			●	347-EN-R03	●	●	●		●	●	●	●		●
0.08	337-EN-R08	●			●					347-EN-R08	●	●	●	●	●	●	●	●		●
0.10	337-EN-R10	●		●	●					347-EN-R10	●	●	●	●	●	●	●	●		●
0.20	337-EN-R20	●			●					347-EN-R20	●	●	●	●	●	●	●	●		●
0.35	-									347-EN-R35	●		●	●	●	●	●	●		●

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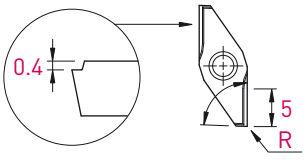


R	L Art. N°	P M N S HTA	P M N S HTiN	P N S HN (µK10)	R Art. N°	P M N S HTA	P M N S HTiN	P N S HN (µK10)
0	338	●	●	●	348	●	●	●
0.05	338-R05	●	●	●	348-R05	●	●	●
0.10	338-R10	●	●	●	348-R10	●	●	●
0.20	338-R20	●	●	●	348-R20	●	●	●
0.40	338-R40	●	●	●	348-R40	●	●	●

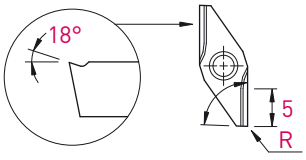
338VS / 348VS



R	L Art. N°	P M N S HTA	P M N S HTiN	P N S HN (µK10)	R Art. N°	P M N S HTA	P M N S HTiN	P N S HN (µK10)
0	338VS	●	●	●	348VS	●	●	●
0.10	338VS-R10	●	●	●	348VS-R10	●	●	●

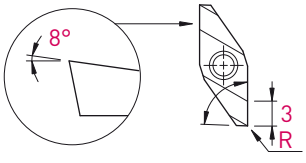
338VX / 348VX





R	L Art. N°	HTA	HTiN	HN (µk10)	R Art. N°	HTA	HTiN	HN (µk10)
0	338VX	●	●	●	348VX	●	●	●
0.05	338VX-R05	●	●	●	348VX-R05	●	●	●
0.10	338VX-R10	●	●	●	348VX-R10	●	●	●

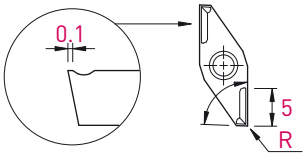
338X / 348X





R	L Art. N°	HTA	HTiN	HN (µk10)	R Art. N°	HTA	HTiN	HN (µk10)
0	338X	●	●	●	348X	●	●	●
0.10	338X-R10	●	●	●	348X-R10	●	●	●

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R	L Art. N°	HTA	HTiN	HN (µk10)	R Art. N°	HTA	HTiN	HN (µk10)
0	339	●	●	●	349	●	●	●
0.10	339-R10	●	●	●	349-R10	●	●	●
0.20	339-R20	●	●	●	349-R20	●	●	●

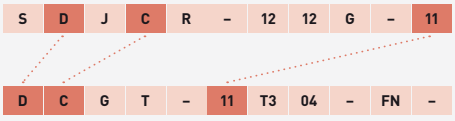
ISO-Line



APPLITEC
CUTTING TOOLS

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Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations

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Géométries de coupe
Spanformgeometrien
Cutting geometries





> 9.08

Nuances
Sorten
Grades

PVD | CVD | CERMET

> 9.14

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

P | M | N | S
VC (m/min) | F (mm/U)

> 9.16

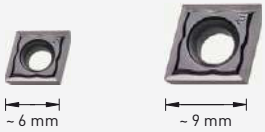
80°

Porte-outils
Halter
Holders



> 9.20

Plaquettes
WSP
Inserts



> 9.26

55°

Porte-outils
Halter
Holders



> 9.34

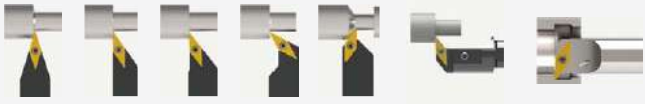
Plaquettes
WSP
Inserts



> 9.45

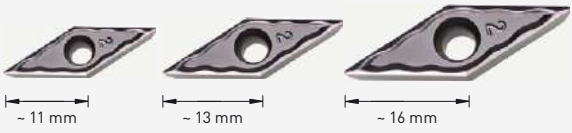
35°

Porte-outils
Halter
Holders



> 9.53

Plaquettes
WSP
Inserts



> 9.62

Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories

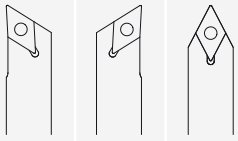


> 9.71

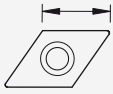
Codification
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Coding guide

Méthode de serrage Klemmsystem Clamping system	Forme de la plaquette Plattenform Insert shape	Géométrie du porte-outil Halterform Holder geometry	Angle de dépouille de la plaquette WSP-Freiwinkel Insert clearance angle	Direction de coupe Schneidrichtung Cut direction		Hauteur du porte-outil Halter Höhe Holder height	Largeur du porte-outil Halter Breite Holder width	Longueur du porte-outil Halter Länge Holder length		Dimension de la plaquette (L) WSP Grösse (L) Insert size (L)
S	**D**	**J**	**C**	**R**	**–**	**12**	**12**	**G**	**–**	**11**

R **L** **N**

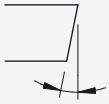


L



[mm]

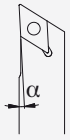
C = 7°

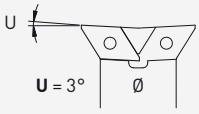


A x B (or Ø) [mm]
08 x 08
10 x 10
12 x 12
12.7 x 12.7 (1/2 in)
16 x 16
20 x 20
Ø: D10 / D20 / D25.4 (Ø1 in)

Length: [mm]
F = 75
G = 90
J = 110
X = Special

α:
A = 0°
J = 3°
L = 5°
H = 17.5°
X = 27.5°





C = 80°



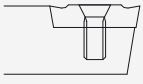
D = 55°



V = 35°



S = vis
Schraube
screw

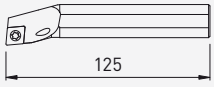


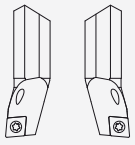
Compatibilité porte-outil - plaquette
WSP - Halter Kompatibilität
Holder - insert compatibility

S	D	J	C	R	–	12	12	G	–	11
D	C	G	T	–	11	T3	04	–	FN	–

Matière Material Material	Diamètre queue Schaft Shank	Longueur du porte-outil Halter Länge Holder length		Méthode de serrage Klemmsystem Clamping system	Forme de la plaquette Plattenform Insert shape	Géométrie du porte-outil Halterform Holder geometry	Angle de dépouille de la plaquette WSP-Freiwinkel Insert clearance angle	Direction de coupe Schneidrichtung Cut direction		Dimension de la plaquette (L) WSP Grösse (L) Insert size (L)
A	**12**	**K**	**–**	**S**	**C**	**L**	**C**	**R**	**–**	**06**

Longueur
Länge
Length
F = 80
H = 100
J = 110
K = 125
M = 150
Q = 180

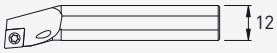




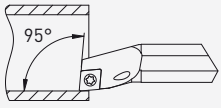
C = 7°



Ø queue
Schaft Ø
Shank Ø



L = 95°
Q = 107.5°
U = 93°



A = acier avec lubrification
Stahl mit Kühlung
Steel with coolant

E = carbure avec lubrification
Harmetall mit Kühlung
Carbide with coolant

C = 80°



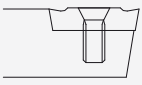
D = 55°



V = 35°



S = vis
Schraube
screw

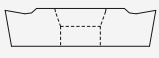




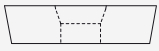
Codification
Kodifizierung
Coding guide

Forme de la plaquette Plattenform Insert shape	Angle de dépouille de la plaquette WSP-Freiwinkel Insert clearance angle	Classe de tolérance Toleranz Klasse Tolerance class	Brise-copeau Spanbrecher Chip breaker		Dimension de la plaquette (L) WSP Grösse (L) Insert size (L)	Epaisseur de la plaquette (E) WSP Dicke (E) Insert thickness (E)	Rayon de pointe de la plaquette WSP Eckenradius Insert corner radius		Exécution d'arête et direction de coupe Schneidkante Ausführung und Schneidrichtung Edge type and cutting direction		Géométrie de coupe Spanformgeometrie Cutting geometry
D	**C**	**G**	**T**	**–**	**11**	**T3**	**04**	**–**	**FN**	**–**	**X8**

T



W



R:
003 = 0.03 mm
005 = 0.05 mm
008 = 0.08 mm
01 = 0.1 mm
015 = 0.15 mm
02 = 0.2 mm
04 = 0.4 mm
08 = 0.8 mm





cf.: Géométrie de coupe
Spanformgeometrie
Cutting geometry

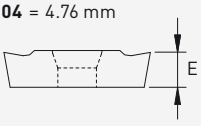
G = ±0.025 mm



M = ±0.05 mm



02 = 2.38 mm
03 = 3.18 mm
T3 = 3.97 mm
04 = 4.76 mm



FN



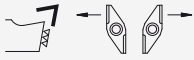
EN



ENP



FL / FR



ELP / ERP



C = 7°



C = 80°



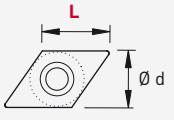
D = 55°



V = 35°



L



[mm]

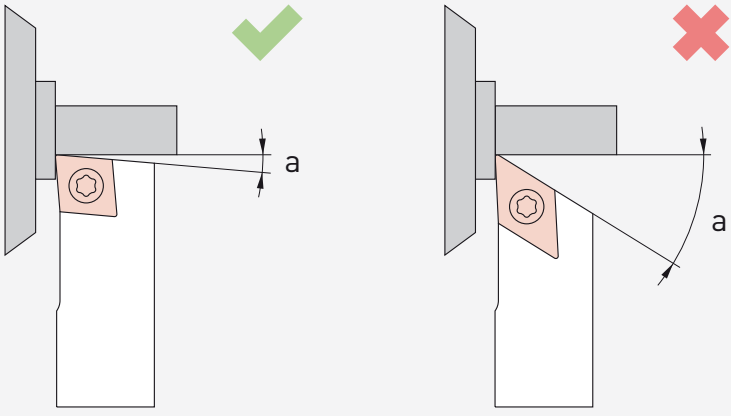
L	Ø d [mm]
CC...**06** DC...**07** VC... **11**	6.350
VC... **13**	7.940
CC...**09** DC... **11** VC... **16**	9.525

Better surface finish

pour un meilleur état de surface et une stabilité d'usinage optimale, choisir une géométrie d'outil permettant un angle "a" le plus petit possible

für bessere Oberflächegüte und optimale Bearbeitungsstabilität, muss die Werkzeuggeometrie mit kleinstmöglichem Winkel "a" ausgewählt werden

for a better surface finish and optimal machining stability, choose a tool geometry with angle "a" as small as possible



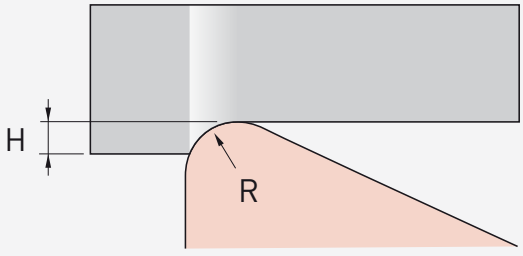
Proportion

rapport hauteur de passe / rayon d'outil

Verhältnis zwischen Spantiefe und Werkzeugradius

machining depth / tool radius ratio

H min = 0.7 X R
R max = 1.4 X H



Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

G
tolerance class

Géométries de coupe
Spanformgeometrien
Cutting geometries

Finishing

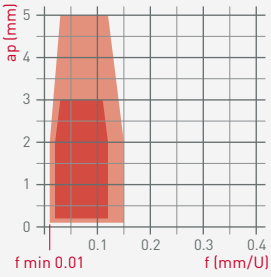
FN-X8



8°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P ★★★★★
M ★★★★
N ★★★★
S ★★★

CCGT DCGT VCGT

p. 9.26 p. 9.45 p. 9.64

Semi-finishing
Finishing

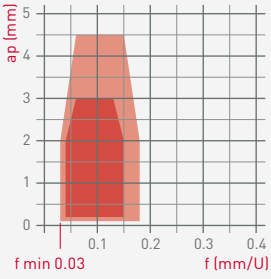
ENP-X8



8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

Poli
Poliert
Polished



P ★★★★★
M ★★★
N ★★★
S ★★★

CCGT DCGT VCGT

p. 9.26 p. 9.45 p. 9.64

Finishing

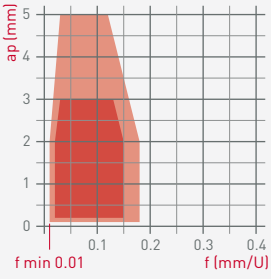
FN-X17



17°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P ★★★
M ★★★★★
N ★★★★
S ★★★★★

CCGT DCGT VCGT

p. 9.27 p. 9.46 p. 9.65

Semi-finishing
Finishing

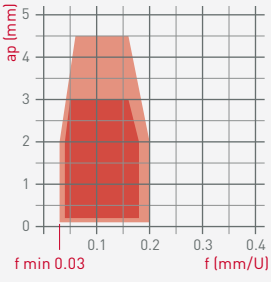
ENP-X17



17°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

Poli
Poliert
Polished



P ★★★
M ★★★★★
N ★★★
S ★★★★

CCGT DCGT VCGT

p. 9.27 p. 9.46 p. 9.65

Géométries de coupe
Spanformgeometrien
Cutting geometries

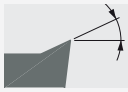
G
tolerance class

Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

Finishing

FN-X25



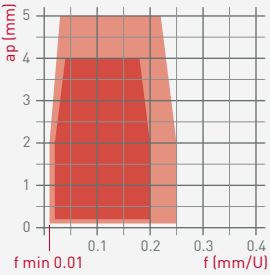


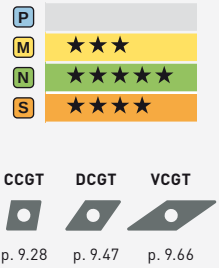


Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished



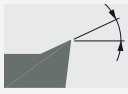


p. 9.28 p. 9.47 p. 9.66

Semi-finishing
Finishing

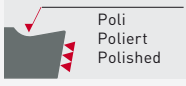
ENP-X25



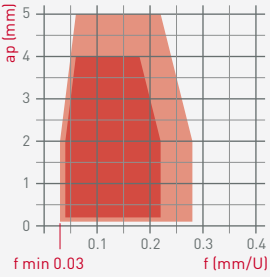


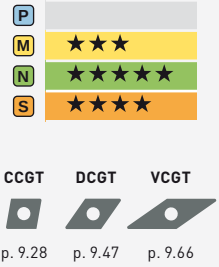


Arête de coupe honée
Schneidkantenverrundung
Honed edge



Poli
Poliert
Polished



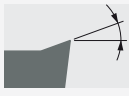


p. 9.28 p. 9.47 p. 9.66

Semi-finishing
Finishing

ENP-X20

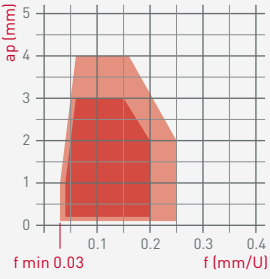


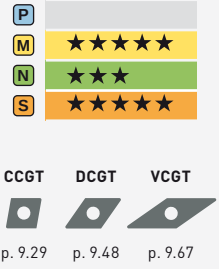




Arête de coupe honée
Schneidkantenverrundung
Honed edge







p. 9.29 p. 9.48 p. 9.67

Plaquettes en métal dur
VHM-Wendeplatten
Carbide inserts

M
tolerance class

Géométries de coupe
Spanformgeometrien
Cutting geometries

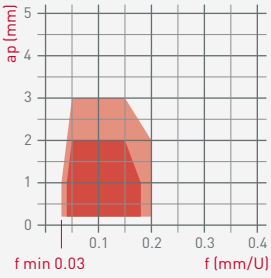
Semi-finishing
Finishing

EN-XF3



12°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P	★★★★
M	★★★★★
N	★★★
S	★★★

CCMT p. 9.30 | DCMT p. 9.49 | VCMT p. 9.68

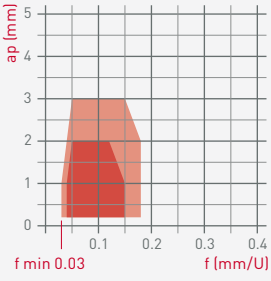
Semi-finishing
Finishing

EN-XF2



6°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P	★★★★★
M	★★★
N	
S	★★★

CCMT p. 9.30 | DCMT p. 9.49 | VCMT p. 9.68

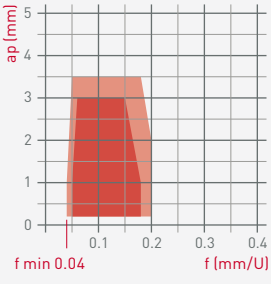
Semi-finishing

EN-MF2



8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P	★★★★
M	★★★★
N	★★★
S	★★★

CCMT p. 9.30 | DCMT p. 9.49

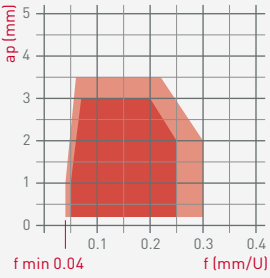
Semi-finishing

EN-MF



5°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

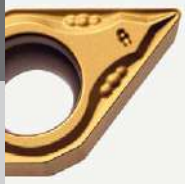


P ★★★★★
M ★★★
N
S

CCMT p. 9.31 | DCMT p. 9.50 | VCMT p. 9.69

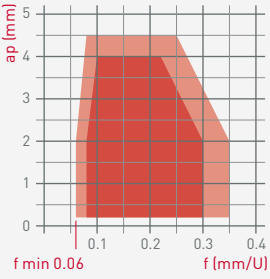
Roughing
Semi-finishing

EN-HF3



10°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P ★★★★★
M ★★★★★
N
S ★★★

CCMT p. 9.31 | DCMT p. 9.50

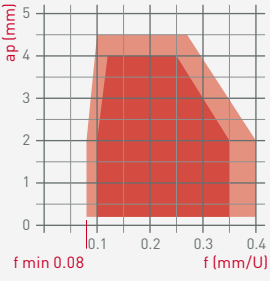
Roughing
Semi-finishing

EN-HF



12°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P ★★★★★
M ★★★★★
N
S

CCMT p. 9.31 | DCMT p. 9.50 | VCMT p. 9.69

Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

G
tolerance class

Géométries de coupe
Spanformgeometrien
Cutting geometries

Super-finishing
Finishing

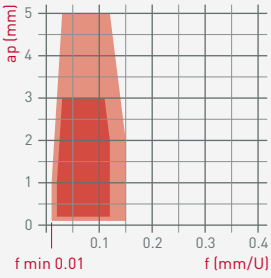
FL/FR-X10



10°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P ★★★★
M ★★★★★
N ★★★★
S ★★★★

VCGT

p. 9.62

Semi-finishing
Finishing

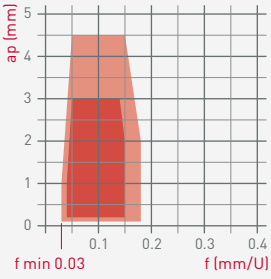
ELP/ERP-X10



10°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

Poli
Poliert
Polished



P ★★★★★
M ★★★★
N ★★★
S ★★★

VCGT

p. 9.62

Super-finishing
Finishing

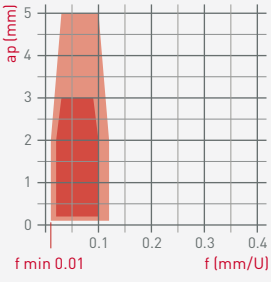
FN-K18



18°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P ★★★★
M ★★★★★
N ★★★★
S ★★★★

VCGT

p. 9.63

Finishing

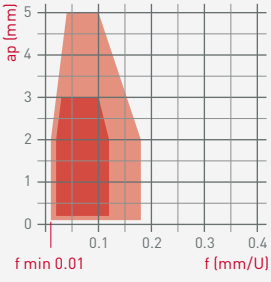
FN-0



0°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P ★★★
M
N ★★★
S

VCGW

p. 9.63

Finishing

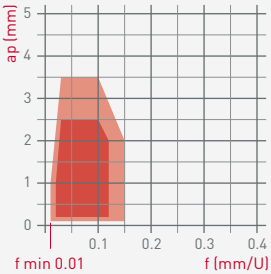
FN-X8 CERMET



8°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P ★★★★★
M ★★★
N
S

CCGT p. 9.32 | DCGT p. 9.51 | VCGT p. 9.64

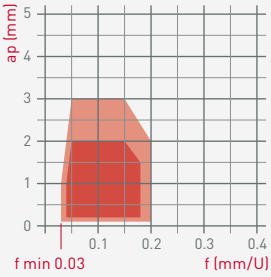
Semi-finishing
Finishing

ENP-KX CERMET



8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

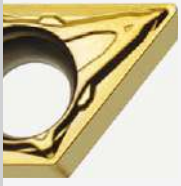


P ★★★★★
M ★★★
N
S

CCGT p. 9.32 | DCGT p. 9.51

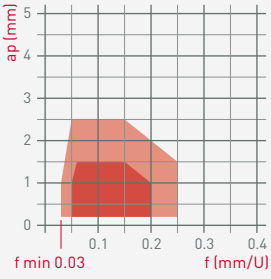
Semi-finishing

EN-KM CERMET



8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P ★★★★★
M ★★★
N
S

CCMT p. 9.33 | DCMT p. 9.52

ISO-Line

Nuances
Sorten
Grades

Nuances Sorten Grades	Domaine d'application Anwendungsbereich Application area	Finishing / light machining	Semi-finishing / medium cut	Roughing / heavy machining	Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries	Résistance à l'usure Verschleissfestigkeit Wear resistance	Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance	Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance	Revêtement et couleur Beschichtung und Farbe Coating and colour	Recommandations spéciales Sonder Empfehlungen Special recommendations
Carbide + PVD										
TiAlN	★★★★★ ★★★★★ ★★★★ ★★★★	●	●	●	FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10	■■■■□	■■■■□	■■■■□	PVD	
HTA	★★★★★ ★★★★★ ★★★★ ★★★★	●			FN-X8 FN-X17 FN-X25 L/R-X10 FN-K18 FN-0	■■■■■	■■■□□	■■■■□	PVD	
TiN	★★★★ ★★★★ ★★★★★	●	●	●	FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10	■■■□□	■■■■□	■■■□□	PVD	High resistance to edge build up
HTiN	★★★★ ★★★★ ★★★★★	●			FN-K18 FN-0	■■■■□	■■■□□	■■■□□	PVD	High resistance to edge build up
TAC	★★★★★ ★★★★★ ★★★★ ★★★★	●	●	●	EN-XF3 EN-XF2 EN-MF2 EN-HF	■■■■□	■■■■□	■■■■□	PVD	
HTAC	★★★★★ ★★★★★ ★★★★ ★★★★	●	●		EN-XF3 EN-XF2 EN-MF2	■■■■■	■■■□□	■■■■□	PVD	
TiX	★★★★★ ★★★★★ ★★★			●	EN-HF3	■■■□□	■■■■□	■■■□□	PVD	Easy wear out control with TiN top layer
HTiX	★★★★★ ★★★★★ ★★★★ ★★★		●	●	ENP-X20 EN-HF3	■■■■□	■■■□□	■■■□□	PVD	Easy wear out control with TiN top layer
Tmax	★★★★★ ★★★★★ ★★★★ ★★★★		●	●	EN-MF EN-HF	■■■■□	■■■■□	■■■■□	PVD	
ZTA	★★★★★ ★★★ ★★★★★	●	●		ENP-X20	■■■■□	■■■■□	■■■■□	PVD	Perfect for titanium alloys & superalloys
TiAlX	★★★★ ★★★★ ★★★★★	●	●		X8 R-X10 X17 X25	■■■■□	■■■■□	■■■■□	PVD	Perfect for titanium alloys & superalloys
HTAX	★★★★ ★★★★ ★★★★★	●			X8 R-X10 X17 X25	■■■■■	■■■□□	■■■■□	PVD	Perfect for titanium alloys & superalloys
ST	★★★★ ★★★★ ★★★★★	●	●		X17 ENP-X17 FL/FR-X10 ELP/ERP-X10	■■■■□	■■■■□	■■■■■	PVD	Hard materials >50HRC, refractory materials, nickel- or cobalt-based, stainless steel, titanium alloys
HST	★★★★ ★★★★ ★★★★★	●	●		X17	■■■■□	■■■□□	■■■■■	PVD	Hard materials >50HRC, refractory materials, nickel- or cobalt-based, stainless steel, titanium alloys

Nuances Sorten Grades	Domaine d'application Anwendungsbereich Application area	Finishing / light machining	Semi-finishing / medium cut	Roughing / heavy machining	Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries	Résistance à l'usure Verschleissfestigkeit Wear resistance	Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance	Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance	Revêtement et couleur Beschichtung und Farbe Coating and colour	Recommandations spéciales Sonder Empfehlungen Special recommendations
Carbide + CVD										
Ti4	★★★★★ ★★★		●	●	EN-MF EN-HF3 EN-HF	■■■■□	■■■■□	■■■■■	CVD	
Ti5	★★★★★ ★★★		●	●	EN-MF2 EN-HF	■■■■□	■■■■□	■■■■■	CVD	Easy wear out control with TiN top layer
HTi5	★★★★★ ★★★		●	●	EN-XF2 EN-MF2 EN-HF	■■■■■	■■■□□	■■■■■	CVD	Easy wear out control with TiN top layer
Ti6	★★★ ★★★★★ ★★★★		●	●	EN-HF3	■■■■□	■■■■□	■■■■■	CVD	
Ti7	★★★ ★★★★★ ★★★★		●	●	EN-MF	■■■□□	■■■■□	■■■■■	CVD	titanium alloys, refractory materials, iron-, nickel- or cobalt-based, austenitic stainless steel
Carbide uncoated										
K10	★★★ ★★★	●			FN-X8 FN-X17 FN-X25 ELP-X10/ERP-X10 FN-K18 FN-0	■■■□□	■■■□□	■■□□□	uncoated	
K20	★★ ★★	●			FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 ELP-X10/ERP-X10	■■□□□	■■■■□	■■□□□	uncoated	
CERMET										
CTA	★★★★★ ★★★	●			FN-X8	■■■■□	■■■■□	■■■■■	CERMET +PVD	
CT7	★★★★★ ★★★	●	●	●	ENP-KX EN-KM	■■■■□	■■■■□	■■■■■	CERMET + PVD	Easy wear out control with TiN top layer
HCT7	★★★★★ ★★★	●	●		ENP-KX EN-KM	■■■■■	■■■□□	■■■■■	CERMET + PVD	Easy wear out control with TiN top layer
CN6	★★★★	●			FN-X8 ENP-KX EN-KM	■■□□□	■■■■□	■■■■□	CERMET uncoated	

ISO-Line

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

★★★★★ ★★★★ ★★★

ISO-Line G tolerance class	Tough grade, for normal to difficult machining conditions	Wear resistant grade, for finishing and light machining	P Acier / Stahl / Steel						M Inox / Rostfreistahl / Stainless steel			
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Hochlegierter Stahl High alloyed steel		Austénitique Austenitisch Austenitic		Martensitique Martensitisch Martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
FN-X8	K20	HTA	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiAlX	HTAX	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN		80-170	0.01-0.12	60-140	0.01-0.10			60-120	0.01-0.12	60-120	0.01-0.12
	K20	K10										
ENP-X8	TiAlN		80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiN		80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.03-0.12	60-120	0.03-0.15
	K20											
FN-X17	TiAlN		80-180	0.01-0.12	60-150	0.01-0.10			60-140	0.01-0.15	60-140	0.01-0.15
	TiAlX		80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	ST	HST	80-180	0,01-0,12	60-150	0,01-0,10	50-120	0,01-0,08	60-150	0,01-0,12	60-150	0,01-0,12
	TiN		80-170	0.01-0.12					60-120	0.01-0.15	60-120	0.01-0.15
	K20	K10										
ENP-X17	TiAlN	HTA	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.15	60-140	0.03-0.18
	ST		80-180	0,01-0,12	60-150	0,01-0,10	50-120	0,01-0,08	60-150	0,01-0,12	60-150	0,01-0,12
	TiAlX	HTAX	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN		80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.01-0.15	60-120	0.03-0.18
	K20	K10										
FN-X25	TiAlN	HTA							60-140	0.01-0.12		
	TiN								60-120	0.01-0.12		
	K20	K10										
ENP-X25	TiAlN								60-140	0.03-0.12	60-140	0.03-0.15
	TiAlX		80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN								60-120	0.03-0.12	60-120	0.03-0.15
	K20											
ENP-X20	ZTA								60-140	0.03-0.18	60-140	0.03-0.18
		HTiX							60-140	0.03-0.18	60-140	0.03-0.18
G tolerance class Special 35° VC..-11												
FL / FR-X10	TiAlN	HTA	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiAlX	HTAX	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	ST	HST	80-180	0,03-0,15	60-160	0,03-0,12	50-120	0,03-0,10	60-150	0,03-0,12	60-150	0,01-0,12
	TiN		80-170	0.01-0.12	60-140	0.01-0.10			60-120	0.01-0.12	60-120	0.01-0.12
	K20	K10										
ELP/ERP-X10	TiAlN	HTA	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiAlX	HTAX	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	ST		80-180	0,03-0,15	60-160	0,03-0,12	50-120	0,03-0,10	60-150	0,03-0,12	60-150	0,01-0,12
	TiN		80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.03-0.12	60-120	0.03-0.15
	K20	K10										
FN-K18		HTA	80-180	0.01-0.10	60-150	0.01-0.10			60-140	0.01-0.10	60-140	0.01-0.10
		HTiN	80-170	0.01-0.10	60-140	0.01-0.10			60-120	0.01-0.10	60-120	0.01-0.10
		K10										
FN-0		HTA	80-150	0.01-0.10								
		HTiN	80-140	0.01-0.10								
		K10										

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane et superalliages Titan und Superlegierungen Titanium and superalloys					
Aluminium		Al-Si		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Ti grade 1 - 3		Ti grade 4 - 6		Superalliages Superlegierungen Superalloys	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
		150-1600	0.01-0.15	80-300	0.01-0.12	**100-400**	**0.01-0.15**			30-60	0.01-0.12	40-70	0.01-0.10
								30-70	0.01-0.12	**30-60**	**0.01-0.12**	**40-70**	**0.01-0.10**
120-2200	0.01-0.18	**150-1600**	**0.01-0.15**	80-300	0.01-0.12	100-400	0.01-0.15						
120-2000	0.01-0.18	150-1500	0.01-0.15	80-250	0.01-0.12	**100-300**	**0.01-0.15**	30-70	0.01-0.12				
		150-800	0.03-0.18	80-300	0.03-0.15					30-60	0.03-0.12	40-70	0.03-0.10
		150-800	**0.03-0.18**	80-300	0.03-0.15								
		150-800	0.03-0.18	80-250	0.03-0.15								
		150-1600	0.01-0.18	**80-300**	**0.01-0.15**	100-400	0.01-0.18			**30-70**	**0.01-0.15**	40-80	0.01-0.12
								30-70	0.01-0.12	**30-60**	**0.01-0.12**	**40-70**	**0.01-0.10**
										40-80	**0,01-0,08**	**40-80**	**0,01-0,08**
120-2200	0.01-0.25	150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18						
120-2000	0.01-0.25	150-1500	0.01-0.18	80-250	0.01-0.15	100-300	0.01-0.18	**40-80**	**0.01-0.15**				
		150-800	0.03-0.20	80-300	0.03-0.18					30-70	0.03-0.15	**40-80**	**0.03-0.12**
										40-80	0,01-0,08	40-80	0,01-0,08
								30-70	0.01-0.12	**30-60**	**0.01-0.12**	**40-70**	**0.01-0.10**
		150-800	0.03-0.20	80-300	0.03-0.18								
		150-800	0.03-0.20	80-250	0.03-0.18								
		150-1600	0.01-0.22	80-300	0.01-0.18					30-60	0.01-0.12	40-70	0.01-0.10
120-2200	0.01-0.30	**150-1600**	**0.01-0.22**	80-300	0.01-0.18								
120-2000	**0.01-0.30**	150-1500	0.01-0.22	80-250	0.01-0.18			30-70	0.01-0.12				
		150-800	0.03-0.25	80-300	0.03-0.20					30-60	0.03-0.12	40-70	0.03-0.10
								30-70	0.01-0.12	**30-60**	**0.01-0.12**	**40-70**	**0.01-0.10**
		150-800	0.03-0.25	80-300	0.03-0.20								
		150-800	0.03-0.25	80-250	0.03-0.20								
		150-800	0.03-0.25	80-300	0.03-0.20					**40-90**	**0.03-0.15**	**40-100**	**0.03-0.15**
		150-800	0.03-0.25	80-300	0.03-0.20					40-80	0.03-0.15	40-90	0.03-0.15
		150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18			30-60	0.01-0.12	40-70	0.01-0.10
								30-70	0.01-0.12	**30-60**	**0.01-0.12**	**40-70**	**0.01-0.10**
										40-80	0,01-0,08	**40-80**	**0,01-0,08**
120-2200	0.01-0.20	150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18						
120-2000	0.01-0.20	150-1500	0.01-0.18	80-250	0.01-0.15	100-300	0.01-0.18	30-70	0.01-0.12				
		150-1600	0.03-0.20	80-300	0.03-0.18					30-60	0.03-0.12	40-70	0.03-0.10
										30-60	**0.03-0.12**	**40-70**	**0.03-0.10**
										40-80	0,01-0,08	40-80	0,01-0,08
		150-1600	0.03-0.20	80-300	0.01-0.18								
		150-1500	0.03-0.20	80-250	0.01-0.18								
		150-1600	0.01-0.12	80-300	0.01-0.10					**30-70**	**0.01-0.10**	40-80	0.01-0.10
120-2200	0.01-0.15	150-1600	0.01-0.12	80-300	0.01-0.10								
120-2000	0.01-0.15	150-1500	0.01-0.12	80-250	0.01-0.10			**40-80**	**0.01-0.10**				
						100-400	0.01-0.18						
						100-400	0.01-0.18						
						100-300	0.01-0.18						

ISO-Line

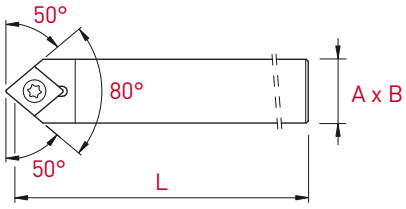
Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

★★★★★ ★★★★ ★★★

ISO-Line M tolerance class	Tough grade, for normal to difficult machining conditions	Wear resistant grade, for finishing and light machining	P Acier Stahl Steel						M Inox Rostfreistahl Stainless steel			
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Hochlegierter Stahl High alloyed steel		Austénitique Austenitisch Austenitic		Martensitique Martensitisch Martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
EN-XF3	TAC	HTAC	100-200	0.03-0.15	80-160	0.03-0.12	50-120	0.03-0.10	**60-140**	**0.03-0.12**	60-140	0.03-0.15
EN-XF2	TAC	HTAC	**100-200**	**0.03-0.15**	**80-160**	**0.03-0.12**	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
		HTi5	100-250	0.03-0.15	**80-220**	**0.03-0.12**	**50-180**	**0.03-0.10**	80-200	0.03-0.12	80-200	0.03-0.15
EN-MF2	TAC	HTAC	100-200	0.04-0.15	80-160	0.04-0.12	50-120	0.04-0.10	**60-140**	**0.04-0.12**	60-140	0.04-0.15
	Ti5	HTi5	100-250	0.04-0.15	**80-220**	**0.04-0.12**	**50-180**	**0.04-0.10**	80-200	0.04-0.12	**80-200**	**0.04-0.15**
EN-MF	Tmax		**100-220**	**0.04-0.30**	**80-180**	**0.04-0.25**	50-150	0.04-0.20	60-150	0.04-0.25	60-150	0.04-0.25
	Ti4		100-250	0.05-0.30	**80-220**	**0.05-0.25**	**50-180**	**0.05-0.20**	80-200	0.05-0.25	80-200	0.05-0.25
	Ti7								60-150	0.05-0.20	60-150	0.05-0.20
EN-HF3	TiX	HTiX	**100-220**	**0.06-0.35**	**80-180**	**0.06-0.30**	50-150	0.06-0.25	**60-150**	**0.06-0.25**	60-150	0.06-0.25
	Ti6		100-250	0.06-0.35	80-220	0.06-0.30	50-180	0.06-0.25	**80-200**	**0.06-0.25**	**80-200**	**0.06-0.25**
EN-HF	Tmax		100-220	0.08-0.40	80-180	0.08-0.35	50-150	0.08-0.30	60-150	0.08-0.30	60-150	0.08-0.30
	TAC		100-200	0.08-0.40	80-160	0.08-0.35	50-140	0.08-0.30	**60-140**	**0.08-0.30**	60-140	0.08-0.30
	Ti4		100-250	0.08-0.40	**80-220**	**0.08-0.35**	**50-180**	**0.08-0.30**	80-200	0.08-0.30	80-200	0.08-0.30
	Ti5	HTi5	100-280	0.08-0.40	**80-250**	**0.08-0.35**	**50-200**	**0.08-0.30**	80-220	0.08-0.30	80-220	0.08-0.30
ISO-Line CERMET												
FN-X8 CERMET	CTA		**100-350**	**0.01-0.12**	**80-300**	**0.01-0.10**	70-250	0.01-0.08	80-250	0.01-0.12	80-250	0.01-0.12
	CN6		100-300	0.01-0.12	80-250	0.01-0.10	70-200	0.01-0.08				
ENP-KX CERMET	CT7	HCT7	**100-350**	**0.03-0.20**	**80-300**	**0.03-0.18**	70-250	0.03-0.15	80-250	0.03-0.18	80-250	0.03-0.18
	CN6		100-300	0.03-0.20	80-250	0.03-0.18	70-200	0.03-0.15				
EN-KM CERMET	CT7	HCT7	**100-350**	**0.03-0.25**	**80-300**	**0.03-0.20**	70-250	0.03-0.18	80-250	0.03-0.20	80-250	0.03-0.20
	CN6		100-300	0.03-0.25	80-250	0.03-0.20	70-200	0.03-0.18				

N	Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S	Titane et superalliages Titan und Superlegierungen Titanium and superalloys					
	Aluminium		Al-Si		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze			Ti grade 1 - 3		Ti grade 4 - 6		Superalliages Superlegierungen Superalloys	
	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)		VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
			120-1500	0.03-0.20	80-300	0.03-0.15	100-400	0.03-0.18				30-70	0.03-0.15	40-80	0.03-0.12
							100-400	0.03-0.18				30-70	0.03-0.15	40-80	0.03-0.12
			120-1500	0.04-0.20	80-300	0.04-0.15	100-400	0.04-0.18				30-70	0.04-0.15	40-80	0.04-0.12
												40-80	0.05-0.12	40-80	0.05-0.12
												30-70	0.06-0.20	40-80	0.06-0.20

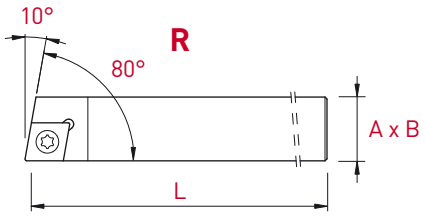




SCM

Plaquettes WSP Inserts	A x B	L	Art. N°
CC..-0602..	8 x 8	115	**SCMCN-0808X-06**
	10 x 10	115	**SCMCN-1010X-06**
	12 x 12	130	**SCMCN-1212X-06**
	12 x 12	90	**SCMCN-1212G-06**
	12.7 x 12.7	130	**SCMCN-12.7X-06**
	16 x 16	130	**SCMCN-1616X-06**
	16 x 16	75	**SCMCN-1616F-06**
CC..-09T3..	12 x 12	130	**SCMCN-1212X-09**
	12 x 12	90	**SCMCN-1212G-09**
	12.7 x 12.7	130	**SCMCN-12.7X-09**
	16 x 16	130	**SCMCN-1616X-09**
	16 x 16	75	**SCMCN-1616F-09**
	20 x 20	120	**SCMCN-2020X-09**



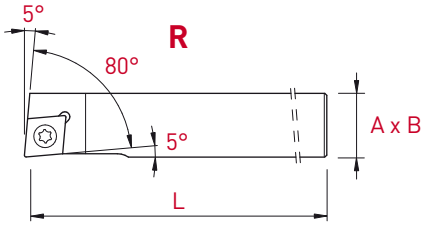


SCA

			L	R
Plaquettes WSP Inserts	A x B	L	**Art. N°**	**Art. N°**
CC..-0602..	8 x 8	115	**SCACL-0808X-06**	**SCACR-0808X-06**
	10 x 10	115	**SCACL-1010X-06**	**SCACR-1010X-06**
	12 x 12	130	**SCACL-1212X-06**	**SCACR-1212X-06**
	12 x 12	90	**SCACL-1212G-06**	**SCACR-1212G-06**
	12.7 x 12.7	130	**SCACL-12.7X-06**	**SCACR-12.7X-06**
	16 x 16	130	**SCACL-1616X-06**	**SCACR-1616X-06**
	16 x 16	75	**SCACL-1616F-06**	**SCACR-1616F-06**
CC..-09T3..	12 x 12	130	**SCACL-1212X-09**	**SCACR-1212X-09**
	12 x 12	90	**SCACL-1212G-09**	**SCACR-1212G-09**
	12.7 x 12.7	130	**SCACL-12.7X-09**	**SCACR-12.7X-09**
	16 x 16	130	**SCACL-1616X-09**	**SCACR-1616X-09**
	16 x 16	75	**SCACL-1616F-09**	**SCACR-1616F-09**
	20 x 20	120	**SCACL-2020X-09**	**SCACR-2020X-09**



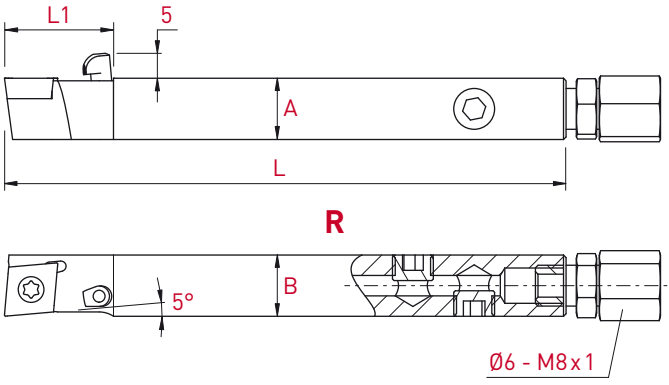
SCL



			L	R
Plaquettes WSP Inserts	A x B	L	**Art. N°**	**Art. N°**
CC..-0602..	8 x 8	115	**SCLCL-0808X-06**	**SCLCR-0808X-06**
	10 x 10	115	**SCLCL-1010X-06**	**SCLCR-1010X-06**
	12 x 12	130	**SCLCL-1212X-06**	**SCLCR-1212X-06**
	12 x 12	90	**SCLCL-1212G-06**	**SCLCR-1212G-06**
	12.7 x 12.7	130	**SCLCL-12.7X-06**	**SCLCR-12.7X-06**
	16 x 16	130	**SCLCL-1616X-06**	**SCLCR-1616X-06**
	16 x 16	75	**SCLCL-1616F-06**	**SCLCR-1616F-06**
CC..-09T3..	12 x 12	130	**SCLCL-1212X-09**	**SCLCR-1212X-09**
	12 x 12	90	**SCLCL-1212G-09**	**SCLCR-1212G-09**
	12.7 x 12.7	130	**SCLCL-12.7X-09**	**SCLCR-12.7X-09**
	16 x 16	130	**SCLCL-1616X-09**	**SCLCR-1616X-09**
	16 x 16	75	**SCLCL-1616F-09**	**SCLCR-1616F-09**
	20 x 20	120	**SCLCL-2020X-09**	**SCLCR-2020X-09**



SCL



				L	R
Plaquettes WSP Inserts	A x B	L	L1	Art. N°	Art. N°
CC..-0602..	10 x 10	110	21	**SCLCL-1010J-06-JET**	**SCLCR-1010J-06-JET**
	12 x 12	110	21	**SCLCL-1212J-06-JET**	**SCLCR-1212J-06-JET**
	12.7 x 12.7	110	21	**SCLCL-12.7J-06-JET**	**SCLCR-12.7J-06-JET**
	16 x 16	110	21	**SCLCL-1616J-06-JET**	**SCLCR-1616J-06-JET**
CC..-09T3..	12 x 12	110	21	**SCLCL-1212J-09-JET**	**SCLCR-1212J-09-JET**
	12.7 x 12.7	110	21	**SCLCL-12.7J-09-JET**	**SCLCR-12.7J-09-JET**
	16 x 16	110	21	**SCLCL-1616J-09-JET**	**SCLCR-1616J-09-JET**
	20 x 20	110	21	**SCLCL-2020J-09-JET**	**SCLCR-2020J-09-JET**

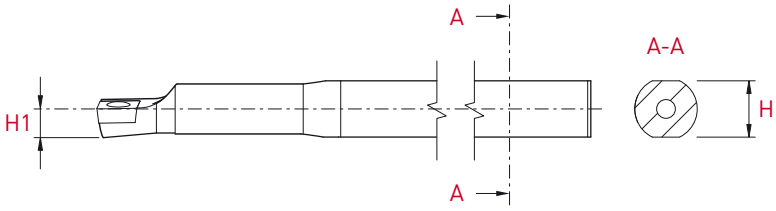
A-SCLCR/L

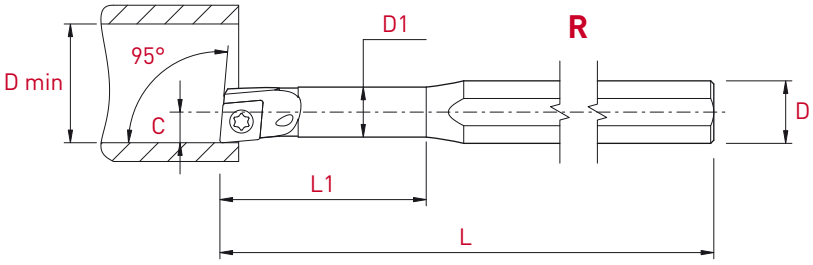
80°

Porte-outils intérieurs amincis
Verjüngte Innenhalter
Thinned internal holders



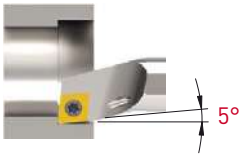
SCL



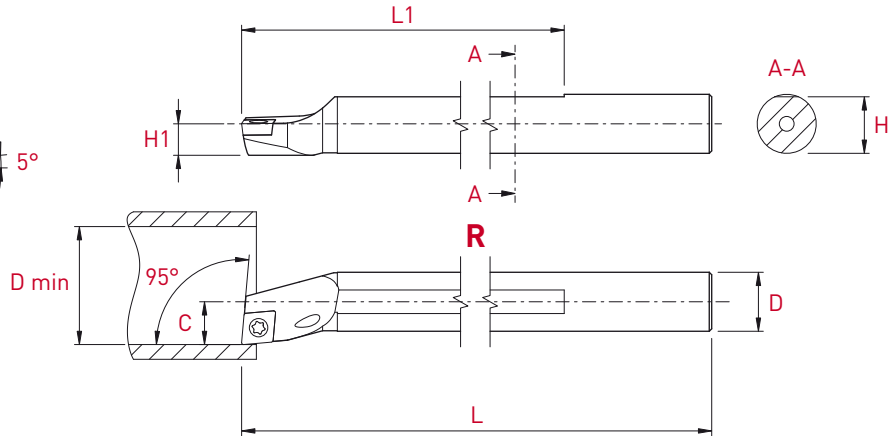


	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	D min	D1	C	H1	L	L1	H	Art. N°	Art. N°
CC..-0602..	8	8	6	4	4	100	25	7	**A0608H-SCLCL-06**	**A0608H-SCLCR-06**
	10	12	8	6	5	110	32	9	**A0810J-SCLCL-06**	**A0810J-SCLCR-06**
	12	14	10	7	6	125	38	11	**A1012K-SCLCL-06**	**A1012K-SCLCR-06**

	Pièces de rechange Ersatzteile Spare parts	Options
Pour barres d'alésage Für Borstange For boring bar	Art. N°	Art. N°
A0608H_ / A0810J_	**V-M2.5X4.8-T8**	**C-T8**
A1012K_	**V-M2.5X5.8-T8**	

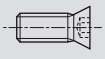
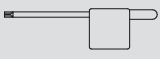


SCL



	Acier / Stahl / Steel							L	R
Plaquettes WSP Inserts	D	D min	C	H1	L	L1	H	Art. N°	Art. N°
CC..-0602	8	11	5	4	80	74	7.5	**A08F-SCLCL-06**	**A08F-SCLCR-06**
	10	13	7	5	100	85	9.5	**A10H-SCLCL-06**	**A10H-SCLCR-06**
	12	16	9	6	125	95	11.5	**A12K-SCLCL-06**	**A12K-SCLCR-06**
CC..-09T3	16	20	11	8	150	117	15.5	**A16M-SCLCL-09**	**A16M-SCLCR-09**

	Carbure de tungstène / Hartmetall / Solid carbide								
	D	D min	C	H1	L	L1	H	Art. N°	Art. N°
CC..-0602	8	9	5	4	125	-	7.5	**E08K-SCLCL-06**	**E08K-SCLCR-06**
	10	11	6	5	125	-	9.5	**E10K-SCLCL-06**	**E10K-SCLCR-06**
	12	13	8	6	150	-	11.5	**E12M-SCLCL-06**	**E12M-SCLCR-06**

	Pièces de rechange Ersatzteile Spare parts	Options
Pour barres d'alésage Für Borstange For boring bar		
	Art. N°	Art. N°
A08F_ / E08K_	**V-M2.5X4.8-T8**	**C-T8**
A10H_ /E10H_	**V-M2.5X5.8-T8**	**C-T8**
A16M_	**V-M3.5X7.2-T15-ISO**	**C-T15**

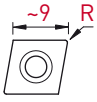




CCGT FN-X8

R	Art. N°	PVD TiAlN	PVD TiN	PVD HTA	non revêtu K20	non revêtu K10
0.05	CCGT-0602005-FN-X8	●	●	●	●	●
0.1	CCGT-060201-FN-X8	●	●	●	●	●
0.2	CCGT-060202-FN-X8	●	●	●	●	●
0.4	CCGT-060204-FN-X8	●	●	●	●	●
0.05	CCGT-09T3005-FN-X8	●	●	●	●	●
0.1	CCGT-09T301-FN-X8	●	●	●	●	●
0.2	CCGT-09T302-FN-X8	●	●	●	●	●
0.4	CCGT-09T304-FN-X8	●	●	●	●	●





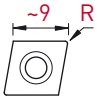




CCGT ENP-X8

R	Art. N°	PVD TiAlN	PVD TiN	non revêtu K20
0.05	CCGT-0602005-ENP-X8	●	●	●
0.1	CCGT-060201-ENP-X8	●	●	●
0.2	CCGT-060202-ENP-X8	●	●	●
0.4	CCGT-060204-ENP-X8	●	●	●
0.05	CCGT-09T3005-ENP-X8	●	●	●
0.1	CCGT-09T301-ENP-X8	●	●	●
0.2	CCGT-09T302-ENP-X8	●	●	●
0.4	CCGT-09T304-ENP-X8	●	●	●





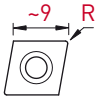




CCGT FN-X17

R	Art. N°	PVD ST	PVD TiAlN	PVD TiN	PVD HST	PVD HTA	non revêtu K20	non revêtu K10
0.05	CCGT-0602005-FN-X17	●	●	●	●	●	●	●
0.1	CCGT-060201-FN-X17	●	●	●	●	●	●	●
0.2	CCGT-060202-FN-X17	●	●	●	●	●	●	●
0.4	CCGT-060204-FN-X17	●	●	●	●	●	●	●
0.05	CCGT-09T3005-FN-X17	●	●	●	●	●	●	●
0.1	CCGT-09T301-FN-X17	●	●	●	●	●	●	●
0.2	CCGT-09T302-FN-X17	●	●	●	●	●	●	●
0.4	CCGT-09T304-FN-X17	●	●	●	●	●	●	●
0.8	CCGT-09T308-FN-X17	●	●	●	●	●	●	●





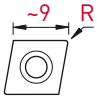




CCGT ENP-X17

R	Art. N°	PVD ST	PVD TiAlN	PVD TiN	non revêtu K20
0.05	CCGT-0602005-ENP-X17	●	●	●	●
0.1	CCGT-060201-ENP-X17	●	●	●	●
0.2	CCGT-060202-ENP-X17	●	●	●	●
0.4	CCGT-060204-ENP-X17	●	●	●	●
0.05	CCGT-09T3005-ENP-X17	●	●	●	●
0.1	CCGT-09T301-ENP-X17	●	●	●	●
0.2	CCGT-09T302-ENP-X17	●	●	●	●
0.4	CCGT-09T304-ENP-X17	●	●	●	●
0.8	CCGT-09T308-ENP-X17	●		●	●









CCGT FN-X25

R	Art. N°	PVD TiAlN	PVD TiN	PVD HTA	non revêtu K20	non revêtu K10
0.05	CCGT-0602005-FN-X25	●	●	●	●	●
0.1	CCGT-060201-FN-X25	●	●	●	●	●
0.2	CCGT-060202-FN-X25	●	●	●	●	●
0.4	CCGT-060204-FN-X25	●	●	●	●	●
0.05	CCGT-09T3005-FN-X25	●	●	●	●	●
0.1	CCGT-09T301-FN-X25	●	●	●	●	●
0.2	CCGT-09T302-FN-X25	●	●	●	●	●
0.4	CCGT-09T304-FN-X25	●	●	●	●	●
0.8	CCGT-09T308-FN-X25	●	●	●	●	●





CCGT ENP-X25

R	Art. N°	PVD TiAlN	PVD TiN	non revêtu K20
0.05	CCGT-0602005-ENP-X25	●	●	●
0.1	CCGT-060201-ENP-X25	●	●	●
0.2	CCGT-060202-ENP-X25	●	●	●
0.4	CCGT-060204-ENP-X25	●	●	●
0.05	CCGT-09T3005-ENP-X25	●	●	●
0.1	CCGT-09T301-ENP-X25	●	●	●
0.2	CCGT-09T302-ENP-X25	●	●	●
0.4	CCGT-09T304-ENP-X25	●	●	●
0.8	CCGT-09T308-ENP-X25	●	●	●

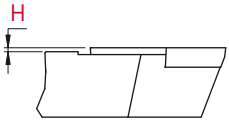




CCGT
ENP-X20

R	H	Art. N°	PVD ZTA	PVD HTiX
0.1	0.2	CCGT-060201-ENP-X20	●	
0.2	0.2	CCGT-060202-ENP-X20	●	●
0.4	0.2	CCGT-060204-ENP-X20	●	●
0.1	0.25	CCGT-09T301-ENP-X20	●	
0.2	0.25	CCGT-09T302-ENP-X20	●	●
0.4	0.25	CCGT-09T304-ENP-X20	●	●
0.8	0.25	CCGT-09T308-ENP-X20	●	●









CCMT EN-XF3

R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC
0.1	CCMT-060201-EN-XF3	●	●
0.2	CCMT-060202-EN-XF3	●	●
0.4	CCMT-060204-EN-XF3	●	●
0.1	CCMT-09T301-EN-XF3	●	●
0.2	CCMT-09T302-EN-XF3	●	●
0.4	CCMT-09T304-EN-XF3	●	●





CCMT EN-XF2

R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC	CVD P M HTi5
0.2	CCMT-060202-EN-XF2	●	●	●
0.4	CCMT-060204-EN-XF2	●	●	●
0.2	CCMT-09T302-EN-XF2	●	●	●
0.4	CCMT-09T304-EN-XF2	●	●	●





CCMT EN-MF2

R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC	CVD P M Ti5	CVD P M HTi5
0.2	CCMT-060202-EN-MF2	●	●	●	●
0.4	CCMT-060204-EN-MF2	●	●	●	●
0.2	CCMT-09T302-EN-MF2	●	●	●	●
0.4	CCMT-09T304-EN-MF2	●	●	●	●
0.8	CCMT-09T308-EN-MF2	●	●	●	●





CCMT EN-MF

R	Art. N°	PVD P M Tmax	CVD P M Ti4	CVD P M S Ti7
~6 R				
0.2	CCMT-060202-EN-MF	●	●	●
0.4	CCMT-060204-EN-MF	●	●	●
~9 R				
0.2	CCMT-09T302-EN-MF	●	●	●
0.4	CCMT-09T304-EN-MF	●	●	●





CCMT EN-HF3

R	Art. N°	PVD P M TiX	PVD P M HTiX	CVD P M S Ti6
~6 R				
0.2	CCMT-060202-EN-HF3	●	●	●
0.4	CCMT-060204-EN-HF3	●	●	●
~9 R				
0.2	CCMT-09T302-EN-HF3	●	●	●
0.4	CCMT-09T304-EN-HF3	●	●	●
0.8	CCMT-09T308-EN-HF3	●	●	●





CCMT EN-HF

R	Art. N°	PVD P M Tmax	PVD P M TAC	CVD P M Ti4	CVD P M Ti5	CVD P M HTi5
~6 R						
0.2	CCMT-060202-EN-HF		●		●	●
0.4	CCMT-060204-EN-HF	●	●	●	●	●
0.8	CCMT-060208-EN-HF	●	●	●	●	●
~9 R						
0.2	CCMT-09T302-EN-HF		●		●	●
0.4	CCMT-09T304-EN-HF	●	●	●	●	●
0.8	CCMT-09T308-EN-HF	●	●	●	●	●





CCGT FN-X8

R	Art. N°	CERMET PVD CTA	CERMET non revêtu unbeschichtet uncoated CN6
~6 R			
0.05	CCGT-0602005-FN-X8	●	●
0.1	CCGT-060201-FN-X8	●	●
0.2	CCGT-060202-FN-X8	●	●
~9 R			
0.05	CCGT-09T3005-FN-X8	●	●
0.1	CCGT-09T301-FN-X8	●	●
0.2	CCGT-09T302-FN-X8	●	●
0.4	CCGT-09T304-FN-X8	●	●





CCGT ENP-KX

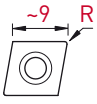
R	Art. N°	CERMET PVD CT7	CERMET PVD HCT7	CERMET non revêtu unbeschichtet uncoated CN6
~6 R				
0.1	CCGT-060201-ENP-KX	●	●	●
0.2	CCGT-060202-ENP-KX	●	●	●
0.4	CCGT-060204-ENP-KX	●	●	●
~9 R				
0.1	CCGT-09T301-ENP-KX	●	●	●
0.2	CCGT-09T302-ENP-KX	●	●	●
0.4	CCGT-09T304-ENP-KX	●	●	●





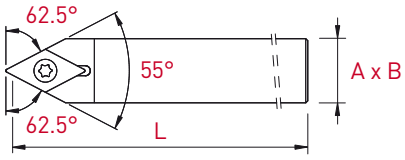
CCMT EN-KM





R	Art. N°	CERMET		
		PVD		non revêtu unbeschichtet uncoated
		P M	P M	P
		CT7	HCT7	CN6
0.2	CCMT-060202-EN-KM	●	●	●
0.4	CCMT-060204-EN-KM	●	●	●
0.2	CCMT-09T302-EN-KM	●	●	●
0.4	CCMT-09T304-EN-KM	●	●	●
0.8	CCMT-09T308-EN-KM	●	●	●

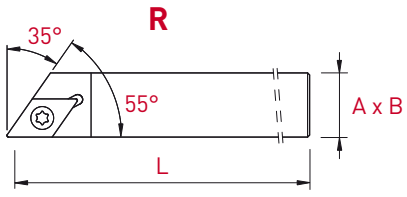




SDN

Plaquettes WSP Inserts	A x B	L	Art. N°
DC..-0702..	8 x 8	115	**SDNCN-0808X-07**
	10 x 10	115	**SDNCN-1010X-07**
	12 x 12	130	**SDNCN-1212X-07**
	12 x 12	90	**SDNCN-1212G-07**
	12.7 x 12.7	130	**SDNCN-12.7X-07**
	16 x 16	130	**SDNCN-1616X-07**
	16 x 16	75	**SDNCN-1616F-07**
DC..-11T3..	12 x 12	130	**SDNCN-1212X-11**
	12 x 12	90	**SDNCN-1212G-11**
	12.7 x 12.7	130	**SDNCN-12.7X-11**
	16 x 16	130	**SDNCN-1616X-11**
	16 x 16	75	**SDNCN-1616F-11**
	20 x 20	120	**SDNCN-2020X-11**



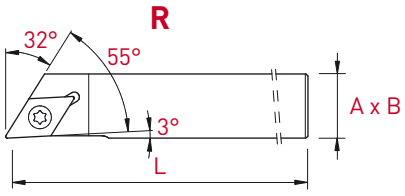


SDA

Plaquettes WSP Inserts	A x B	L	L **Art. N°**	R **Art. N°**
DC..-0702..	8 x 8	115	**SDACL-0808X-07**	**SDACR-0808X-07**
	10 x 10	115	**SDACL-1010X-07**	**SDACR-1010X-07**
	12 x 12	130	**SDACL-1212X-07**	**SDACR-1212X-07**
	12 x 12	90	**SDACL-1212G-07**	**SDACR-1212G-07**
	12.7 x 12.7	130	**SDACL-12.7X-07**	**SDACR-12.7X-07**
	16 x 16	130	**SDACL-1616X-07**	**SDACR-1616X-07**
	16 x 16	75	**SDACL-1616F-07**	**SDACR-1616F-07**
DC..-11T3..	12 x 12	130	**SDACL-1212X-11**	**SDACR-1212X-11**
	12 x 12	90	**SDACL-1212G-11**	**SDACR-1212G-11**
	12.7 x 12.7	130	**SDACL-12.7X-11**	**SDACR-12.7X-11**
	16 x 16	130	**SDACL-1616X-11**	**SDACR-1616X-11**
	16 x 16	75	**SDACL-1616F-11**	**SDACR-1616F-11**
	20 x 20	120	**SDACL-2020X-11**	**SDACR-2020X-11**



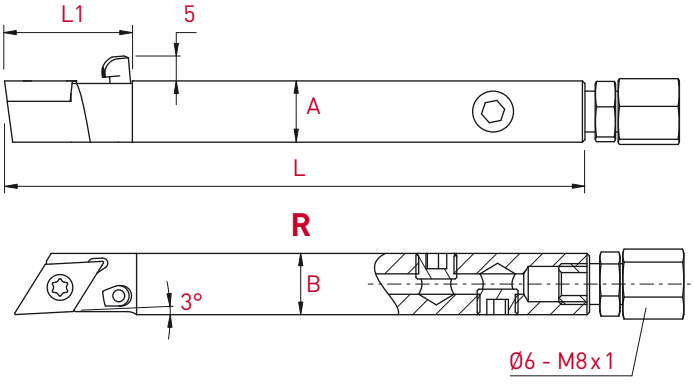
SDJ



			L	R
Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
DC..-0702..	8 x 8	115	SDJCL-0808X-07	SDJCR-0808X-07
	10 x 10	115	SDJCL-1010X-07	SDJCR-1010X-07
	12 x 12	130	SDJCL-1212X-07	SDJCR-1212X-07
	12 x 12	90	SDJCL-1212G-07	SDJCR-1212G-07
	12.7 x 12.7	130	SDJCL-12.7X-07	SDJCR-12.7X-07
	16 x 16	130	SDJCL-1616X-07	SDJCR-1616X-07
	16 x 16	75	SDJCL-1616F-07	SDJCR-1616F-07
	20 x 20	120	SDJCL-2020X-07	SDJCR-2020X-07
DC..-11T3..	12 x 12	130	SDJCL-1212X-11	SDJCR-1212X-11
	12 x 12	90	SDJCL-1212G-11	SDJCR-1212G-11
	12.7 x 12.7	130	SDJCL-12.7X-11	SDJCR-12.7X-11
	16 x 16	130	SDJCL-1616X-11	SDJCR-1616X-11
	16 x 16	75	SDJCL-1616F-11	SDJCR-1616F-11
	20 x 20	120	SDJCL-2020X-11	SDJCR-2020X-11

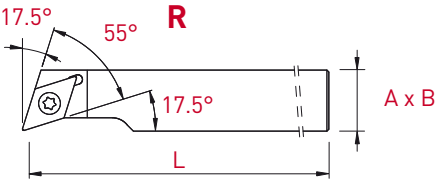


SDJ



				L	R
Plaquettes WSP Inserts	A x B	L	L1	Art. N°	Art. N°
DC..-0702..	10 x 10	110	20	**SDJCL-1010J-07-JET**	**SDJCR-1010J-07-JET**
	12 x 12	110	20	**SDJCL-1212J-07-JET**	**SDJCR-1212J-07-JET**
	12.7 x 12.7	110	20	**SDJCL-12.7J-07-JET**	**SDJCR-12.7J-07-JET**
	16 x 16	110	20	**SDJCL-1616J-07-JET**	**SDJCR-1616J-07-JET**
	20 x 20	110	20	**SDJCL-2020J-07-JET**	**SDJCR-2020J-07-JET**
DC..-11T3..	12 x 12	110	23	**SDJCL-1212J-11-JET**	**SDJCR-1212J-11-JET**
	12.7 x 12.7	110	23	**SDJCL-12.7J-11-JET**	**SDJCR-12.7J-11-JET**
	16 x 16	110	23	**SDJCL-1616J-11-JET**	**SDJCR-1616J-11-JET**
	20 x 20	110	23	**SDJCL-2020J-11-JET**	**SDJCR-2020J-11-JET**



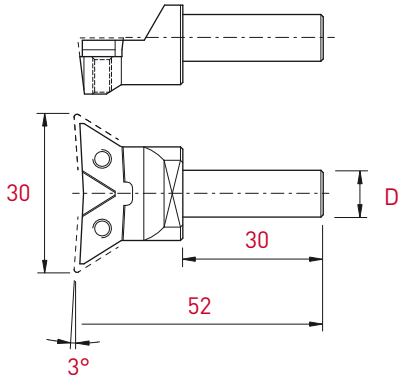


SDH

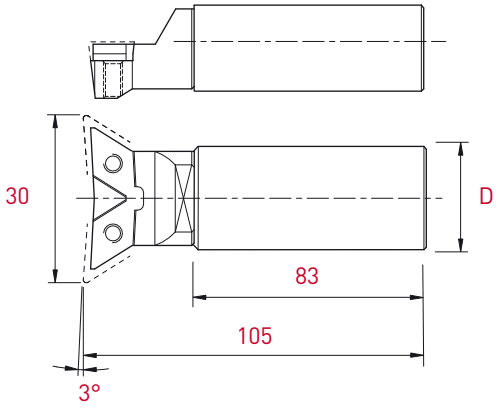
Plaquettes WSP Inserts	A x B	L	L **Art. N°**	R **Art. N°**
DC..-0702..	10 x 10	115	**SDHCL-1010X-07**	**SDHCR-1010X-07**
	12 x 12	130	**SDHCL-1212X-07**	**SDHCR-1212X-07**
	12 x 12	90	**SDHCL-1212G-07**	**SDHCR-1212G-07**
	12.7 x 12.7	130	**SDHCL-12.7X-07**	**SDHCR-12.7X-07**
	16 x 16	130	**SDHCL-1616X-07**	**SDHCR-1616X-07**
	16 x 16	75	**SDHCL-1616F-07**	**SDHCR-1616F-07**
DC..-11T3..	16 x 16	130	**SDHCL-1616X-11**	**SDHCR-1616X-11**
	16 x 16	75	**SDHCL-1616F-11**	**SDHCR-1616F-11**
	20 x 20	120	**SDHCL-2020X-11**	**SDHCR-2020X-11**



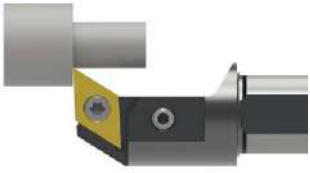
SDU



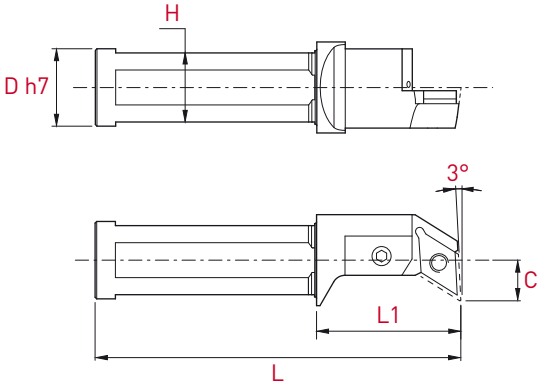
Plaquettes WSP Inserts	D	Art. N°
DC..-11T3..	10	**SDUC-D10X-11**



Plaquettes WSP Inserts	D	Art. N°
DC..-11T3..	20	**SDUC-D20X-11**
	25.4	**SDUC-D25.4X-11**

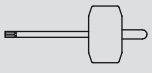


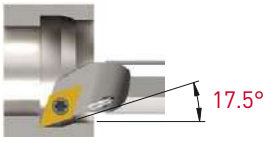
SDUCL



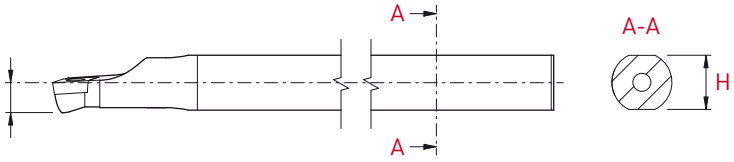
Plaquettes WSP Inserts	D	C	H	L	L1	Art. N°
DC..-11T3..	19.05	10	17	90	35.5	**SDUCL-D19.05-90-11-JET**
DC..-11T3..	20	10	17	90	35.5	**SDUCL-D20-90-11-JET**

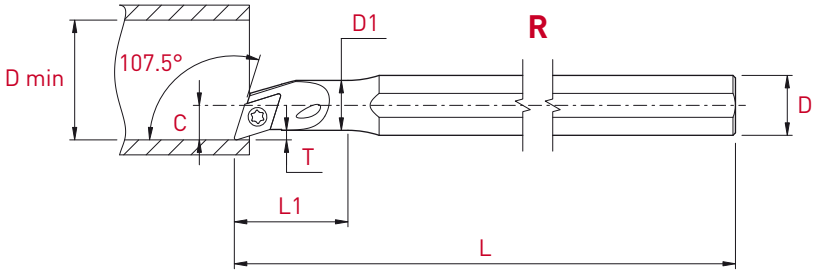
Pièces de rechange Ersatzteile Spare parts	
	
Art. N°	**Art. N°**
V-M4X9-T15	**V-M5x5-BN24**

Options	
	
Art. N°	**Art. N°**
C-T15	**JS-M5-D4**

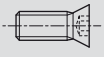
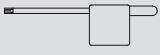


SDQ





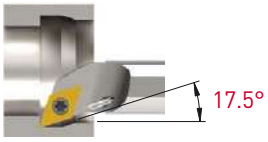
	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	D min	D1	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	12.5	8	2.4	7	5	100	22	9	**A0810H-SDQCL-07**	**A0810H-SDQCR-07**
	12	15.5	10	2.9	9	6	125	28	11	**A1012K-SDQCL-07**	**A1012K-SDQCR-07**

	Pièces de rechange Ersatzteile Spare parts	Options
Pour barres d'alésage Für Borstange For boring bar		
	Art. N°	**Art. N°**
A0810H_	**V-M2.5X4.8-T8**	**C-T8**
A1012K_	**V-M2.5X5.8-T8**	

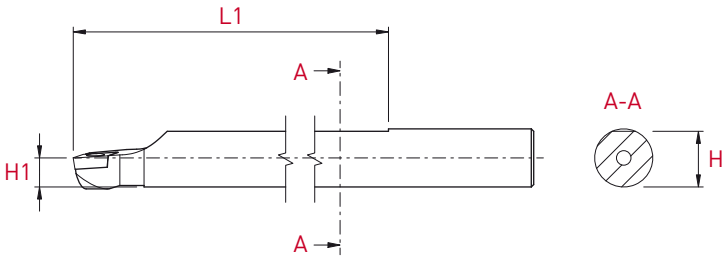
A-SDQCR/L
E-SDQCR/L

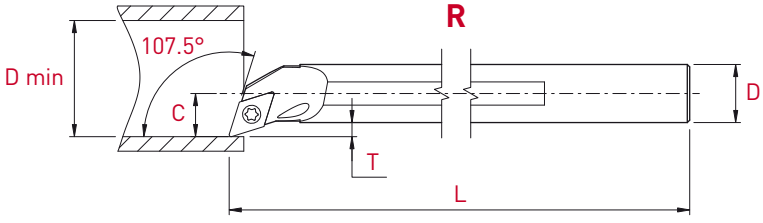
55°

Porte-outils intérieurs
Innenhalter
Internal holders



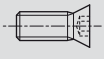
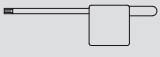
SDQ

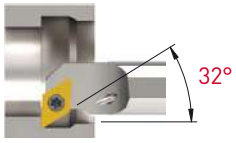




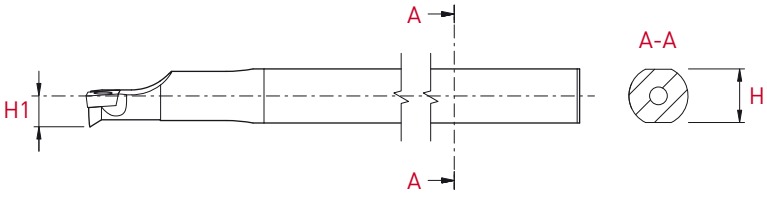
	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	14	2.4	7	4.5	100	85	9.5	**A10H-SDQCL-07**	**A10H-SDQCR-07**
	12	17	2.9	9	6	125	95	11.5	**A12K-SDQCL-07**	**A12K-SDQCR-07**
	16	21	2.9	11	8	150	117	15.5	**A16M-SDQCL-07**	**A16M-SDQCR-07**

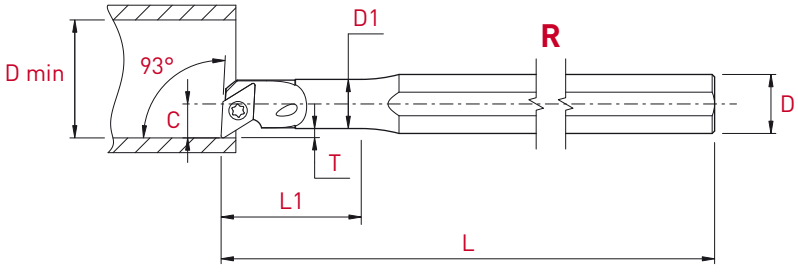
	Carbure de tungstène / Hartmetall / Solid carbide									
	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	13	2.4	7.5	5	125	-	9.5	**E10K-SDQCL-07**	**E10K-SDQCR-07**
	12	17	2.9	9	6	150	-	11.5	**E12M-SDQCL-07**	**E12M-SDQCR-07**

Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	**Art. N°**
V-M2.5X5.8-T8	**C-T8**

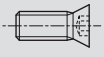
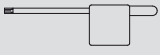


SDU





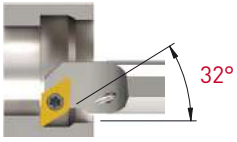
	Acier / Stahl / Steel									L	R
Plaquettes WSP Inserts	D	D min	D1	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	12.5	8	1.9	7	5	100	22	9	**A0810H-SDUCL-07**	**A0810H-SDUCR-07**
	12	15.5	10	2.9	9	6	125	28	11	**A1012K-SDUCL-07**	**A1012K-SDUCR-07**

	Pièces de rechange Ersatzteile Spare parts	Options
Pour barres d'alésage Für Borstange For boring bar		
	Art. N°	Art. N°
A0810H_	**V-M2.5X4.8-T8**	**C-T8**
A1012K_	**V-M2.5X5.8-T8**	

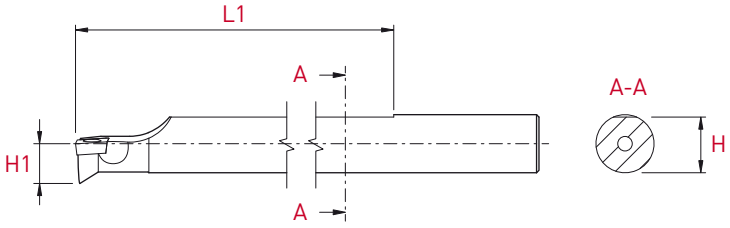
A-SDUCR/L
E-SDUCR/L

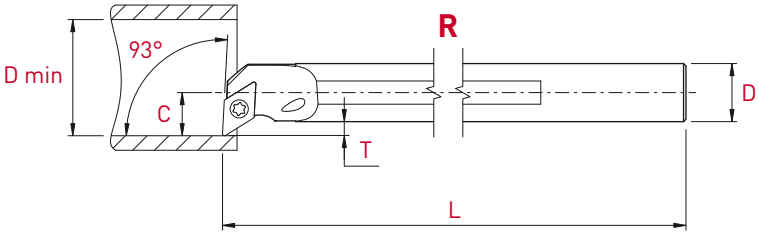
55°

Porte-outils intérieurs
Innenhalter
Internal holders



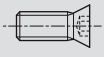
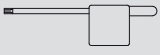
SDU





	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	14	1.9	7	5	100	85	9.5	**A10H-SDUCL-07**	**A10H-SDUCR-07**
	12	17	2.9	9	6	125	95	11.5	**A12K-SDUCL-07**	**A12K-SDUCR-07**
	16	21	2.9	11	8	150	117	15.5	**A16M-SDUCL-07**	**A16M-SDUCR-07**

	Carbure de tungstène / Hartmetall / Solid carbide									
	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	14	1.9	7	5	125	-	9.5	**E10K-SDUCL-07**	**E10K-SDUCR-07**
	12	17	2.9	9	6	150	-	11.5	**E12M-SDUCL-07**	**E12M-SDUCR-07**

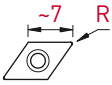
Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	**Art. N°**
V-M2.5X5.8-T8	**C-T8**

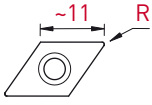




DCGT FN-X8

		PVD					non revêtu unbeschichtet uncoated	
		P M N S	P M S	P M N	P M N S	P M S	N S	N S
R	Art. N°	TiAlN	TiAlX	TiN	HTA	HTAX	K20	K10
0.05	DCGT-0702005-FN-X8	●	●	●	●	●	●	●
0.08	DCGT-0702008-FN-X8	●	●		●	●	●	●
0.1	DCGT-070201-FN-X8	●	●	●	●	●	●	●
0.15	DCGT-0702015-FN-X8	●	●		●	●	●	●
0.2	DCGT-070202-FN-X8	●	●	●	●	●	●	●
0.4	DCGT-070204-FN-X8	●	●	●	●	●	●	●
0.05	DCGT-11T3005-FN-X8	●	●	●	●	●	●	●
0.08	DCGT-11T3008-FN-X8	●	●		●	●	●	●
0.1	DCGT-11T301-FN-X8	●	●	●	●	●	●	●
0.15	DCGT-11T3015-FN-X8	●	●		●	●	●	●
0.2	DCGT-11T302-FN-X8	●	●	●	●	●	●	●
0.4	DCGT-11T304-FN-X8	●	●	●	●	●	●	●



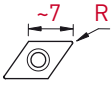


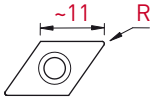




DCGT ENP-X8

		PVD		non revêtu unbeschichtet uncoated
		P M N S	P M N	N
R	Art. N°	TiAlN	TiN	K20
0.05	DCGT-0702005-ENP-X8	●	●	●
0.08	DCGT-0702008-ENP-X8	●		●
0.1	DCGT-070201-ENP-X8	●	●	●
0.15	DCGT-0702015-ENP-X8	●		●
0.2	DCGT-070202-ENP-X8	●	●	●
0.4	DCGT-070204-ENP-X8	●	●	●
0.05	DCGT-11T3005-ENP-X8	●	●	●
0.08	DCGT-11T3008-ENP-X8	●		●
0.1	DCGT-11T301-ENP-X8	●	●	●
0.15	DCGT-11T3015-ENP-X8	●		●
0.2	DCGT-11T302-ENP-X8	●	●	●
0.4	DCGT-11T304-ENP-X8	●	●	●



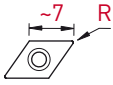


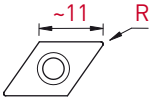




DCGT FN-X17

R	Art. N°	PVD ST	PVD TiAlN	PVD TiAlX	PVD TiN	PVD HST	PVD HTA	PVD HTAX	non revêtu K20	non revêtu K10
0.05	DCGT-0702005-FN-X17	●	●	●	●	●	●	●	●	●
0.08	DCGT-0702008-FN-X17	●	●	●		●	●	●	●	●
0.1	DCGT-070201-FN-X17	●	●	●	●	●	●	●	●	●
0.15	DCGT-0702015-FN-X17	●	●	●		●	●	●	●	●
0.2	DCGT-070202-FN-X17	●	●	●	●	●	●	●	●	●
0.4	DCGT-070204-FN-X17	●	●	●	●	●	●	●	●	●
0.05	DCGT-11T3005-FN-X17	●	●	●	●	●	●	●	●	●
0.08	DCGT-11T3008-FN-X17	●	●	●		●	●	●	●	●
0.1	DCGT-11T301-FN-X17	●	●	●	●	●	●	●	●	●
0.15	DCGT-11T3015-FN-X17	●	●	●		●	●	●	●	●
0.2	DCGT-11T302-FN-X17	●	●	●	●	●	●	●	●	●
0.4	DCGT-11T304-FN-X17	●	●	●	●	●	●	●	●	●
0.8	DCGT-11T308-FN-X17	●	●	●	●	●	●	●	●	●



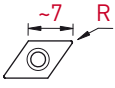


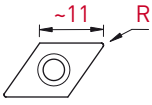




DCGT ENP-X17

R	Art. N°	PVD ST	PVD TiAlN	PVD TiN	non revêtu K20
0.05	DCGT-0702005-ENP-X17	●	●	●	●
0.08	DCGT-0702008-ENP-X17	●	●		●
0.1	DCGT-070201-ENP-X17	●	●	●	●
0.15	DCGT-0702015-ENP-X17	●	●		●
0.2	DCGT-070202-ENP-X17	●	●	●	●
0.4	DCGT-070204-ENP-X17	●	●	●	●
0.05	DCGT-11T3005-ENP-X17	●	●	●	●
0.08	DCGT-11T3008-ENP-X17	●	●		●
0.1	DCGT-11T301-ENP-X17	●	●	●	●
0.15	DCGT-11T3015-ENP-X17	●	●		●
0.2	DCGT-11T302-ENP-X17	●	●	●	●
0.4	DCGT-11T304-ENP-X17	●	●	●	●
0.8	DCGT-11T308-ENP-X17	●	●	●	●



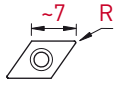


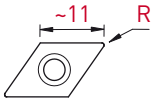




DCGT FN-X25

R	Art. N°	PVD P M N S TiAlN	PVD P M N S TiN	PVD P M N S	non revêtu unbeschichtet uncoated N K20	non revêtu unbeschichtet uncoated N K10
0.05	DCGT-0702005-FN-X25	●	●	●	●	●
0.1	DCGT-070201-FN-X25	●	●	●	●	●
0.2	DCGT-070202-FN-X25	●	●	●	●	●
0.4	DCGT-070204-FN-X25	●	●	●	●	●
0.05	DCGT-11T3005-FN-X25	●	●	●	●	●
0.1	DCGT-11T301-FN-X25	●	●	●	●	●
0.2	DCGT-11T302-FN-X25	●	●	●	●	●
0.4	DCGT-11T304-FN-X25	●	●	●	●	●
0.8	DCGT-11T308-FN-X25	●	●	●	●	●



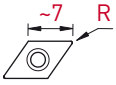


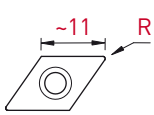




DCGT ENP-X25

R	Art. N°	PVD P M N S TiAlN	PVD P M N S TiAlX	PVD P M N S TiN	non revêtu unbeschichtet uncoated N K20
0.05	DCGT-0702005-ENP-X25	●	●	●	●
0.1	DCGT-070201-ENP-X25	●	●	●	●
0.2	DCGT-070202-ENP-X25	●	●	●	●
0.4	DCGT-070204-ENP-X25	●	●	●	●
0.05	DCGT-11T3005-ENP-X25	●	●	●	●
0.1	DCGT-11T301-ENP-X25	●	●	●	●
0.2	DCGT-11T302-ENP-X25	●	●	●	●
0.4	DCGT-11T304-ENP-X25	●	●	●	●
0.8	DCGT-11T308-ENP-X25	●	●	●	●

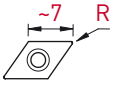


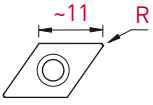




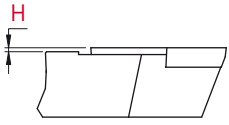


DCGT ENP-X20





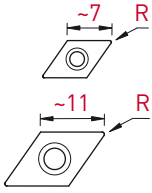
R	H	Art. N°	PVD ZTA	PVD HTiX
0.1	0.2	DCGT-070201-ENP-X20	●	
0.2	0.2	DCGT-070202-ENP-X20	●	●
0.4	0.2	DCGT-070204-ENP-X20	●	●
0.1	0.25	DCGT-11T301-ENP-X20	●	
0.2	0.25	DCGT-11T302-ENP-X20	●	●
0.4	0.25	DCGT-11T304-ENP-X20	●	●
0.8	0.25	DCGT-11T308-ENP-X20	●	●







DCMT EN-XF3

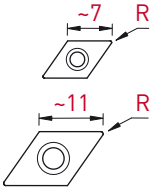


R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC
0.1	DCMT-070201-EN-XF3	●	●
0.2	DCMT-070202-EN-XF3	●	●
0.4	DCMT-070204-EN-XF3	●	●
0.1	DCMT-11T301-EN-XF3	●	●
0.2	DCMT-11T302-EN-XF3	●	●
0.4	DCMT-11T304-EN-XF3	●	●





DCMT EN-XF2

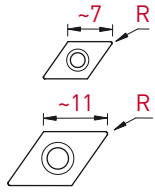


R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC	CVD P M HTi5
0.2	DCMT-070202-EN-XF2	●	●	●
0.4	DCMT-070204-EN-XF2	●	●	●
0.2	DCMT-11T302-EN-XF2	●	●	●
0.4	DCMT-11T304-EN-XF2	●	●	●





DCMT EN-MF2



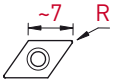
R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC	CVD P M Ti5	CVD P M HTi5
0.2	DCMT-070202-EN-MF2	●	●	●	●
0.4	DCMT-070204-EN-MF2	●	●	●	●
0.2	DCMT-11T302-EN-MF2	●	●	●	●
0.4	DCMT-11T304-EN-MF2	●	●	●	●
0.8	DCMT-11T308-EN-MF2	●	●	●	●

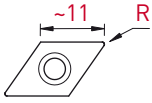




DCMT EN-MF

R	Art. N°	PVD P M Tmax	CVD P M Ti4	CVD P S Ti7
0.2	DCMT-070202-EN-MF	●	●	●
0.4	DCMT-070204-EN-MF	●	●	●
0.2	DCMT-11T302-EN-MF	●	●	●
0.4	DCMT-11T304-EN-MF	●	●	●



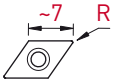


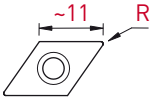




DCMT EN-HF3

R	Art. N°	PVD P M TiX	PVD P M HTiX	CVD P M Ti6
0.2	DCMT-070202-EN-HF3	●	●	●
0.4	DCMT-070204-EN-HF3	●	●	●
0.2	DCMT-11T302-EN-HF3	●	●	●
0.4	DCMT-11T304-EN-HF3	●	●	●
0.8	DCMT-11T308-EN-HF3	●	●	●



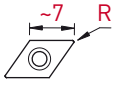


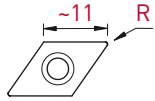




DCMT EN-HF

R	Art. N°	PVD P M Tmax	PVD P M TAC	CVD P M Ti4	CVD P M Ti5	CVD P M HTi5
0.2	DCMT-070202-EN-HF		●		●	●
0.4	DCMT-070204-EN-HF	●	●	●	●	●
0.8	DCMT-070208-EN-HF	●	●	●	●	●
0.2	DCMT-11T302-EN-HF		●		●	●
0.4	DCMT-11T304-EN-HF	●	●	●	●	●
0.8	DCMT-11T308-EN-HF	●	●	●	●	●

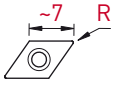
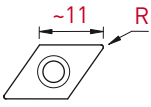








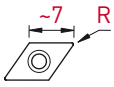
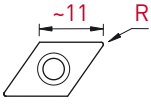
DCGT FN-X8

R	Art. N°	CERMET PVD CTA	CERMET non revêtu uncoated CN6
			
0.05	DCGT-0702005-FN-X8	●	●
0.1	DCGT-070201-FN-X8	●	●
0.2	DCGT-070202-FN-X8	●	●
			
0.05	DCGT-11T3005-FN-X8	●	●
0.1	DCGT-11T301-FN-X8	●	●
0.2	DCGT-11T302-FN-X8	●	●
0.4	DCGT-11T304-FN-X8	●	●

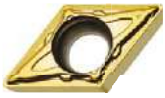




DCGT ENP-KX

R	Art. N°	CERMET PVD CT7	CERMET PVD HCT7	CERMET non revêtu uncoated CN6
				
0.1	DCGT-070201-ENP-KX	●	●	●
0.2	DCGT-070202-ENP-KX	●	●	●
0.4	DCGT-070204-ENP-KX	●	●	●
				
0.1	DCGT-11T301-ENP-KX	●	●	●
0.2	DCGT-11T302-ENP-KX	●	●	●
0.4	DCGT-11T304-ENP-KX	●	●	●

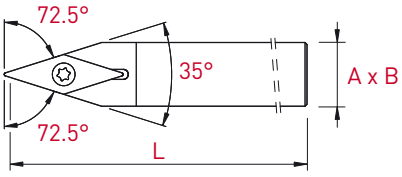




DCMT EN-KM

		CERMET		
		PVD		non revêtu unbeschichtet uncoated
		P M	P M	P
R	Art. N°	CT7	HCT7	CN6
~7 R				
0.2	**DCMT-070202-EN-KM**	●	●	●
0.4	**DCMT-070204-EN-KM**	●	●	●
~11 R				
0.2	**DCMT-11T302-EN-KM**	●	●	●
0.4	**DCMT-11T304-EN-KM**	●	●	●
0.8	**DCMT-11T308-EN-KM**	●	●	●

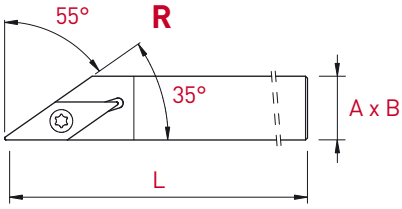




SVV

Plaquettes WSP Inserts	A x B	L	Art. N°
VC..-1103..	8 x 8	115	**SVVCN-0808X-11**
	10 x 10	115	**SVVCN-1010X-11**
	12 x 12	130	**SVVCN-1212X-11**
	12 x 12	90	**SVVCN-1212G-11**
	12.7 x 12.7	130	**SVVCN-12.7X-11**
	16 x 16	130	**SVVCN-1616X-11**
	16 x 16	75	**SVVCN-1616F-11**
	20 x 20	120	**SVVCN-2020X-11**
VC..-1303..	8 x 10	115	**SVVCN-0810X-13**
	10 x 10	115	**SVVCN-1010X-13**
	12 x 12	130	**SVVCN-1212X-13**
	12 x 12	90	**SVVCN-1212G-13**
	12.7 x 12.7	130	**SVVCN-12.7X-13**
	16 x 16	130	**SVVCN-1616X-13**
	16 x 16	75	**SVVCN-1616F-13**
	20 x 20	120	**SVVCN-2020X-13**
VC..-1604..	12 x 12	130	**SVVCN-1212X-16**
	12 x 12	90	**SVVCN-1212G-16**
	12.7 x 12.7	130	**SVVCN-12.7X-16**
	16 x 16	130	**SVVCN-1616X-16**
	16 x 16	75	**SVVCN-1616F-16**
	20 x 20	120	**SVVCN-2020X-16**

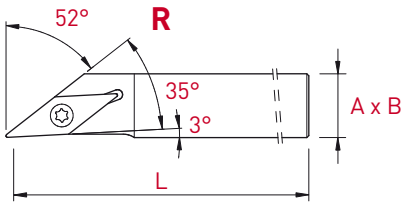




SVA

Plaquettes WSP Inserts	A x B	L	L Art. N°	R Art. N°
VC..-1103..	8 x 8	115	**SVACL-0808X-11**	**SVACR-0808X-11**
	10 x 10	115	**SVACL-1010X-11**	**SVACR-1010X-11**
	12 x 12	130	**SVACL-1212X-11**	**SVACR-1212X-11**
	12 x 12	90	**SVACL-1212G-11**	**SVACR-1212G-11**
	12.7 x 12.7	130	**SVACL-12.7X-11**	**SVACR-12.7X-11**
	16 x 16	130	**SVACL-1616X-11**	**SVACR-1616X-11**
	16 x 16	75	**SVACL-1616F-11**	**SVACR-1616F-11**
	20 x 20	120	**SVACL-2020X-11**	**SVACR-2020X-11**
VC..-1604..	12 x 12	130	**SVACL-1212X-16**	**SVACR-1212X-16**
	12 x 12	90	**SVACL-1212G-16**	**SVACR-1212G-16**
	12.7 x 12.7	130	**SVACL-12.7X-16**	**SVACR-12.7X-16**
	16 x 16	130	**SVACL-1616X-16**	**SVACR-1616X-16**
	16 x 16	75	**SVACL-1616F-16**	**SVACR-1616F-16**
	20 x 20	120	**SVACL-2020X-16**	**SVACR-2020X-16**





SVJ

			L	R
Plaquettes WSP Inserts	A x B	L	**Art. N°**	**Art. N°**
VC..-1103..	8 x 8	115	**SVJCL-0808X-11**	**SVJCR-0808X-11**
	10 x 10	115	**SVJCL-1010X-11**	**SVJCR-1010X-11**
	12 x 12	130	**SVJCL-1212X-11**	**SVJCR-1212X-11**
	12 x 12	90	**SVJCL-1212G-11**	**SVJCR-1212G-11**
	12.7 x 12.7	130	**SVJCL-12.7X-11**	**SVJCR-12.7X-11**
	16 x 16	130	**SVJCL-1616X-11**	**SVJCR-1616X-11**
	16 x 16	75	**SVJCL-1616F-11**	**SVJCR-1616F-11**
	20 x 20	120	**SVJCL-2020X-11**	**SVJCR-2020X-11**
VC..-1303..	8 x 10	115	**SVJCL-0810X-13**	**SVJCR-0810X-13**
	10 x 10	115	**SVJCL-1010X-13**	**SVJCR-1010X-13**
	12 x 12	130	**SVJCL-1212X-13**	**SVJCR-1212X-13**
	12 x 12	90	**SVJCL-1212G-13**	**SVJCR-1212G-13**
	12.7 x 12.7	130	**SVJCL-12.7X-13**	**SVJCR-12.7X-13**
	16 x 16	130	**SVJCL-1616X-13**	**SVJCR-1616X-13**
	16 x 16	75	**SVJCL-1616F-13**	**SVJCR-1616F-13**
	20 x 20	120	**SVJCL-2020X-13**	**SVJCR-2020X-13**
VC..-1604..	12 x 12	130	**SVJCL-1212X-16**	**SVJCR-1212X-16**
	12 x 12	90	**SVJCL-1212G-16**	**SVJCR-1212G-16**
	12.7 x 12.7	130	**SVJCL-12.7X-16**	**SVJCR-12.7X-16**
	16 x 16	130	**SVJCL-1616X-16**	**SVJCR-1616X-16**
	16 x 16	75	**SVJCL-1616F-16**	**SVJCR-1616F-16**
	20 x 20	120	**SVJCL-2020X-16**	**SVJCR-2020X-16**

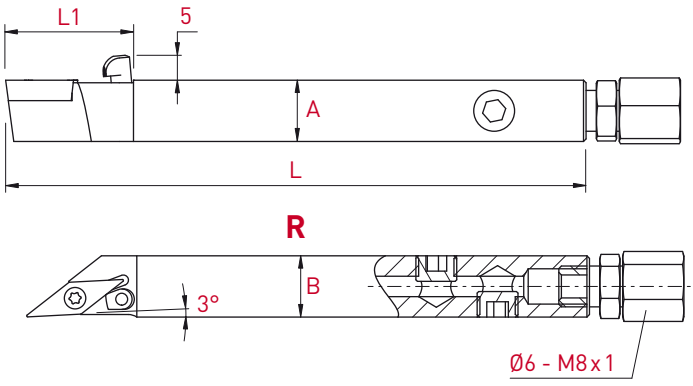
SVJ-JET

35°

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply



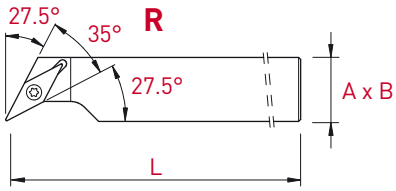
SVJ



Plaquettes WSP Inserts	A x B	L	L1	L Art. N°	R Art. N°
VC..-1103..	10 x 10	110	21	SVJCL-1010J-11-JET	SVJCR-1010J-11-JET
	12 x 12	110	21	SVJCL-1212J-11-JET	SVJCR-1212J-11-JET
	12.7 x 12.7	110	21	SVJCL-12.7J-11-JET	SVJCR-12.7J-11-JET
	16 x 16	110	21	SVJCL-1616J-11-JET	SVJCR-1616J-11-JET
	20 x 20	110	21	SVJCL-2020J-11-JET	SVJCR-2020J-11-JET
VC..-1303..	10 x 10	110	26	SVJCL-1010J-13-JET	SVJCR-1010J-13-JET
	12 x 12	110	26	SVJCL-1212J-13-JET	SVJCR-1212J-13-JET
	12.7 x 12.7	110	26	SVJCL-12.7J-13-JET	SVJCR-12.7J-13-JET
	16 x 16	110	26	SVJCL-1616J-13-JET	SVJCR-1616J-13-JET
	20 x 20	110	26	SVJCL-2020J-13-JET	SVJCR-2020J-13-JET
VC..-1604..	12 x 12	110	30	SVJCL-1212J-16-JET	SVJCR-1212J-16-JET
	12.7 x 12.7	110	30	SVJCL-12.7J-16-JET	SVJCR-12.7J-16-JET
	16 x 16	110	30	SVJCL-1616J-16-JET	SVJCR-1616J-16-JET
	20 x 20	110	30	SVJCL-2020J-16-JET	SVJCR-2020J-16-JET



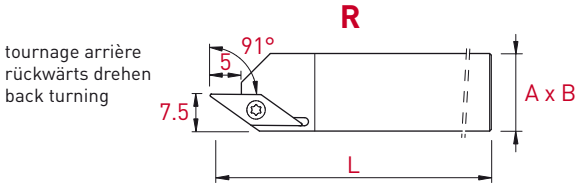
SVX



			L	R
Plaquettes WSP Inserts	A x B	L	**Art. N°**	**Art. N°**
VC..-1103..	16 x 16	130	**SVXCL-1616X-11**	**SVXCR-1616X-11**
	16 x 16	75	**SVXCL-1616F-11**	**SVXCR-1616F-11**
	20 x 20	120	**SVXCL-2020X-11**	**SVXCR-2020X-11**

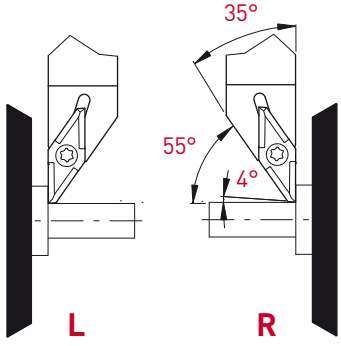


SV-CL/R

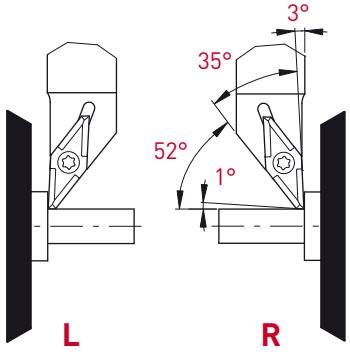


			L	R
Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
VC**G**..-1103..	12 x 12	130	**SV-CL-1212X-11**	**SV-CR-1212X-11**
	12 x 12	90	**SV-CL-1212G-11**	**SV-CR-1212G-11**
	12.7 x 12.7	130	**SV-CL-12.7X-11**	**SV-CR-12.7X-11**
	16 x 16	130	**SV-CL-1616X-11**	**SV-CR-1616X-11**
	16 x 16	75	**SV-CL-1616F-11**	**SV-CR-1616F-11**
	20 x 20	120	**SV-CL-2020X-11**	**SV-CR-2020X-11**

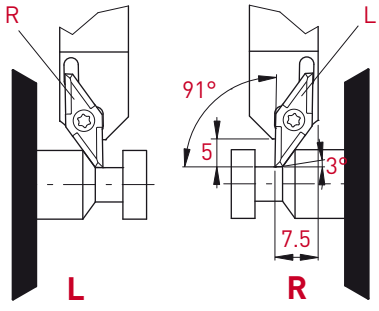
Porte-outils compatibles avec plaquettes VCGT ELP/ERP-FL/FR-X10°
Passende Halter zu den Wendeplatten VCGT ELP/ERP-FL/FR-X10°
Holders compatible with inserts VCGT ELP/ERP-FL/FR-X10°



	Art. N°
R	SVACR-...-11
L	SVACL-...-11



	Art. N°
R	SVJCR-...-11
L	SVJCL-...-11

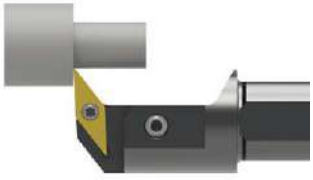


	Art. N°
R	SV-CR-...-11
L	SV-CL-...-11

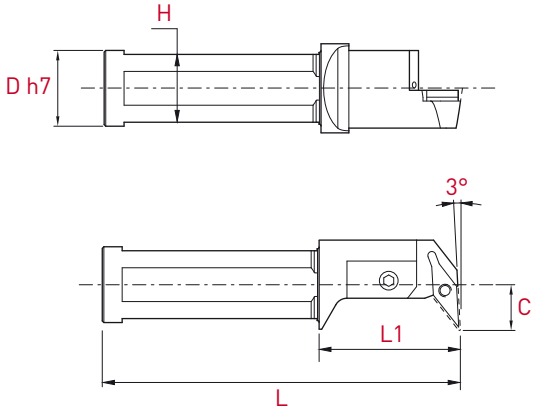
SVUCL-JET

35°

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

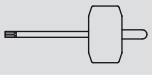


SVUCL



Plaquettes WSP Inserts	D	C	H	L	L1	Art. N°
VC..-1103..	19.05	10	17	90	35.5	**SVUCL-D19.05-90-11-JET**
VC..-1103..	20	10	17	90	35.5	**SVUCL-D20-90-11-JET**

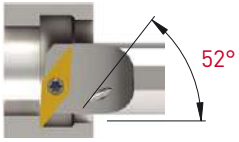
Pièces de rechange Ersatzteile Spare parts	
	
Art. N°	**Art. N°**
V-M4X9-T15	**V-M5x5-BN24**

Options	
	
Art. N°	**Art. N°**
C-T15	**JS-M5-D4**

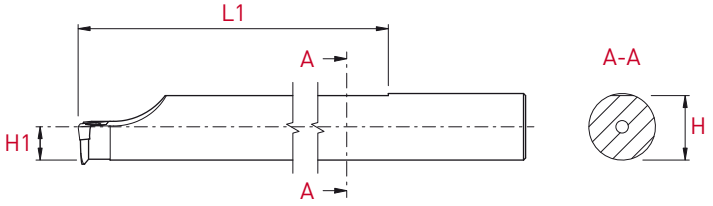
Porte-outils intérieurs
Innenhalter
Internal holders

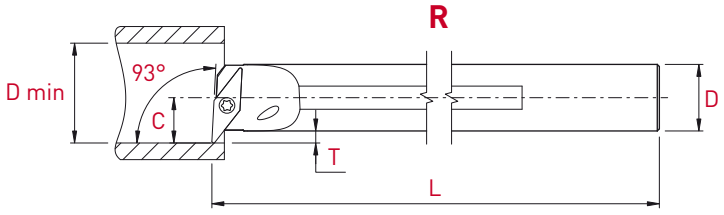
35°

A-SVUCR/L

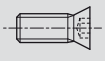
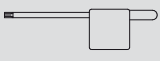


SVU





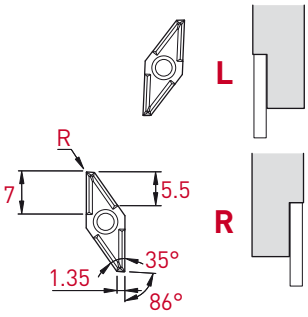
	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	Dmin	T	C	H1	L	L1	H	Art. N°	Art. N°
VC..-1103	16	21	3.1	11	8	150	118	15.5	A16M-SVUCL-11	A16M-SVUCR-11

Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	Art. N°
V-M2.5X5.8-T8	C-T8





VCGT FL / FR-X10

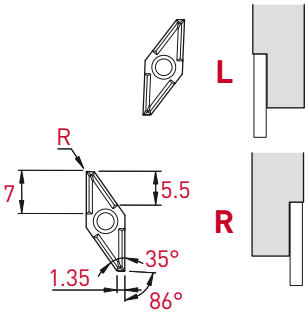


R	Art. N°	PVD ST	PVD TiAlN	PVD HTA	PVD TiAlX	PVD HTAX	PVD TiN	PVD HST	non revêtu K10	non revêtu K20
0.03	VCGT-1103003-FL-X10	●	●	●			●	●	●	●
0.08	VCGT-1103008-FL-X10	●	●	●			●	●	●	●
0.1	VCGT-110301-FL-X10	●	●	●			●	●	●	●
0.2	VCGT-110302-FL-X10	●	●	●			●	●	●	●
0.03	VCGT-1103003-FR-X10	●	●	●	●	●	●	●	●	●
0.08	VCGT-1103008-FR-X10	●	●	●	●	●	●	●	●	●
0.1	VCGT-110301-FR-X10	●	●	●	●	●	●	●	●	●
0.2	VCGT-110302-FR-X10	●	●	●	●	●	●	●	●	●





VCGT ELP/ERP-X10



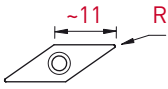
R	Art. N°	PVD ST	PVD TiAlN	PVD HTA	PVD TiAlX	PVD HTAX	PVD TiN	non revêtu K10	non revêtu K20
0.03	VCGT-1103003-ELP-X10	●	●	●			●	●	●
0.08	VCGT-1103008-ELP-X10	●	●	●			●	●	●
0.1	VCGT-110301-ELP-X10	●	●	●			●	●	●
0.2	VCGT-110302-ELP-X10	●	●	●			●	●	●
0.03	VCGT-1103003-ERP-X10	●	●	●	●	●	●	●	●
0.08	VCGT-1103008-ERP-X10	●	●	●	●	●	●	●	●
0.1	VCGT-110301-ERP-X10	●	●	●	●	●	●	●	●
0.2	VCGT-110302-ERP-X10	●	●	●	●	●	●	●	●





VCGT FN-K18

R	Art. N°	PVD P M N S HTA	PVD P M N HTiN	non revêtu unbeschichtet uncoated N S K10
0.05	VCGT-1103005-FN-K18	●	●	●
0.1	VCGT-110301-FN-K18	●	●	●
0.2	VCGT-110302-FN-K18	●	●	●
0.4	VCGT-110304-FN-K18	●	●	●

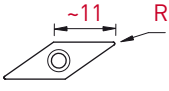






VCGW FN-0

R	Art. N°	PVD P N HTA	PVD P N HTiN	non revêtu unbeschichtet uncoated N K10
0.05	VCGW-1103005-FN-0	●	●	●
0.1	VCGW-110301-FN-0	●	●	●
0.2	VCGW-110302-FN-0	●	●	●
0.4	VCGW-110304-FN-0	●	●	●







VCGT FN-X8

R	Art. N°	PVD TiAlN	PVD TiAlX	PVD TiN	PVD HTA	PVD HTAX	non revêtu K20	non revêtu K10
		P M N S	P M	P M N	P M N S	P M S	N S	N S
0.05	VCGT-1103005-FN-X8	●	●	●	●	●	●	●
0.08	VCGT-1103008-FN-X8	●	●		●	●	●	●
0.1	VCGT-110301-FN-X8	●	●	●	●	●	●	●
0.15	VCGT-1103015-FN-X8	●	●		●	●	●	●
0.2	VCGT-110302-FN-X8	●	●	●	●	●	●	●
0.4	VCGT-110304-FN-X8	●	●	●	●	●	●	●
0.05	VCGT-1303005-FN-X8	●		●	●		●	●
0.1	VCGT-130301-FN-X8	●		●	●		●	●
0.2	VCGT-130302-FN-X8	●		●	●		●	●
0.4	VCGT-130304-FN-X8	●		●	●		●	●
0.05	VCGT-1604005-FN-X8	●		●	●		●	●
0.1	VCGT-160401-FN-X8	●		●	●		●	●
0.2	VCGT-160402-FN-X8	●		●	●		●	●
0.4	VCGT-160404-FN-X8	●		●	●		●	●





VCGT ENP-X8

R	Art. N°	PVD TiAlN	PVD TiN	non revêtu K20
		P M N S	P M N	N
0.05	VCGT-1103005-ENP-X8	●	●	●
0.08	VCGT-1103008-ENP-X8	●		●
0.1	VCGT-110301-ENP-X8	●	●	●
0.15	VCGT-1103015-ENP-X8	●		●
0.2	VCGT-110302-ENP-X8	●	●	●
0.4	VCGT-110304-ENP-X8	●	●	●
0.05	VCGT-1303005-ENP-X8	●		●
0.1	VCGT-130301-ENP-X8	●		●
0.2	VCGT-130302-ENP-X8	●		●
0.4	VCGT-130304-ENP-X8	●		●
0.05	VCGT-1604005-ENP-X8	●	●	●
0.1	VCGT-160401-ENP-X8	●	●	●
0.2	VCGT-160402-ENP-X8	●	●	●
0.4	VCGT-160404-ENP-X8	●	●	●

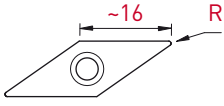




VCGT FN-X17

R	Art. N°	PVD ST	PVD TiAlN	PVD TiN	PVD HST	PVD HTA	PVD HTAX	non revêtu K20	non revêtu K10
0.05	VCGT-1103005-FN-X17	●	●	●	●	●	●	●	●
0.08	VCGT-1103008-FN-X17	●	●		●	●	●	●	●
0.1	VCGT-110301-FN-X17	●	●	●	●	●	●	●	●
0.15	VCGT-1103015-FN-X17	●	●		●	●	●	●	●
0.2	VCGT-110302-FN-X17	●	●	●	●	●	●	●	●
0.4	VCGT-110304-FN-X17	●	●	●	●	●	●	●	●
0.05	VCGT-1303005-FN-X17	●	●	●	●	●		●	●
0.1	VCGT-130301-FN-X17	●	●	●	●	●		●	●
0.2	VCGT-130302-FN-X17	●	●	●	●	●		●	●
0.4	VCGT-130304-FN-X17	●	●	●	●	●		●	●
0.05	VCGT-1604005-FN-X17	●	●	●	●	●		●	●
0.1	VCGT-160401-FN-X17	●	●	●	●	●		●	●
0.2	VCGT-160402-FN-X17	●	●	●	●	●		●	●
0.4	VCGT-160404-FN-X17	●	●	●	●	●		●	●
0.8	VCGT-160408-FN-X17	●	●	●	●	●		●	●



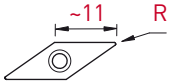


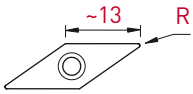


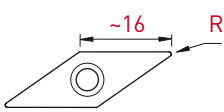


VCGT ENP-X17

R	Art. N°	PVD ST	PVD TiAlN	PVD TiN	non revêtu K20
0.05	VCGT-1103005-ENP-X17	●	●	●	●
0.08	VCGT-1103008-ENP-X17	●	●		●
0.1	VCGT-110301-ENP-X17	●	●	●	●
0.15	VCGT-1103015-ENP-X17	●	●		●
0.2	VCGT-110302-ENP-X17	●	●	●	●
0.4	VCGT-110304-ENP-X17	●	●	●	●
0.05	VCGT-1303005-ENP-X17	●	●		●
0.1	VCGT-130301-ENP-X17	●	●		●
0.2	VCGT-130302-ENP-X17	●	●		●
0.4	VCGT-130304-ENP-X17	●	●		●
0.05	VCGT-1604005-ENP-X17	●	●	●	●
0.1	VCGT-160401-ENP-X17	●	●	●	●
0.2	VCGT-160402-ENP-X17	●	●	●	●
0.4	VCGT-160404-ENP-X17	●	●	●	●
0.8	VCGT-160408-ENP-X17	●	●	●	●



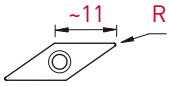
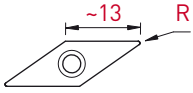
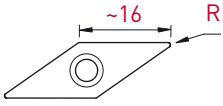








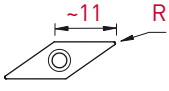
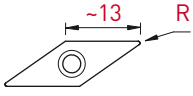
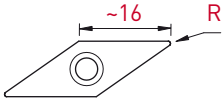
VCGT FN-X25

R	Art. N°	PVD P M N S TiAlN	PVD P M N TiN	PVD P M N S HTA	non revêtu unbeschichtet uncoated N K20	non revêtu unbeschichtet uncoated N K10
						
0.05	VCGT-1103005-FN-X25	●	●	●	●	●
0.1	VCGT-110301-FN-X25	●	●	●	●	●
0.2	VCGT-110302-FN-X25	●	●	●	●	●
0.4	VCGT-110304-FN-X25	●	●	●	●	●
						
0.05	VCGT-1303005-FN-X25	●	●	●	●	●
0.1	VCGT-130301-FN-X25	●	●	●	●	●
0.2	VCGT-130302-FN-X25	●	●	●	●	●
0.4	VCGT-130304-FN-X25	●	●	●	●	●
0.8	VCGT-130308-FN-X25	●	●	●	●	●
						
0.05	VCGT-1604005-FN-X25	●	●	●	●	●
0.1	VCGT-160401-FN-X25	●	●	●	●	●
0.2	VCGT-160402-FN-X25	●	●	●	●	●
0.4	VCGT-160404-FN-X25	●	●	●	●	●
0.8	VCGT-160408-FN-X25	●	●	●	●	●





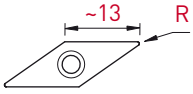
VCGT ENP-X25

R	Art. N°	PVD P M N S TiAlN	PVD P M S TiAlX	PVD P M N TiN	non revêtu unbeschichtet uncoated N K20
					
0.05	VCGT-1103005-ENP-X25	●	●	●	●
0.1	VCGT-110301-ENP-X25	●	●	●	●
0.2	VCGT-110302-ENP-X25	●	●	●	●
0.4	VCGT-110304-ENP-X25	●	●	●	●
					
0.05	VCGT-1303005-ENP-X25	●			●
0.1	VCGT-130301-ENP-X25	●			●
0.2	VCGT-130302-ENP-X25	●			●
0.4	VCGT-130304-ENP-X25	●			●
0.8	VCGT-130308-ENP-X25	●			●
					
0.05	VCGT-1604005-ENP-X25	●		●	●
0.1	VCGT-160401-ENP-X25	●		●	●
0.2	VCGT-160402-ENP-X25	●		●	●
0.4	VCGT-160404-ENP-X25	●		●	●
0.8	VCGT-160408-ENP-X25	●		●	●

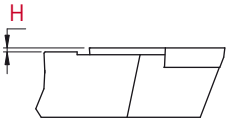




VCGT ENP-X20



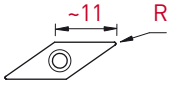
R	H	Art. N°	PVD ZTA	PVD HTiX
0.2	0.25	**VCGT-130302-ENP-X20**	●	●
0.4	0.25	**VCGT-130304-ENP-X20**	●	●
0.8	0.25	**VCGT-130308-ENP-X20**	●	●







VCMT EN-XF3

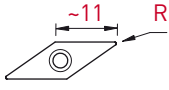


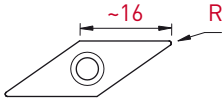
R	Art. N°	PVD TAC	PVD HTAC
0.1	VCMT-110301-EN-XF3	●	●
0.2	VCMT-110302-EN-XF3	●	●
0.4	VCMT-110304-EN-XF3	●	●





VCMT EN-XF2





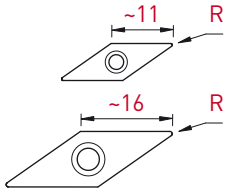
R	Art. N°	PVD TAC	PVD HTAC	CVD HTi5
0.2	VCMT-110302-EN-XF2	●	●	●
0.4	VCMT-110304-EN-XF2	●	●	●
0.4	VCMT-160404-EN-XF2	●	●	●





VCMT EN-MF

R	Art. N°	PVD	CVD	
		P M	P M	P M S
		Tmax	Ti4	Ti7
0.2	VCMT-110302-EN-MF	●	●	●
0.4	VCMT-110304-EN-MF	●	●	●
0.4	VCMT-160404-EN-MF	●	●	●

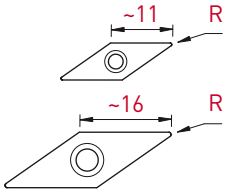






VCMT EN-HF

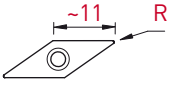
R	Art. N°	PVD	CVD
		P M	P M
		Tmax	Ti4
0.4	VCMT-110304-EN-HF	●	●
0.8	VCMT-110308-EN-HF	●	●
0.4	VCMT-160404-EN-HF	●	●
0.8	VCMT-160408-EN-HF	●	●



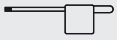
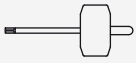




VCGT FN-X8



R	Art. N°	CERMET PVD CTA	CERMET non revêtu unbeschichtet uncoated CN6
0.05	**VCGT-1103005-FN-X8**	●	●
0.1	**VCGT-110301-FN-X8**	●	●
0.2	**VCGT-110302-FN-X8**	●	●
0.4	**VCGT-110304-FN-X8**	●	●

	Porte-outils Halter Holders	Vis Schrauben Screw	Options Clé Schlüssel Key	 Clé dynamométrique Drehmomentschlüssel Torque wrench	Serrage Drehmoment Torque
Vis de rechange **Ersatzschrauben** **Spare screws**	Series SC...-06 Series SD...-07 Series SV...-11	**V-M2.5X7.8-T8** 	**C-T8** 	**SET-NM1.5-TX8**	1.3 Nm
	Series SV...-13	**V-M3X7.3-T8-ISO** 			2.0 Nm
	Series SC...-09 Series SD...-11 Series SV...-16	**V-M4X9-T15-ISO** 	**C-T15** 	**SET-NM3.0-TX15**	3.0 Nm

		 *	 *	 *
	L Pour réf. Für Ref. For ref.	**Art. N°**	**Art. N°**	**Art. N°**
Pièces de rechange JET **Ersatzteile JET** **Spare parts JET**	S...L-10...-JET	**JJL-4X12-D1.5**	**J-M8X1-D6**	**JB-M8X1**
	S...L-12...-JET S...L-12.7...-JET	**JJL-4X14-D1.5**		
	S...L-16...-JET S...L-20...-JET	**JJL-4X17-D1.5**		
	R Pour réf. Für Ref. For ref.	 *	 *	 *
		Art. N°	**Art. N°**	**Art. N°**
	S...R-10...-JET	**JJR-4X12-D1.5**	**J-M8X1-D6**	**JB-M8X1**
	S...R-12...-JET S...R-12.7...-JET	**JJR-4X14-D1.5**		
	S...R-16...-JET S...R-20...-JET	**JJR-4X17-D1.5**		

* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

EVOCUT-Line



APPLITEC
CUTTING TOOLS

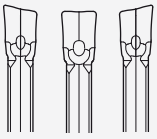
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	T	negative geometry	> 10.31
	TS	negative geometry	> 10.33
	A	strongly positive geometry	> 10.34

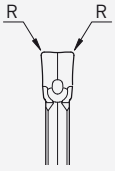
ET	20	-	U	R	-	8	00	Ou / Oder / Or F	-	TIALN

Angle de pointe
Spitzenwinkel
Point angle

L N R



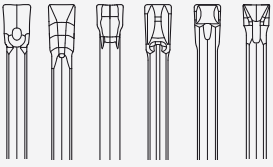
Rayon
Radius
Radius



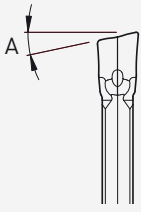
Nuance
Sorte
Grade

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

U J JS T TS A

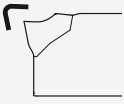


Valeur de l'angle de pointe
Wert des Spitzenwinkels
Value of the point angle



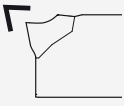
A
0°
6°
8°
12°
15°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

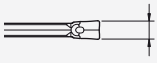
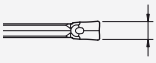
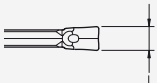
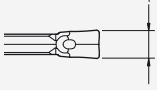


F

Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Epaisseur de coupe
Schnittbreite
Cutting thickness

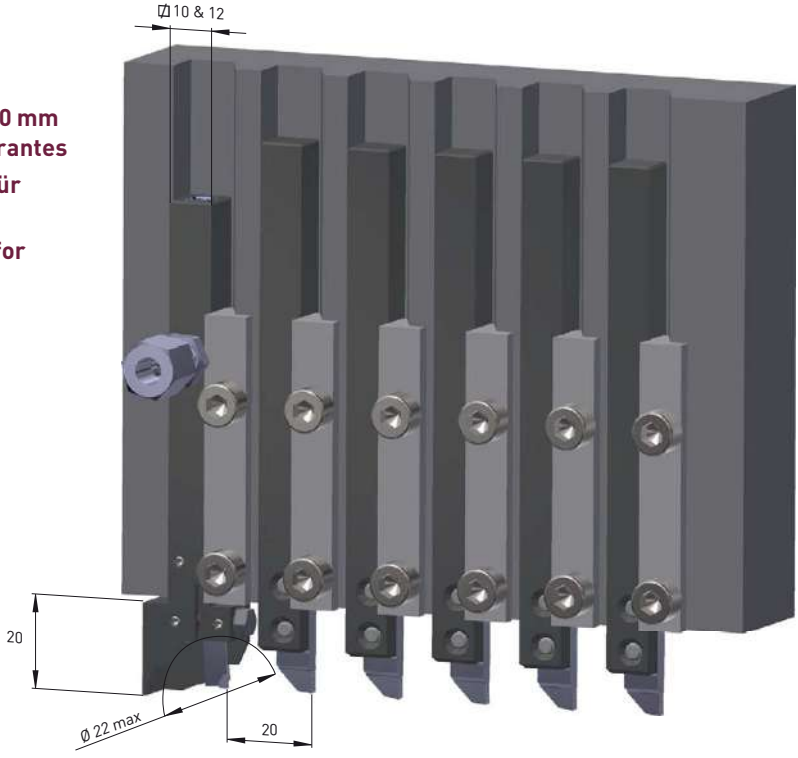
ET 15		1.5 mm	Ø max 32 mm
ET 20		2.0 mm	Ø max 44 mm
ET 25		2.5 mm	
ET 30		3.0 mm	

Applitec EVOCUT-Line	Système performant dédié pour le tronçonnage
Applitec EVOCUT-Line	Leistungsstarkes System für das Abstechen
Applitec EVOCUT-Line	High-performance system for cutting

Compact : seulement 20 mm pour les machines courantes

Kompakt : nur 20 mm für übliche Maschinen

Compact : only 20 mm for current machines



Facilité d'accès

Zugangsleichtigkeit

Excellent accessibility

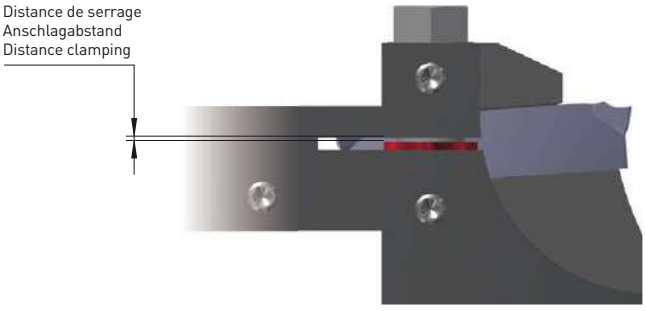


Changement de la plaquette sans démontage

Veränderung der Platte ohne Zerlegung

Change of insert without disassembly

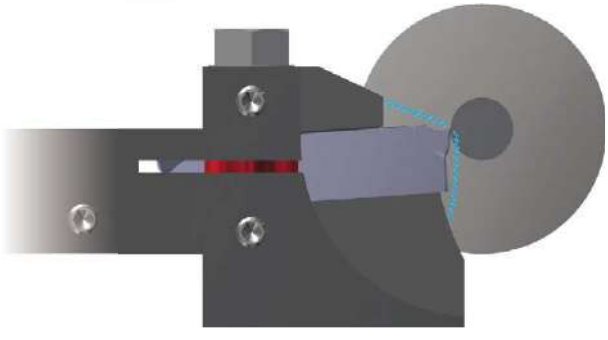
Butée de serrage
Spannungs-Anschlag
Clamping stop



Recommandations de serrage :
n'utiliser que la clé fournie
Spannungsempfehlungen :
nur den gelieferten Schlüssel benutzen
Tightening recommendation :
only use the delivered key



Support JET à double lubrification
JET Halter mit doppeltem Schmierung
Jet holder with double lubrification



Porte-outils / Halter / Holders

H

Système de serrage monobloc
Einteiliges Klemmsystem
Monobloc top clamp system



H JET

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply



H-HM-JET
GWS-HM
MS-HM
HSK

Porte-lames avec arrosage
Halter für Stechklinge mit Kühlung
Holder for parting-off blades with coolant



HM
HK
HUK

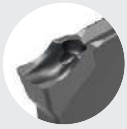
Lames
Stechklinge
Parting-off blades

Plaquettes / WSP / Inserts



U J JS T TS A

UN | UL UR



- géométrie positive universelle, faibles efforts de coupe
- bonne maîtrise du copeau
- 1er choix pour l'inox

- allgemeine Geometrie, geringe Schnittkräfte
- gute Spankontrolle
- 1. Wahl für rostfreiem Stahl

- all-round geometry, low cutting forces
- efficient chip control
- 1st choice for stainless steel

JN | JR



- géométrie universelle
- excellent rétrécissement du copeau pour un meilleur contrôle
- conseillé pour le tronçonnage de pièces à parois minces
- pour acier et inox

- allgemeine Geometrie
- ausgezeichnete Spanverschmälerung für eine bessere Spankontrolle
- für abstechen von dünnwandigen Teilen empfohlen
- für Stahl und rostfreiem Stahl

- all-round geometry
- very efficient arrow for a better chip control
- recommended for parting off of thin-walled parts
- for steel and stainless steel

JSN



- géométrie spéciale et étroite pour un meilleur contrôle du copeau
- recommandé pour l'acier avec faible taux de carbone, alliages Chrome nickel et acier 100Cr6

- spezielle und schmale Geometrie für eine bessere Spankontrolle
- empfohlen für Stahl mit niedrigem Kohlenstoffgehalt sowie Chrom-Nickel-Legierungen und 100Cr6-Stahl

- special and narrow geometry for better chip control
- recommended for low-carbon steel, chrome-nickel alloys and 100Cr6 steel

TN | TR

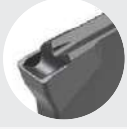


- géométrie négative
- utilisation dans des conditions de rigidité optimale
- pour les matières à haute ténacité
- universel pour les aciers et inox

- negative Geometrie
- bei stabilen Verhältnissen einsetzbar
- für hohe widerstandsfähige Rohstoffe
- allgemein für Stahl und rostfreiem Stahl

- negative geometry
- use in solid cutting conditions
- for high toughness material
- universal for steel and stainless steel

TSN

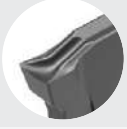


- géométrie négative similaire à TN pour avances modérées depuis 0.05mm/t
- conseillé pour les matières tenaces aciers et inox

- negative Geometrie ähnlich wie TN für moderate Vorschübe ab 0,05 mm/U
- Empfohlen für zähe Werkstoffe, Stahl und rostfreien Stahl

- negative geometry similar to TN for moderate feeds from 0.05 mm/rev
- recommended for tough materials, steel, and stainless steel

AN | AR



- géométrie fortement positive
- roule-copeaux poli avec arêtes de coupe vives
- 1er choix pour aluminium et matériaux non ferreux

- stark positive Geometrie
- geschliffene Spanrolle mit scharfe Schneidkanten
- 1. Wahl für Aluminium und Nichteisenmetalle

- very positive geometry
- polished chip roller with sharp cutting edge
- 1st choice for aluminium and non-ferrous materials

TiAlN



Revêtement PVD
PVD Beschichtung
PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- pour l'usinage des aciers, aciers inoxydables et alliages de titane
- 1er choix pour les avances faibles à modérées

- für die Bearbeitung von Stahl, rostfreien Stahl und Titanlegierungen
- erste Wahl für niedrige bis mittlere Vorschübe

- for machining of steel, stainless steel and titanium alloys
- first choice for low to average cutting speed

Tmax



Revêtement PVD
PVD Beschichtung
PVD coating

TF F M **E**

P ★★★★★
M ★★★★★
N ★★☆☆☆
S ★★☆☆☆

- nuance pour usinage moyen à lourd des aciers, aciers alliés et inoxydables
- bonne résistance aux températures d'usinage élevées
- 1er choix pour le tronçonnage des aciers au carbone et des aciers fortement alliés

- Sorte für mittlere bis hohe Belastung in Stahl und legierter Stahlbearbeitung
- gute Bearbeitungswarmfestigkeit
- erste Wahl für die Bearbeitung von legiertem Kohlenstahl und hoch legiertem Stahl

- grade for medium to heavy machining of steel, stainless steel and alloyed steel
- high machining heat resistance
- first choice for the machining of carbon steel and high alloyed steel

Zmax



Revêtement PVD
PVD Beschichtung
PVD coating

TF F M **E**

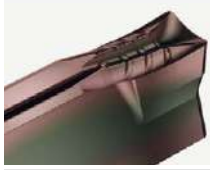
P ★★★★★
M ★★★★★
N ★★☆☆☆
S ★★☆☆☆

- pour l'usinage des aciers, aciers inoxydables et alliages de titane en conditions défavorables
- bonne résistance aux chocs à des vitesses de coupe moyennes à faibles
- 1er choix pour le tronçonnage en coupe interrompue

- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen in schwierige Bearbeitungsfälle
- gute Bruchfestigkeit mit durchschnittliche bis niedrige Schnittgeschwindigkeit
- erste Wahl für die Bearbeitung in unterbrochenen Schnitte

- for machining of steel, stainless steel and titanium alloys in unfavourable machining conditions
- good impact resistance with average to low cutting speed
- first choice for machining in interrupted cut

ZTi6



Revêtement CVD
CVD Beschichtung
CVD coating

TF F **M** E

P ★★★★★
M ★★★★☆
N ★☆☆☆☆
S ★★★☆☆

- nuance très tenace
- grande résistance à la température
- 1er choix pour les aciers « haute température »
- également recommandé pour les aciers inox

- sehr zähe Sorte
- hohe Bearbeitungswarmfestigkeit
- erste Wahl für „hohe Temperatur" Stähle
- auch für rostfreie Stähle empfohlen

- very strong grade
- good wear resistance
- first choice for "high temperature" steels
- also recommended for stainless steels

AC



Revêtement PVD
PVD Beschichtung
PVD coating

TF F **M** E

P ☆☆☆☆☆
M ☆☆☆☆☆
N ★★★★★
S ★★★★★

- nuance pour métaux non ferreux
- très faible coefficient de frottement
- 1er choix pour l'usinage des aluminiums, des cuivres et titanes faiblement alliés

- Sorte für Nichteisenmetalle
- sehr geringer Reibwert
- erste Wahl für die Bearbeitung von Aluminium, Kupfer und niedriglegiertem Titan

- grade for non-ferrous materials
- very low friction ratio
- first choice for Aluminium, copper and low alloyed titanium

N



Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- nuance non revêtue
- recommandé pour l'usinage des matières non ferreuses
- titane, laiton, cuivre, aluminium sans silicium, plastique

- unbeschichtete Sorte
- für die Bearbeitung von Nichteisenmetalle empfohlen
- Titan, Messing, Kupfer, Silicium freies Aluminium, Kunstoff

- uncoated grade
- recommended for machining of non-ferrous materials
- titanium, brass, bronze, aluminium without silicium, plastic

EVOCUT-Line

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

★★★★★ ★★★★ ★★★

			ET15	ET20	ET25	ET30	P Acier Stahl Steel – Acier de décolletage Automatenstahl Free-cutting steel VC (m/min)	F (mm/U)	Acier faiblement allié Leicht legierter Stahl Low alloyed steel VC (m/min)	F (mm/U)	Acier fortement allié Legierter Stahl High alloyed steel VC (m/min)	F (mm/U)	M Inox Rostfreistahl Stainless steel – Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic VC (m/min)	F (mm/U)
Avance standard Standard Vorschub Standard feed rate	UN	TiAlN	●	●	●	●	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	●	●	●	●	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	**60-150**	**0.04-0.08**
		Zmax	●	●	●	●	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	**50-120***	**0.04-0.10**
		ZTi6		●	●	●	**110-200**	**0.04-0.08**	**80-160**	**0.04-0.08**	**70-140**	**0.04-0.08**	70-160	0.04-0.08
	UR	TiAlN	●	●	●	●	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	●	●	●	●	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	**60-150**	**0.04-0.08**
		Zmax	●	●	●	●	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	**50-120***	**0.04-0.10**
	JN	TiAlN	●	●	●	●	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	●	●	●	●	**100-170**	**0.04-0.08**	**70-150**	**0.04-0.08**	**60-120**	**0.04-0.08**	**60-150**	**0.04-0.08**
		Zmax	●	●	●	●	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	**50-120***	**0.04-0.10**
		ZTi6		●	●	●	**110-200**	**0.04-0.08**	**80-160**	**0.04-0.08**	**70-140**	**0.04-0.08**	70-160	0.04-0.08
	JR	TiAlN	●	●	●	●	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	●	●	●	●	**100-170**	**0.04-0.08**	**70-150**	**0.04-0.08**	**60-120**	**0.04-0.08**	**60-150**	**0.04-0.08**
		Zmax	●	●	●	●	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	**50-120***	**0.04-0.10**
	JSN	Tmax		●			**80-150**	**0.02-0.1**	**80-170**	**0.02-0.1**	**50-120**	**0.02-0.1**	50-120	0.02-0.1
	TN	TiAlN		●	●	●	90-150	0.08-0.18	70-130	0.08-0.18	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax		●	●	●	100-170	0.08-0.18	**70-150**	**0.08-0.18**	**60-120**	**0.08-0.15**	60-150	0.08-0.20
		Zmax		●	●	●	80-130*	0.08-0.18	50-110*	0.08-0.18	50-90*	0.08-0.15	50-120*	0.08-0.20
		ZTi6		●	●	●	**110-200**	**0.08-0.18**	**80-160**	**0.08-0.18**	**70-140**	**0.08-0.15**	70-160	0.08-0.20
	TR	TiAlN		●	●	●	90-150	0.08-0.18	70-130	0.08-0.18	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax		●	●	●	100-170	0.08-0.18	**70-150**	**0.08-0.18**	**60-120**	**0.08-0.15**	60-150	0.08-0.20
		Zmax		●	●	●	80-130*	0.08-0.18	50-110*	0.08-0.18	50-90*	0.08-0.15	50-120*	0.08-0.20
		ZTi6				●	**110-200**	**0.08-0.18**	**80-160**	**0.08-0.18**	**70-140**	**0.08-0.15**	70-160	0.08-0.20
	TSN	Tmax		●			**80-150**	**0.05-0.15**	**80-170**	**0.05-0.15**	**50-120**	**0.05-0.15**	50-120	0.05-0.15
		Zmax		●			80-130	0.05-0.15	80-150	0.05-0.15	50-100	0.05-0.15	50-100	0.05-0.15
Avance modérée Niedriger Vorschub ** Low feed rate	UN-000F	TiAlN	●	●	●	●	80-120	0.02-0.05	50-100	0.02-0.05	40-80	0.02-0.05	40-100	0.02-0.05
	UR/ULF	TiAlN	●	●	●	●	80-120	0.02-0.05	50-100	0.02-0.05	40-80	0.02-0.05	40-100	0.02-0.05
	ANF	N		●		●								
		TiAlN		●		●							40-80	0.02-0.05
		AC		●		●								
	ARF	N		●		●								
		TiAlN		●		●							40-80	0.02-0.05
		AC		●		●								

* premier choix en cas de coupe interrompue
** arête de coupe vive

* erste Wahl für unterbrochener Schnitt
** scharfe Schneidkante

* first choice for interrupted cut
** sharp cutting edge

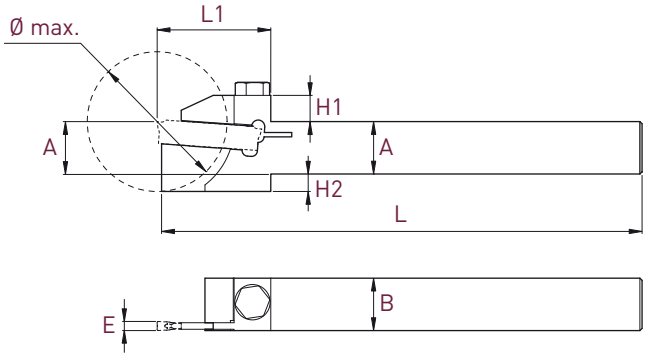
Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

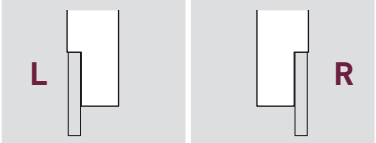
N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-300	0.02-0.1	100-300	0.02-0.1	100-300	0.02-0.1	100-300	0.02-0.1	50-120	0.02-0.1	30-50	0.02-0.1
						150-300	0.05-0.20				
						150-300	0.05-0.20				
						100-300	0.05-0.15				
100-300	0.02-0.06	100-200	0.01-0.05	100-250	0.01-0.05	100-300	0.02-0.06			50-100	0.01-0.06
100-300	0.02-0.06	100-200	0.01-0.05	100-250	0.01-0.05	100-300	0.02-0.06			50-100	0.01-0.06
80-200	0.02-0.06			80-200	0.01-0.05	80-200	0.02-0.06	50-100	0.01-0.06	50-100	0.01-0.06
100-250	0.02-0.06	80-150	0.01-0.05	100-200	0.01-0.05	80-200	0.02-0.06			30-80	0.01-0.06
100-300	**0.02-0.06**	**100-200**	**0.01-0.05**	**100-250**	**0.01-0.05**	**100-300**	**0.02-0.06**	**50-120**	**0.01-0.06**	**50-120**	**0.01-0.06**
80-200	0.02-0.06			80-200	0.01-0.05	80-200	0.02-0.06	50-100	0.01-0.06	50-100	0.01-0.06
100-250	0.02-0.06	80-150	0.01-0.05	100-200	0.01-0.05	80-200	0.02-0.06			30-80	0.01-0.06
100-300	**0.02-0.06**	**100-200**	**0.01-0.05**	**100-250**	**0.01-0.05**	**100-300**	**0.02-0.06**	**50-120**	**0.01-0.06**	**50-120**	**0.01-0.06**

H

Ø max 44 mm

Porte-outils
Halter
Holders





Pièces de rechange et accessoires
Ersatzteile und Zubehöre
Spare parts and accessories



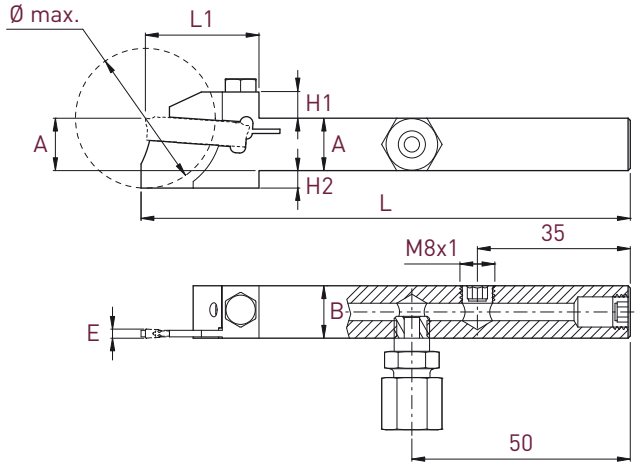
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H1	H2	Art. N°	Art. N°	Art. N° *	Art. N° *
E 1.5 **Type** ET15	10x12	110	22	20	5	6	**ET15-H1012L-D22**	**ET15-H1012R-D22**	**V-M5X20-6P6**	**C-6PEX-6.0**
	12x12	110	22	20	5	4	**ET15-H1212L-D22**	**ET15-H1212R-D22**		
	12.7x12.7	110	22	20	5	3	**ET15-H12.7L-D22**	**ET15-H12.7R-D22**		
	12x12	110	32	26	6	4	**ET15-H1212L-D32**	**ET15-H1212R-D32**	**V-M5X21-6P7**	**C-6PEX-7.0**
	12.7x12.7	110	32	26	6	3	**ET15-H12.7L-D32**	**ET15-H12.7R-D32**		
	16x16	110	32	26	6	-	**ET15-H1616L-D32**	**ET15-H1616R-D32**		
E 2.0 **Type** ET20	10x12	110	22	20	5	6	**ET20-H1012L-D22**	**ET20-H1012R-D22**	**V-M5X20-6P6**	**C-6PEX-6.0**
	12x12	110	22	20	5	4	**ET20-H1212L-D22**	**ET20-H1212R-D22**		
	12.7x12.7	110	22	20	5	3	**ET20-H12.7L-D22**	**ET20-H12.7R-D22**		
	12x12	110	32	26	6	4	**ET20-H1212L-D32**	**ET20-H1212R-D32**	**V-M5X21-6P7**	**C-6PEX-7.0**
	12.7x12.7	110	32	26	6	3	**ET20-H12.7L-D32**	**ET20-H12.7R-D32**		
	16x16	110	32	26	6	-	**ET20-H1616L-D32**	**ET20-H1616R-D32**		
	16x16	130	44	35	8	4	**ET20-H1616L-D44**	**ET20-H1616R-D44**	**V-M5X27-6P7**	**C-6PEX-7.0**
	20x20	130	44	35	8	-	**ET20-H2020L-D44**	**ET20-H2020R-D44**		
E 2.5 **Type** ET25	10x12	110	22	20	5	6	**ET25-H1012L-D22**	**ET25-H1012R-D22**	**V-M5X20-6P6**	**C-6PEX-6.0**
	12x12	110	22	20	5	4	**ET25-H1212L-D22**	**ET25-H1212R-D22**		
	12.7x12.7	110	22	20	5	3	**ET25-H12.7L-D22**	**ET25-H12.7R-D22**		
	12x12	110	32	26	6	4	**ET25-H1212L-D32**	**ET25-H1212R-D32**	**V-M5X21-6P7**	**C-6PEX-7.0**
	12.7x12.7	110	32	26	6	3	**ET25-H12.7L-D32**	**ET25-H12.7R-D32**		
	16x16	110	32	26	6	-	**ET25-H1616L-D32**	**ET25-H1616R-D32**		
	16x16	130	44	35	8	4	**ET25-H1616L-D44**	**ET25-H1616R-D44**	**V-M5X27-6P7**	**C-6PEX-7.0**
	20x20	130	44	35	8	-	**ET25-H2020L-D44**	**ET25-H2020R-D44**		
E 3.0 **Type** ET30	12.7x12.7	110	32	26	6	3	**ET30-H12.7L-D32**	**ET30-H12.7R-D32**	**V-M5X21-6P7**	**C-6PEX-7.0**
	16x16	110	32	26	6	-	**ET30-H1616L-D32**	**ET30-H1616R-D32**		
	16x16	130	44	35	8	4	**ET30-H1616L-D44**	**ET30-H1616R-D44**	**V-M5X27-6P7**	**C-6PEX-7.0**
	20x20	130	44	35	8	-	**ET30-H2020L-D44**	**ET30-H2020R-D44**		
	25x25	140	44	35	8	-	**ET30-H2525L-D44**	**ET30-H2525R-D44**		

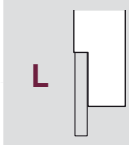
* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

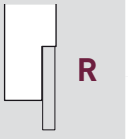
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

Ø max 44 mm

H JET







Pièces de rechange et accessoires
Ersatzteile und Zubehöre
Spare parts and accessories


*


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Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H1	H2	Art. N°	Art. N°	Art. N°	Art. N°
E 2.0 **Type** ET20	10x12	110	22	20	5	6	**ET20-H1012L-JET22**	**ET20-H1012R-JET22**		
	12x12	110	22	20	5	4	**ET20-H1212L-JET22**	**ET20-H1212R-JET22**	**V-M5X20-6P6-J**	**C-6PEX-6.0**
	12.7x12.7	110	22	20	5	3	**ET20-H12.7L-JET22**	**ET20-H12.7R-JET22**		
	12x12	110	32	26	6	4	**ET20-H1212L-JET32**	**ET20-H1212R-JET32**		
	12.7x12.7	110	32	26	6	3	**ET20-H12.7L-JET32**	**ET20-H12.7R-JET32**	**V-M5X21-6P7-J**	**C-6PEX-7.0**
	16x16	110	32	26	6	-	**ET20-H1616L-JET32**	**ET20-H1616R-JET32**		
	16x16	130	44	35	8	4	**ET20-H1616L-JET44**	**ET20-H1616R-JET44**		
	20x20	130	44	35	8	-	**ET20-H2020L-JET44**	**ET20-H2020R-JET44**	**V-M5X27-6P7-J**	**C-6PEX-7.0**
E 2.5 **Type** ET25	10x12	110	22	20	5	6	**ET25-H1012L-JET22**	**ET25-H1012R-JET22**		
	12x12	110	22	20	5	4	**ET25-H1212L-JET22**	**ET25-H1212R-JET22**	**V-M5X20-6P6-J**	**C-6PEX-6.0**
	12.7x12.7	110	22	20	5	3	**ET25-H12.7L-JET22**	**ET25-H12.7R-JET22**		
	12x12	110	32	26	6	4	**ET25-H1212L-JET32**	**ET25-H1212R-JET32**		
	12.7x12.7	110	32	26	6	3	**ET25-H12.7L-JET32**	**ET25-H12.7R-JET32**	**V-M5X21-6P7-J**	**C-6PEX-7.0**
	16x16	110	32	26	6	-	**ET25-H1616L-JET32**	**ET25-H1616R-JET32**		
	16x16	130	44	35	8	4	**ET25-H1616L-JET44**	**ET25-H1616R-JET44**		
	20x20	130	44	35	8	-	**ET25-H2020L-JET44**	**ET25-H2020R-JET44**	**V-M5X27-6P7-J**	**C-6PEX-7.0**
E 3.0 **Type** ET30	12.7x12.7	110	32	26	6	3	**ET30-H12.7L-JET32**	**ET30-H12.7R-JET32**	**V-M5X21-6P7-J**	**C-6PEX-7.0**
	16x16	110	32	26	6	-	**ET30-H1616L-JET32**	**ET30-H1616R-JET32**		
	16x16	130	44	35	8	4	**ET30-H1616L-JET44**	**ET30-H1616R-JET44**		
	20x20	130	44	35	8	-	**ET30-H2020L-JET44**	**ET30-H2020R-JET44**	**V-M5X27-6P7-J**	**C-6PEX-7.0**
	25x25	140	44	35	8	-	**ET30-H2525L-JET44**	**ET30-H2525R-JET44**		

Pièces de rechange
Ersatzteile
Spare parts



Art. N°
J-M8X1-D6

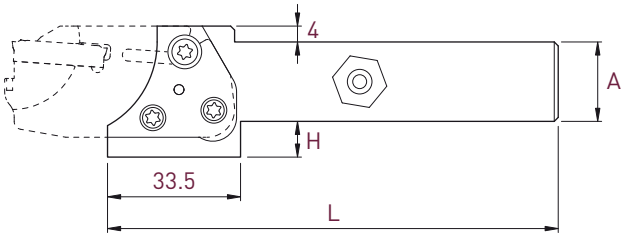


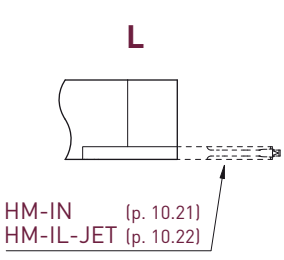
Art. N°
JB-M8X1

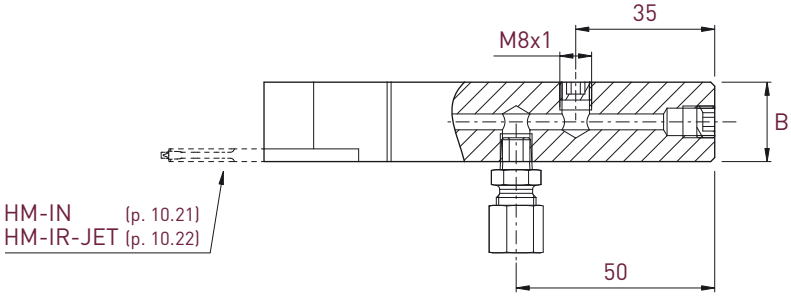
* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

H-HM-JET

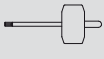
Porte-lames avec arrosage intégré
Halter für Stechklinge mit Kühlmittelzufuhr
Holder for parting-off blades with integrated coolant supply





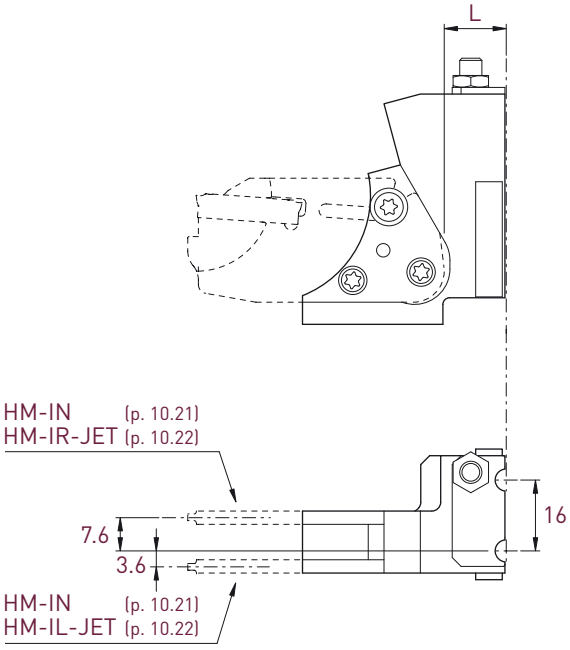


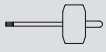
			L	R
A x B	L	H	**Art. N°**	**Art. N°**
16x16	113.5	13	**H1616L-HM-JET**	**H1616R-HM-JET**
20x20	113.5	9	**H2020L-HM-JET**	**H2020R-HM-JET**
25x25	138.5	4	**H2525L-HM-JET**	**H2525R-HM-JET**

Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories				Options
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
V-M5X10-T20IP	**V-M6X10-T20IP**	**J-M8X1-D6**	**JB-M8X1**	**C-T20IP**

Interface Göltenbodt

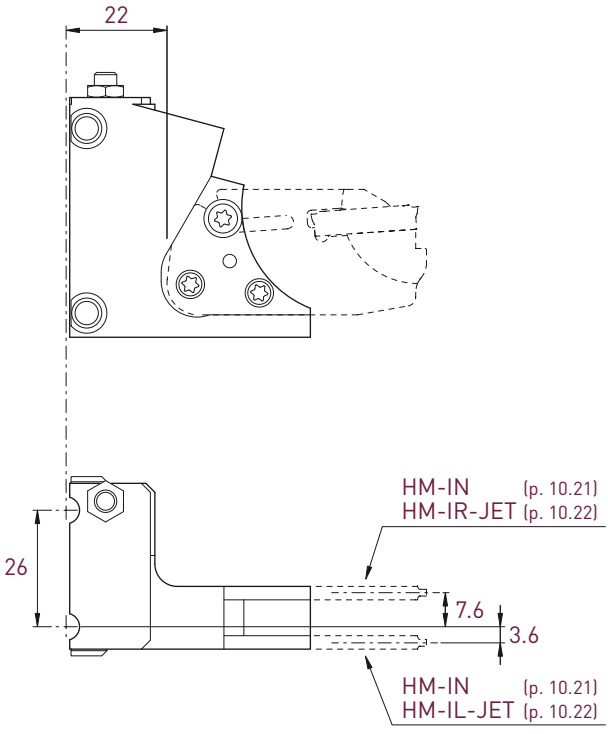
GWS02R-HM-JET



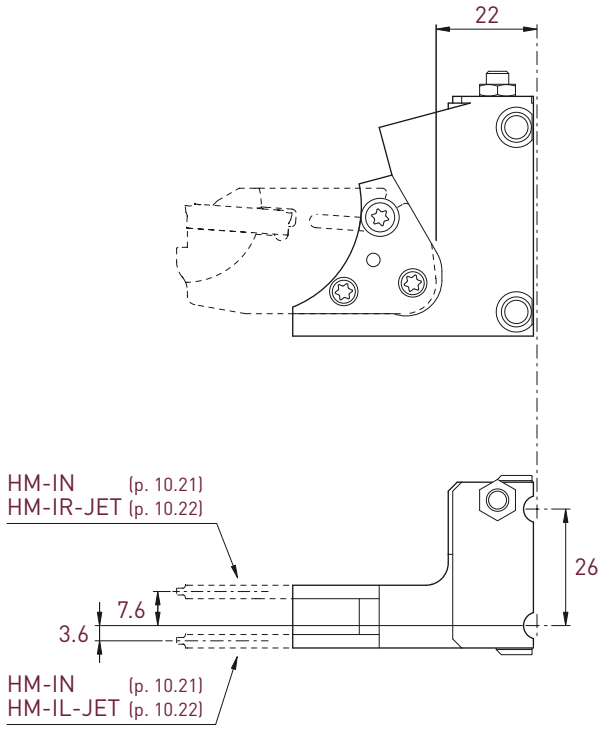
			R	Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories		Options
						
Interface	Machine compatibility	L	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
GWS02	AS14	14	**GWS02R-02001-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**
	SAS16					
	SBS20					
	Others	22	**GWS02R-02002-HM-JET**			

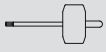
GWS41L-HM-JET

Interface Göltenbodt



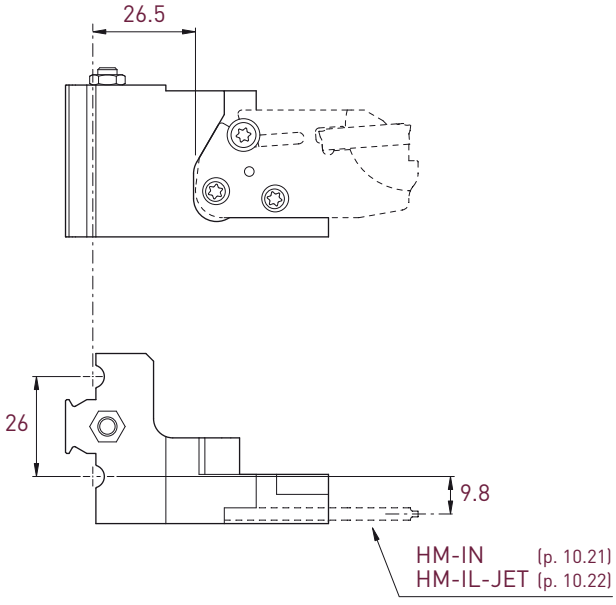
		L	Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories		Options
Interface	Machine compatibility	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
GWS41	MultiSwiss 6X16	**GWS41L-41001-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**
	MultiDeco 20X6				
	MultiDeco 20X8				
	MultiDeco 26X6				
	MultiDeco 32X6				
	MultiAlpha 20X8				
	MultiSigma 24X8				

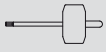


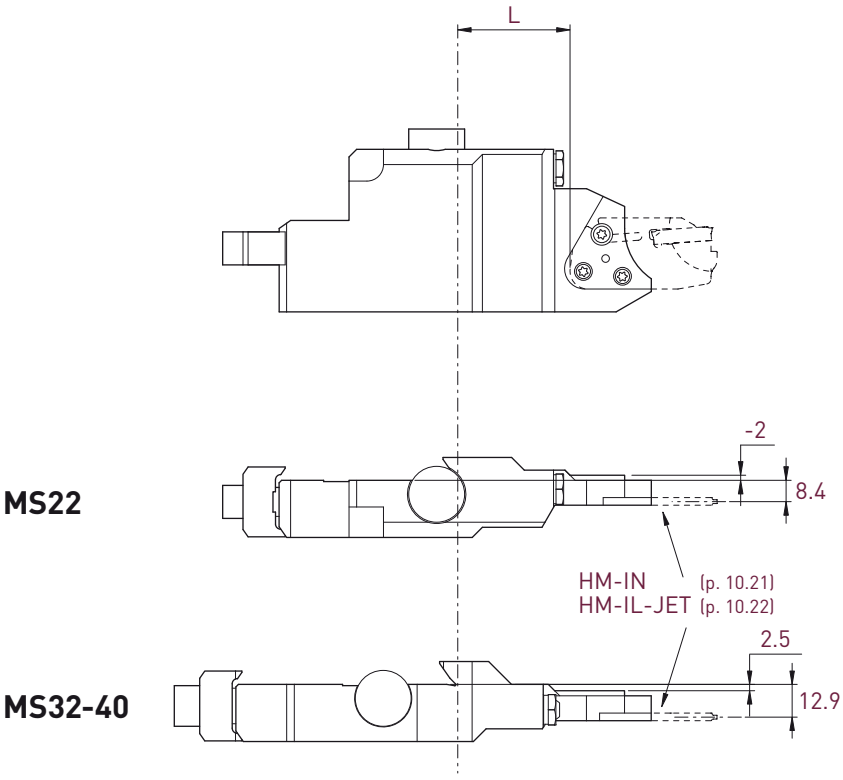
		R	Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories		Options
					
Interface	Machine compatibility	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
GWS41	MultiSwiss 6X16	**GWS41R-41002-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**
	MultiDeco 20X6				
	MultiDeco 20X8				
	MultiDeco 26X6				
	MultiDeco 32X6				
	MultiAlpha 20X8				
	MultiSigma 24X8				

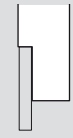
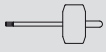
GWS202L-HM-JET

Interface Göltenbodt



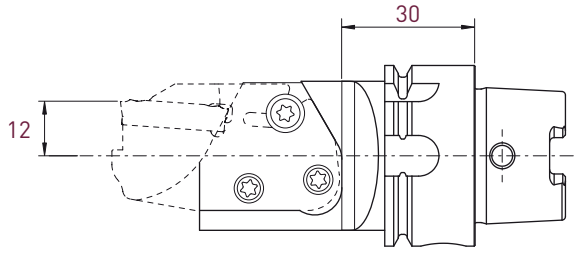
		L	Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories		Options
					
Interface	Machine compatibility	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
GWS202	MultiSwiss 6X32 MultiSwiss 8X26	**GWS202L-202001-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**

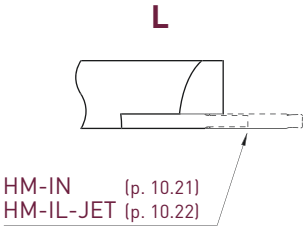


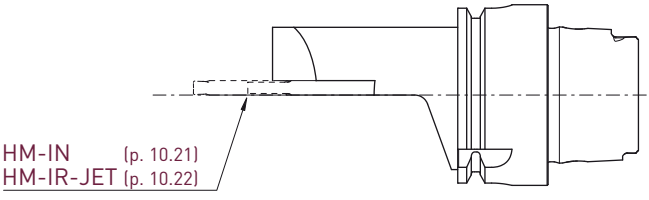
Machine compatibility	L	L  Art. N°	Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories  Art. N°	 Art. N°	Options  Art. N°
MS22	44.2	**MS22-W5190231-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**
MS32-40	45.5	**MS32-40-W5190233-HM-JET**			

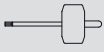
HSK-JET

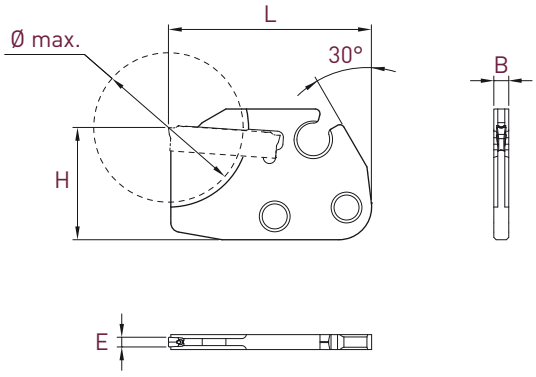
Porte-outils HSK pour porte-lames avec arrosage intégré
HSK Halter Stechklingen mit integrierter Kühlmittelzufuhr
HSK holder for parting-off blades with integrated coolant supply







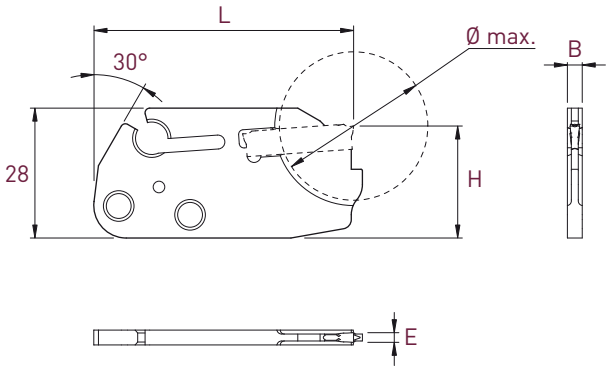
L	R	Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories		Options
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
HSK-T40-L-HM-JET	**HSK-T40-R-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**



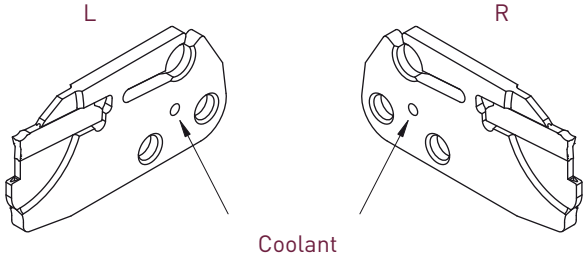
					N
Plaquettes WSP Inserts	Ø max.	B	L	H	Art. N°
E 1.5 **Type** ET15	20	3.2	43.5	24	**ET15-HM-IN-43-D20**
	32	3.2	43.5	24	**ET15-HM-IN-43-D32**
E 2.0 **Type** ET20	20	3.2	43.5	24	**ET20-HM-IN-43-D20**
	26	3.2	43.5	24	**ET20-HM-IN-43-D26**
	26	3.2	54	24	**ET20-HM-IN-54-D26**
	32	3.2	43.5	24	**ET20-HM-IN-43-D32**
E 3.0 **Type** ET30	32	3.2	43.5	24	**ET30-HM-IN-43-D32**

HM-JET

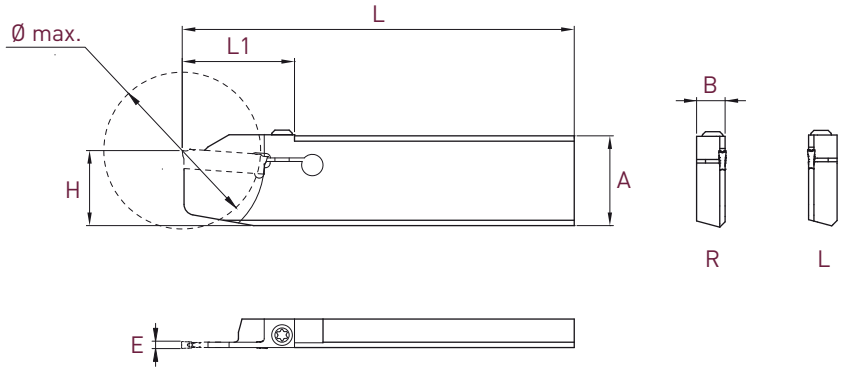
Lames avec arrosage intégré
Stechklinge mit integrierter Kühlmittelzufuhr
Parting-off blades with integrated coolant supply

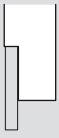
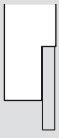


Plaquettes WSP Inserts	Ø max.	B	L	H	L Art. N°	R Art. N°
E 2.0 **Type** ET20	20	3.2	48.5	24	**ET20-HM-IL-48.5-JET20**	**ET20-HM-IR-48.5-JET20**
	24		48.5		**ET20-HM-IL-48.5-JET24**	**ET20-HM-IR-48.5-JET24**
	32		45.5		**ET20-HM-IL-45.5-JET32**	**ET20-HM-IR-45.5-JET32**
	32		56		**ET20-HM-IL-56-JET32**	**ET20-HM-IR-56-JET32**
	42		48.5		**ET20-HM-IL-48.5-JET42**	**ET20-HM-IR-48.5-JET42**
E 3.0 **Type** ET30	32	3.2	45.5	24	**ET30-HM-IL-45.5-JET32**	**ET30-HM-IR-45.5-JET32**
	44		48.5		**ET30-HM-IL-48.5-JET42**	**ET30-HM-IR-48.5-JET42**



Lames de tronçonnage
Stechklinge
Parting-off blades



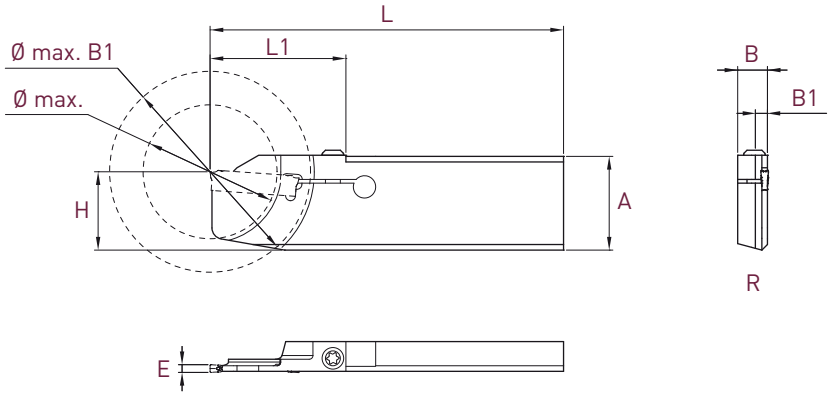
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	L  Art. N°	 R Art. N°
E 1.5	26x8	110	20	19.5	21	**ET15-HK-2608L-110-D20**	**ET15-HK-2608R-110-D20**
Type ET15	26x8	110	32	25.5	21	**ET15-HK-2608L-110-D32**	**ET15-HK-2608R-110-D32**
E 2.0	26x8	110	32	25.5	21	**ET20-HK-2608L-110-D32**	**ET20-HK-2608R-110-D32**
Type ET20	26x8	110	44	31.5	21	**ET20-HK-2608L-110-D44**	**ET20-HK-2608R-110-D44**

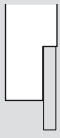
Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories	Options
 *	
Art. N°	**Art. N°**
V-M4X14.5-T15-EVOCUT	**C-T15**

* livré avec chaque lame
mit jedem Steckling geliefert
delivered with each blade

HK-RS

Lames de tronçonnage avec dégagement pour accès contre-broche
Stechklinge mit Aussparung für Gegenspindel Zugriff
Parting-off blades with recess for subspindle access





R

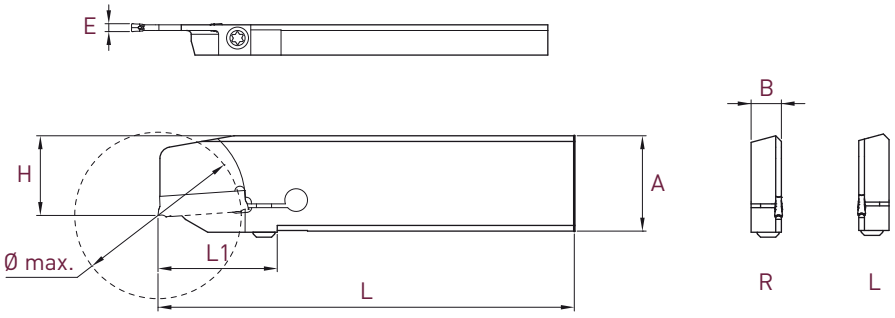
Plaquettes WSP Inserts	A x B	L	Ø max.	Ø max. B1	B1	L1	H	Art. N°
E 1.5 **Type** ET15	26x8	95	36	54	3.25	36.5	21	**ET15-HK-2608RS-95-D36**
E 2.0 **Type** ET20	26x8	95	36	54	3.25	36.5	21	**ET20-HK-2608RS-95-D36**

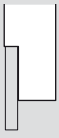
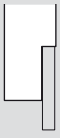
Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories	Options
 *	
Art. N°	**Art. N°**
V-M4X14.5-T15-EVOCUT	**C-T15**

* livré avec chaque lame
mit jedem Steckling geliefert
delivered with each blade

Lames de tronçonnage inversées
Überkopf Stechklinge
Upside down parting-off blades

HUK



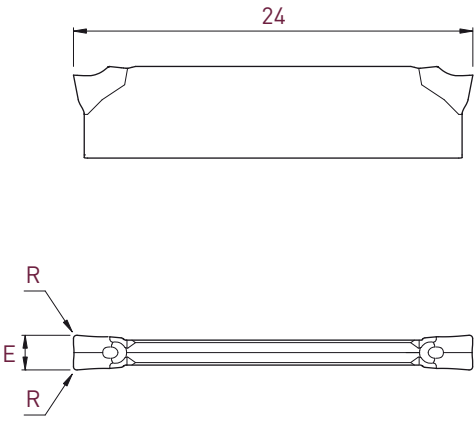
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	L  Art. N°	 R Art. N°
E 1.5	26x8	110	20	19.5	21	**ET15-HUK-2608L-110-D20**	**ET15-HUK-2608R-110-D20**
Type ET15	26x8	110	32	25.5	21	**ET15-HUK-2608L-110-D32**	**ET15-HUK-2608R-110-D32**
E 2.0	26x8	110	32	25.5	21	**ET20-HUK-2608L-110-D32**	**ET20-HUK-2608R-110-D32**
Type ET20	26x8	110	44	31.5	21	**ET20-HUK-2608L-110-D44**	**ET20-HUK-2608R-110-D44**

Pièces de rechange et accessoires Ersatzteile und Zubehöre Spare parts and accessories	Options
 *	
Art. N°	**Art. N°**
V-M4X14.5-T15-EVOCUT	**C-T15**

* livré avec chaque lame
mit jedem Steckling geliefert
delivered with each blade

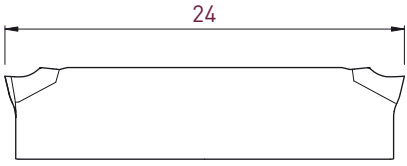
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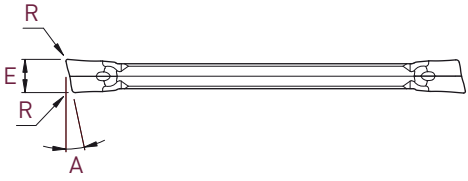
Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts





Type	E ±0.05	R	Art. N°	UN P M N S TiAlN	P M Tmax	P M Zmax	P M ZTi6
ET15	1.35	0	ET15-UN-000F	●			
	1.5	0.2	ET15-UN-002	●	●	●	
ET20	1.85	0	ET20-UN-000F	●			
	2.0	0.2	ET20-UN-002	●	●	●	●
ET25	2.35	0	ET25-UN-000F	●			
	2.5	0.3	ET25-UN-003	●	●	●	●
ET30	2.85	0	ET30-UN-000F	●			
	3.0	0.3	ET30-UN-003	●	●	●	●



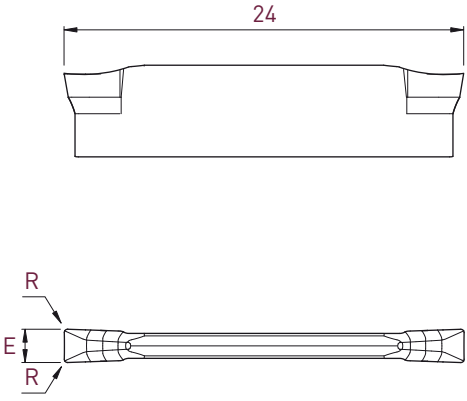




				UL				UR			
Type	E ±0.05	A	R	Art. N°	TiAlN	Tmax	Zmax	Art. N°	TiAlN	Tmax	Zmax
ET15	1.5	6°	0.2	-				ET15-UR-602	●	●	●
	1.35	8°	0	-				ET15-UR-800F	●		
	1.5	12°	0.1	-				ET15-UR-1201	●	●	●
	1.35	15°	0	ET15-UL-1500F	●			ET15-UR-1500F	●		
ET20	2.0	6°	0.2	-				ET20-UR-602	●	●	●
	1.85	8°	0	-				ET20-UR-800F	●		
	2.0	12°	0.1	-				ET20-UR-1201	●	●	●
	1.85	15°	0	ET20-UL-1500F	●			ET20-UR-1500F	●		
ET25	2.5	6°	0.2	-				ET25-UR-602	●	●	●
	2.35	8°	0	-				ET25-UR-800F	●		
	2.5	12°	0.1	-				ET25-UR-1201	●	●	●
	2.35	15°	0	ET25-UL-1500F	●			ET25-UR-1500F	●		
ET30	3.0	6°	0.3	-				ET30-UR-603	●	●	●
	2.85	8°	0	-				ET30-UR-800F	●		
	3.0	12°	0.2	-				ET30-UR-1202	●	●	●
	2.85	15°	0	ET30-UL-1500F	●			ET30-UR-1500F	●		

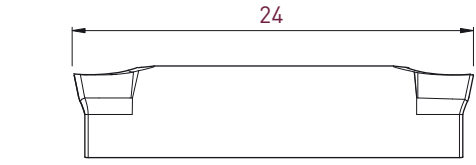
JN

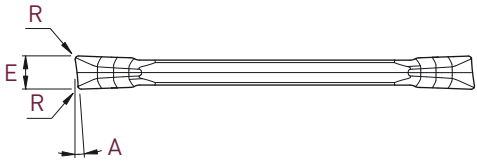
Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts





Type	E ±0.05	R	Art. N°	JN			
				P M N S	P M	P M	P M
				TiAlN	Tmax	Zmax	ZTi6
ET15	1.5	0.2	ET15-JN-002	●	●	●	
ET20	2.0	0.2	ET20-JN-002	●	●	●	●
ET25	2.5	0.3	ET25-JN-003	●	●	●	●
ET30	3.0	0.3	ET30-JN-003	●	●	●	●



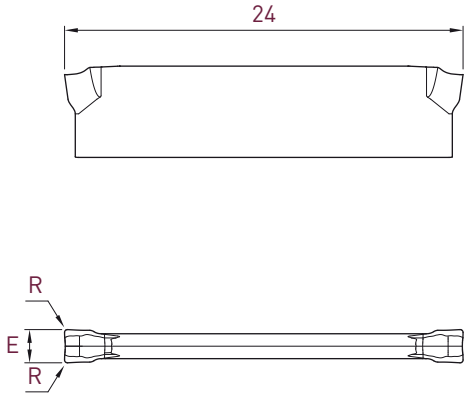


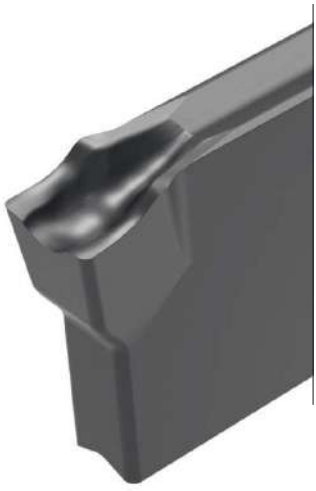


				JR	
Type	E ±0.05	A	R	Art. N°	TiAlN / Tmax / Zmax
ET15	1.5	6°	0.2	ET15-JR-602	● ● ●
ET20	2.0	6°	0.2	ET20-JR-602	● ● ●
ET25	2.5	6°	0.2	ET25-JR-602	● ● ●
ET30	3.0	6°	0.3	ET30-JR-603	● ● ●

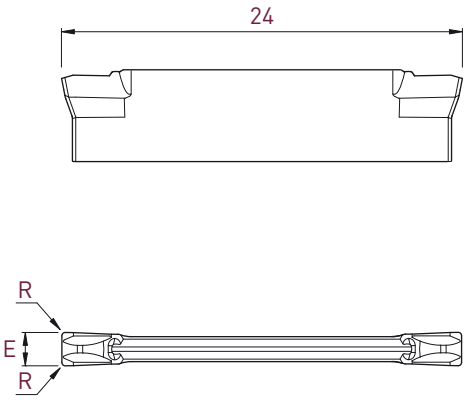
JSN

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts



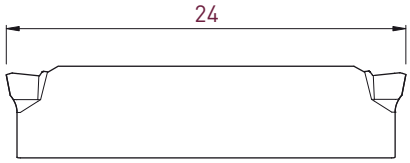


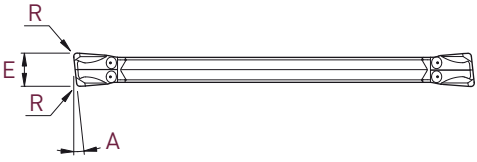
Type	E ±0.05	R	Art. N°	Tmax P M
ET20	2.0	0.2	ET20-JSN-002	●





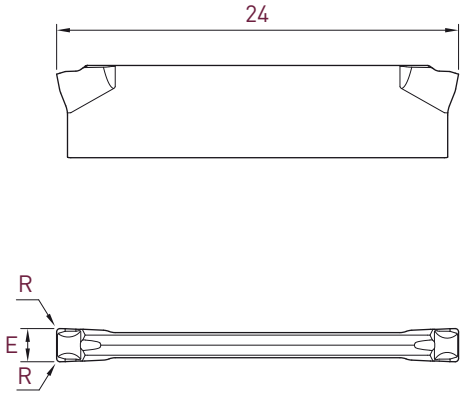
Type	E ±0.05	R	Art. N°	TN			
				P M N	P M	P M	P M
				TiAlN	Tmax	Zmax	ZTi6
ET20	2.0	0.2	ET20-TN-002	●	●	●	●
ET25	2.5	0.3	ET25-TN-003	●	●	●	●
ET30	3.0	0.3	ET30-TN-003	●	●	●	●







				TR				
Type	E ±0.05	A	R	Art. N°	TiAlN	Tmax	Zmax	ZTi6
ET20	2.0	6°	0.2	ET20-TR-602	●	●	●	
ET25	2.5	6°	0.2	ET25-TR-602	●	●	●	
ET30	3.0	6°	0.3	ET30-TR-603	●	●	●	●

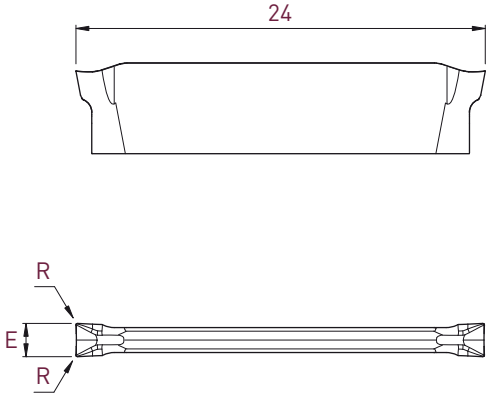




			TSN	
Type	E ±0.05	R	Art. N°	Tmax P M / Zmax P M
ET20	2.0	0.2	ET20-TSN-002	● ●

AN

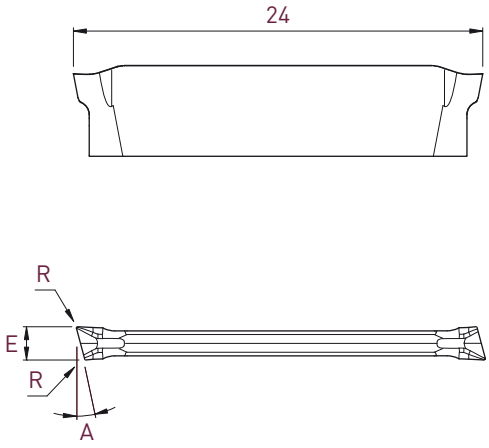
Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts





AN

Type	E ±0.05	R	Art. N°	TiAlN	AC	N
ET20	2.0	0.2	ET20-AN-002F	●	●	●
ET30	3.0	0.3	ET30-AN-003F	●	●	●





				AR			
Type	E ±0.05	A	R	Art. N°	TiAlN (M N S)	AC (N S)	N (N S)
ET20	2.0	15°	0.1	ET20-AR-1501F	●	●	●
ET30	3.0	15°	0.2	ET30-AR-1502F	●	●	●

CUT-Line



APPLITEC
CUTTING TOOLS

Index

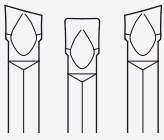
Codification Kodifizierung Coding guide			> 11.03
Infos et avantages, géométries de coupe Infos und Vorteile, Spanformgeometrie Infos and advantages, cutting geometries			> 11.04
Nuances Sorten Grades			> 11.06
Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data	CUT 16	Ø max 20 mm	> 11.08
	CUT 22	Ø max 42 mm	> 11.10
	CUT 31	Ø max 65 mm	> 11.12
Porte-outils Halter Holders	H		> 11.14
	HX		> 11.15
	HZ		> 11.16
Porte-outils avec arrosage intégré Halter mit integrierter Kühlmittelzufuhr Holders with integrated coolant supply	HZ-JET		> 11.17
Plaquettes de tronçonnage Abstechwendeplatten Cut off inserts	U		> 11.18
	P		> 11.20
	T		> 11.24
Plaquettes de fonçage, tournage et tronçonnage WSP zum einstechen, drehen und abstechen Inserts for grooving, turning and cut off	G		> 11.25

CUT	22	-	U	R	-	8	02	Ou / Oder / Or	-	TIALN
								F		

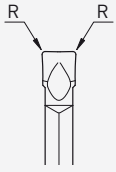
Nuance
Sorte
Grade

Angle de pointe
Spitzenwinkel
Point angle

L N R

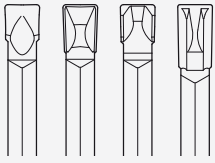


Rayon
Radius
Radius

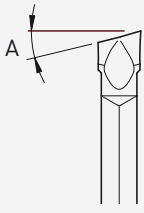


Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

U P T G

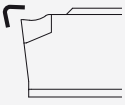


Valeur de l'angle de pointe
Wert des Spitzenwinkels
Value of the point angle



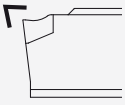
A
0°
8°
15°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

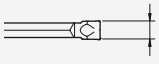
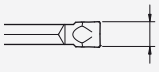
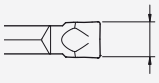


F

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

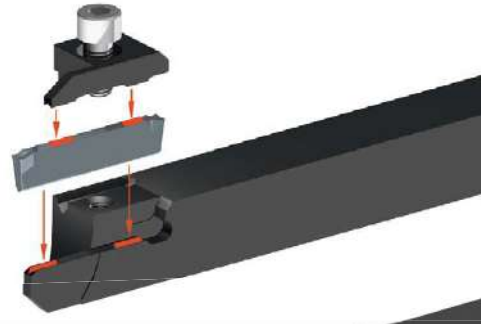


Epaisseur de coupe
Schnittbreite
Cutting thickness

CUT 16		1.6 mm	Ø max 20 mm
CUT 22		2.2 mm	Ø max 42 mm
CUT 31		3.1 mm	Ø max 65 mm

Applitec CUT-Line	Système performant dédié pour le tronçonnage
Applitec CUT-Line	Leistungsstarkes System für das Abstechen
Applitec CUT-Line	High-performance system for cutting

Very rigid clamping system



H

Système de serrage à bride, version courte
Spann-Klemmsystem, kurze Ausführung
Independent top clamp system, short version

HX

Système de serrage à bride, version longue
Spann-Klemmsystem, lange Ausführung
Independent top clamp system, long version

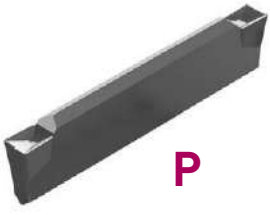


HZ

Porte-outils de grande capacité
Klemmhalter mit grosser Kapazität
High capacity tool holders



U



P



T



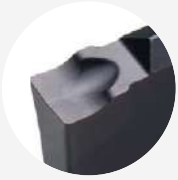
G

Toutes les géométries des plaquettes sont conçues pour être entièrement compatibles avec les porte-outils.

Alle Geometrien der Wendeschneidplatten sind so gestaltet, dass sie vollständig mit den Haltern kompatibel sind.

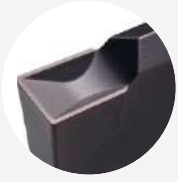
All the geometries of the inserts are designed to be fully compatible with the holders.

UN
UR
UL



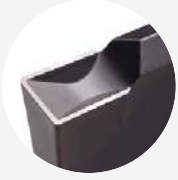
- géométrie positive universelle, bonne maîtrise du copeau
- Universalgeometrie positive gute Beherrschung der Späne
- all-round insert with efficient chip control

PN
PR



- géométrie légèrement positive pour les aciers, aciers au carbone, aciers alliés
- leicht positive Geometrie für Stahl, Kohlenstoffstahl, legiertem Stahl
- slightly positive geometry for steel, carbon steel, alloyed steel

PNW
PRW



- géométrie neutre pour les laitons
- neutrale Geometrie für Messinge
- neutral geometry for brasses

TN



- géométrie négative pour de fortes avances dans des conditions de rigidité favorables
- negative Geometrie für hohe Vorschübe in guten Stabilitätsfällen
- negative geometry for high feed rate in case of good stability

GN



- géométrie universelle pour fonçage-tournage, peut également être utilisée en tronçonnage
- Universalgeometrie zum einstechen-langdrehen, kann auch zum abstechen verwendet werden
- all-round insert for grooving and turning, can also be used for parting off

TiAlN



Revêtement PVD
PVD Beschichtung
PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- pour l'usinage des aciers, aciers inoxydables et alliages de titane
- 1er choix pour les avances faibles à modérées

- für die Bearbeitung von Stahl, rostfreien Stahl und Titanlegierungen
- erste Wahl für niedrige bis mittlere Vorschübe

- for machining of steel, stainless steel and titanium alloys
- first choice for low to average cutting speed

Tmax



Revêtement PVD
PVD Beschichtung
PVD coating

TF F M **E**

P ★★★★★
M ★★★★★
N ★★☆☆☆
S ★★☆☆☆

- nuance pour usinage moyen à lourd des aciers, aciers alliés et inoxydables
- bonne résistance aux températures d'usinage élevées
- 1er choix pour le tronçonnage des aciers au carbone et des aciers fortement alliés

- Sorte für mittlere bis hohe Belastung in Stahl und legierter Stahlbearbeitung
- gute Bearbeitungswarmfestigkeit
- erste Wahl für die Bearbeitung von legiertem Kohlenstahl und hoch legiertem Stahl

- grade for medium to heavy machining of steel, stainless steel and alloyed steel
- high machining heat resistance
- first choice for the machining of carbon steel and high alloyed steel

Zmax



Revêtement PVD
PVD Beschichtung
PVD coating

TF F M **E**

P ★★★★★
M ★★★★★
N ★★☆☆☆
S ★★☆☆☆

- pour l'usinage des aciers, aciers inoxydables et alliages de titane en conditions défavorables
- bonne résistance aux chocs à des vitesses de coupe moyennes à faibles
- 1er choix pour le tronçonnage en coupe interrompue

- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen in schwierige Bearbeitungsfälle
- gute Bruchfestigkeit mit durchschnittliche bis niedrige Schnittgeschwindigkeit
- erste Wahl für die Bearbeitung in unterbrochenen Schnitte

- for machining of steel, stainless steel and titanium alloys in unfavourable machining conditions
- good impact resistance with average to low cutting speed
- first choice for machining in interrupted cut

HTA



Revêtement PVD
PVD Beschichtung
PVD coating

TF F **M** E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- très bonne résistance à l'usure
- pour le tronçonnage des aciers, aciers inoxydables et alliages de titane
- déconseillé en coupe interrompue

- sehr gute Verschleissfestigkeit
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierung
- für unterbrochene Schnitte ungeeignet

- very good wear resistance
- for steel, stainless steel and titanium alloys machining
- not suitable for interrupted cut

HAC



Revêtement PVD
PVD Beschichtung
PVD coating

TF F **M** E

P ☆☆☆☆☆
M ☆☆☆☆☆
N ★★★★★
S ★★★★★

- nuance pour métaux non ferreux
- très faible coefficient de frottement
- 1er choix pour l'usinage des aluminiums, des cuivres et titanes faiblement alliés

- Sorte für Nichteisenmetalle
- sehr geringer Reibwert
- erste Wahl für die Bearbeitung von Aluminium, Kupfer und niedriglegiertem Titan

- grade for non-ferrous materials
- very low friction ratio
- first choice for Aluminium, copper and low alloyed titanium

N



Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★☆☆
S ★★★☆☆

- idéal pour l'usinage du laiton, uniquement disponible en géométries PNW / PRW

- Ideal für die Bearbeitung von Messing, nur in den Geometrien PNW / PRW erhältlich

- ideal for machining brass, only available in PNW / PRW geometries

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

★★★★★ ★★★★ ★★★

CUT 16

			P Acier Stahl Steel						M Inox Rostfreistahl Stainless steel	
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Legierter Stahl High alloyed steel		Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Avance standard Standard Vorschub Standard feed rate	CUT16-UN-001	TiAlN	90-140	0.03-0.07	60-120	0.03-0.07	50-100	0.04-0.08	50-120	0.03-0.07
		Tmax	**100-170**	**0.03-0.07**	**70-150**	**0.03-0.07**	**60-120**	**0.04-0.08**	**60-150**	**0.03-0.07**
		Zmax	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.08	**50-120***	**0.04-0.10**
		HTA	70-120	0.03-0.05	60-100	0.03-0.05	50-90	0.03-0.05	50-100	0.03-0.06
		HAC								
	CUT16-PR-801	TiAlN	90-140	0.03-0.07	60-120	0.03-0.07	50-100	0.03-0.07	50-120	0.03-0.07
		Tmax	**100-170**	**0.03-0.07**	**70-150**	**0.03-0.07**	**60-120**	**0.03-0.07**	60-150	0.03-0.07
	CUT16-PRW-801	N								
Avance modérée ** Niedriger Vorschub ** Low feed rate	CUT16-UN-000F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		HAC								
	CUT16-UL/R-800F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	**50-80**	**0.02-0.05**
		HAC								
	CUT16-UL/R-1500F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	**50-80**	**0.02-0.05**
		HAC								

* premier choix en cas de coupe interrompue
** arête de coupe vive

* erste Wahl für unterbrochener Schnitt
** scharfe Schneidkante

* first choice for interrupted cut
** sharp cutting edge

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			30-60	0.04-0.08
100-300	0.04-0.10	100-250	0.04-0.10	100-300	0.03-0.08	150-300	0.03-0.08			30-60	0.04-0.08
150-300	**0.04-0.15**	**100-300**	**0.04-0.10**	**100-300**	**0.04-0.10**	**150-300**	**0.02-0.08**	**30-60**	**0.04-0.08**	**30-60**	**0.04-0.08**
						150-300	**0.03-0.10**				
						100-500	**0.02-0.10**				
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**

CUT-Line

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

★★★★★ ★★★★ ★★★

CUT 22

			P Acier Stahl Steel						M Inox Rostfreistahl Stainless steel	
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Legierter Stahl High alloyed steel		Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Avance standard Standard Vorschub Standard feed rate	CUT22-UN-002 CUT22-UR-802	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.08	50-120*	0.04-0.10
		HTA	70-120	0.04-0.06	60-100	0.04-0.06	50-90	0.04-0.06	50-100	0.04-0.06
		HAC								
	CUT22-PN-002	TiAlN	90-140	0.04-0.10	60-120	0.04-0.08	50-100	0.04-0.08		
		Tmax	100-170	0.04-0.10	70-150	0.04-0.10	60-120	0.04-0.10		
	CUT22-PNW-002	N								
	CUT22-PR-002	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
	CUT22-PRW-002	N								
	CUT22-TN-002	TiAlN	90-140	0.08-0.18	60-120	0.08-0.18	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax	100-170	0.08-0.18	70-150	0.08-0.18	60-120	0.08-0.15	60-150	0.08-0.20
		Zmax	80-130*	0.08-0.18	50-110*	0.08-0.18	50-90*	0.08-0.15		
	CUT22-GN-002 ***	TiAlN	90-140	0.03-0.12	60-120	0.03-0.12	50-100	0.03-0.10	50-120	0.03-0.08
		Tmax	100-170	0.03-0.12	70-150	0.03-0.12	60-120	0.03-0.10	70-120	0.03-0.08
		HAC								
Avance modérée ** Niedriger Vorschub Low feed rate	CUT22-UN-000F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		HAC								
	CUT22-UL/R-800F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		HAC								
	CUT22-UL/R-802F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		HAC								
	CUT22-UL/R-1500F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		HAC								

* premier choix en cas de coupe interrompue
** arête de coupe vive
*** Pour opérations de fonçage-tournage (évent. tronçonnage)

* erste Wahl für unterbrochener Schnitt
** scharfe Schneidkante
*** Für Stech- und Drehoperationen (event. abstechen)

* first choice for interrupted cut
** sharp cutting edge
*** For grooving and turning operations (event. parting off)

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			30-60	0.04-0.08
100-300	0.04-0.10	100-250	0.04-0.10	100-300	0.03-0.08	150-300	0.03-0.08			30-60	0.04-0.08
150-300	**0.04-0.15**	**100-300**	**0.04-0.10**	**100-300**	**0.04-0.10**	**150-300**	**0.02-0.08**	**30-60**	**0.04-0.08**	**30-60**	**0.04-0.08**
						150-300	**0.03-0.10**				
						100-500	**0.02-0.10**				
						150-300	**0.03-0.10**				
						100-500	**0.02-0.10**				
						150-300	0.05-0.20				
100-300	0.03-0.12	100-200	0.03-0.10	100-200	0.03-0.10	**100-300**	**0.03-0.12**			30-60	0.04-0.08
						100-300	0.03-0.12				
100-300	**0.03-0.12**	100-200	0.03-0.10	100-200	0.03-0.10	**100-300**	**0.03-0.12**	30-60	0.04-0.08	30-60	0.04-0.08
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**

CUT-Line

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

★★★★★ ★★★★ ★★★

CUT 31

			P Acier Stahl Steel						M Inox Rostfreistahl Stainless steel	
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Legierter Stahl High alloyed steel		Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Avance standard Standard Vorschub Standard feed rate	CUT31-UN-002	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.10
		Tmax	**100-170**	**0.04-0.08**	**70-150**	**0.04-0.08**	**60-120**	**0.04-0.08**	**60-150**	**0.04-0.10**
		Zmax	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.08	**50-120***	**0.04-0.10**
		HTA	70-120	0.04-0.06	60-100	0.04-0.06	50-90	0.04-0.06	50-100	0.04-0.06
		HAC								
	CUT31-PN-002	TiAlN	90-140	0.04-0.10	60-120	0.04-0.08	50-100	0.04-0.08		
		Tmax	**100-170**	**0.04-0.10**	**70-150**	**0.04-0.10**	**60-120**	**0.04-0.10**		
	CUT31-PNW-002	N								
	CUT31-PR-802	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	**100-170**	**0.04-0.08**	**70-150**	**0.04-0.08**	**60-120**	**0.04-0.08**	60-150	0.04-0.08
	CUT31-PRW-802	N								
	CUT31-TN-002	TiAlN	90-140	0.08-0.20	60-120	0.08-0.20	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax	**100-170**	**0.08-0.20**	**70-150**	**0.08-0.20**	**60-120**	**0.08-0.15**	**60-150**	**0.08-0.20**
		Zmax	80-130*	0.08-0.20	50-110*	0.08-0.20	50-90*	0.08-0.15		
	CUT31-GN-002 ***	TiAlN	90-140	0.04-0.15	60-120	0.04-0.15	50-100	0.04-0.10	50-120	0.04-0.10
		Tmax	**100-170**	**0.04-0.15**	**70-150**	**0.04-0.15**	**60-120**	**0.04-0.10**	**70-120**	**0.04-0.10**
		HAC								
Avance modérée ** Niedriger Vorschub Low feed rate	CUT31-UN-000F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	**50-80**	**0.02-0.05**
		HAC								
	CUT31-UL/R-800F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	**50-80**	**0.02-0.05**
		HAC								
	CUT31-UL/R-802F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	**50-80**	**0.02-0.05**
		HAC								
	CUT31-UL/R-1500F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	**50-80**	**0.02-0.05**
		HAC								

* premier choix en cas de coupe interrompue
** arête de coupe vive
*** Pour opérations de fonçage-tournage (évent. tronçonnage)

* erste Wahl für unterbrochener Schnitt
** scharfe Schneidkante
*** Für Stech- und Drehoperationen (event. abstechen)

* first choice for interrupted cut
** sharp cutting edge
*** For grooving and turning operations (event. parting off)

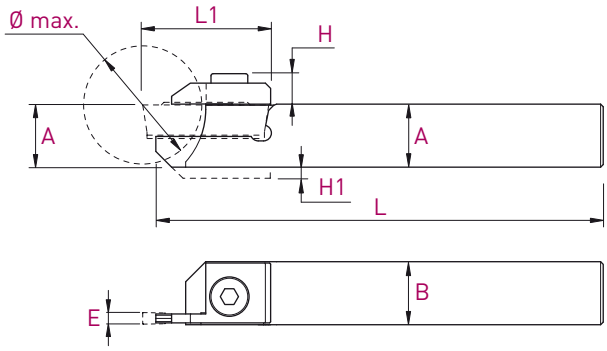
Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			30-60	0.04-0.08
100-300	0.04-0.10	100-250	0.04-0.10	100-300	0.03-0.08	150-300	0.03-0.08			30-60	0.04-0.08
150-300	**0.04-0.15**	**100-300**	**0.04-0.10**	**100-300**	**0.04-0.10**	**150-300**	**0.02-0.08**	**30-60**	**0.04-0.08**	**30-60**	**0.04-0.08**
						150-300	**0.03-0.10**				
						100-500	**0.02-0.15**				
						150-300	**0.03-0.10**				
						100-500	**0.02-0.15**				
						150-300	0.05-0.20				
100-300	0.04-0.15	100-200	0.04-0.10	100-200	0.04-0.10	**100-300**	**0.04-0.15**			30-60	0.04-0.08
						100-300	0.04-0.15				
100-300	**0.04-0.15**	100-200	0.04-0.10	100-200	0.04-0.10	**100-300**	**0.04-0.15**	30-60	0.04-0.08	30-60	0.04-0.08
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-250**	**0.02-0.05**	**100-300**	**0.02-0.05**	**30-60**	**0.02-0.06**	**30-60**	**0.02-0.06**

H

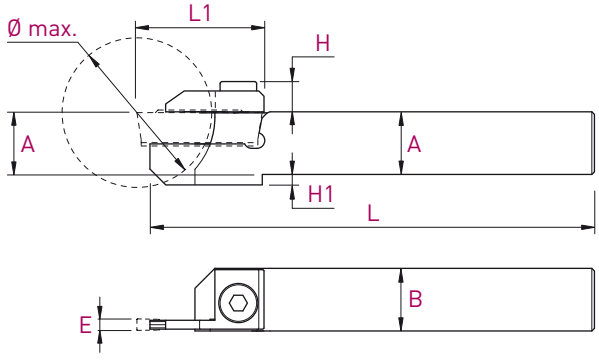
Ø max 34 mm

Porte-outils
Halter
Holders

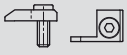


Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	L Art. N°	R Art. N°
E 1.6 mm **Type** CUT16	8 x 10	115	16	19.5	6.2	2	**CUT16-H0810L**	**CUT16-H0810R**
	10 x 10	115	16	19.5	6.2	-	**CUT16-H1010L**	**CUT16-H1010R**
	12 x 12	130	16	19.5	6.2	-	**CUT16-H1212L**	**CUT16-H1212R**
	12 x 12	90	16	19.5	6.2	-	**CUT16-H1212L-90**	**CUT16-H1212R-90**
	12.7 x 12.7	130	16	19.5	6.2	-	**CUT16-H127127L**	**CUT16-H127127R**
	16 x 16	130	16	19.5	6.2	-	**CUT16-H1616L**	**CUT16-H1616R**
	20 x 20	120	16	19.5	6.2	-	**CUT16-H2020L**	**CUT16-H2020R**
E 2.2 mm **Type** CUT22	10 x 12	115	20	24	6.4	-	**CUT22-H1012L**	**CUT22-H1012R**
	12 x 12	130	20	24	6.4	-	**CUT22-H1212L**	**CUT22-H1212R**
	12 x 12	90	20	24	6.4	-	**CUT22-H1212L-90**	**CUT22-H1212R-90**
	12.7 x 12.7	130	20	24	6.4	-	**CUT22-H127127L**	**CUT22-H127127R**
	16 x 16	130	20	24	6.4	-	**CUT22-H1616L**	**CUT22-H1616R**
	20 x 20	120	20	24	6.4	-	**CUT22-H2020L**	**CUT22-H2020R**
E 3.1 mm **Type** CUT31	16 x 16	130	34	35	7.8	-	**CUT31-H1616L**	**CUT31-H1616R**
	20 x 20	120	34	35	7.8	-	**CUT31-H2020L**	**CUT31-H2020R**
	25 x 25	140	34	35	7.8	-	**CUT31-H2525L**	**CUT31-H2525R**

Pièces de rechange Ersatzteile Spare parts	L Art. N°	R Art. N°	Art. N°	Serrage Anzug Torque
CUT 16	**CUT16L-SET**	**CUT16R-SET**	**V-M4X10-BN7**	3.5 Nm
CUT 22	**CUT22L-SET**	**CUT22R-SET**	**V-M4X10-BN7**	3.5 Nm
CUT 31	**CUT31L-SET**	**CUT31R-SET**	**V-M5X10-BN7**	4.5 Nm



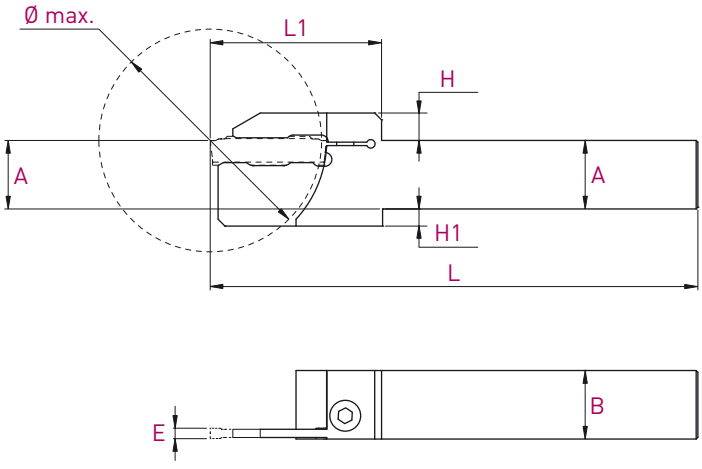
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	L  Art. N°	R  Art. N°
E 1.6 mm **Type** CUT16	10 x 12	115	20	21	6.2	2	**CUT16-H1012LX**	**CUT16-H1012RX**
	12 x 12	130	20	21	6.2	-	**CUT16-H1212LX**	**CUT16-H1212RX**
	12 x 12	90	20	21	6.2	-	**CUT16-H1212LX-90**	**CUT16-H1212RX-90**
	12.7 x 12.7	130	20	21	6.2	-	**CUT16-H127127LX**	**CUT16-H127127RX**
	16 x 16	130	20	21	6.2	-	**CUT16-H1616LX**	**CUT16-H1616RX**
	20 x 20	120	20	21	6.2	-	**CUT16-H2020LX**	**CUT16-H2020RX**
E 2.2 mm **Type** CUT22	10 x 12	115	26	25	6.4	4	**CUT22-H1012LX**	**CUT22-H1012RX**
	12 x 12	130	26	25	6.4	2	**CUT22-H1212LX**	**CUT22-H1212RX**
	12 x 12	90	26	25	6.4	2	**CUT22-H1212LX-90**	**CUT22-H1212RX-90**
	12.7 x 12.7	130	26	25	6.4	-	**CUT22-H127127LX**	**CUT22-H127127RX**
	16 x 16	130	26	25	6.4	-	**CUT22-H1616LX**	**CUT22-H1616RX**
	20 x 20	120	26	25	6.4	-	**CUT22-H2020LX**	**CUT22-H2020RX**
	25 x 25	140	26	25	6.4	-	**CUT22-H2525LX**	**CUT22-H2525RX**
E 3.1 mm **Type** CUT31	16 x 16	120	42	37	7.8	4	**CUT31-H1616LX**	**CUT31-H1616RX**
	20 x 20	120	42	37	7.8	-	**CUT31-H2020LX**	**CUT31-H2020RX**
	25 x 25	140	42	37	7.8	-	**CUT31-H2525LX**	**CUT31-H2525RX**

Pièces de rechange Ersatzteile Spare parts	L  Art. N°	 R Art. N°	 Art. N°	Serrage Anzug Torque
CUT 16	**CUT16LX-SET**	**CUT16RX-SET**	**V-M4X10-BN7**	3.5 Nm
CUT 22	**CUT22LX-SET**	**CUT22RX-SET**	**V-M4X10-BN7**	3.5 Nm
CUT 31	**CUT31LX-SET**	**CUT31RX-SET**	**V-M5X10-BN7**	4.5 Nm

HZ

Ø max 65 mm

Porte-outils
Halter
Holders



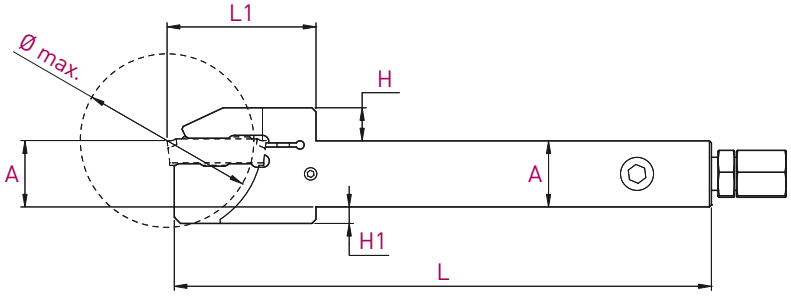
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	L **Art. N°**	R **Art. N°**
E 2.2 mm **Type** CUT22	16 x 16	130	32	30	7	-	**CUT22-H1616LZ-D32**	**CUT22-H1616RZ-D32**
	20 x 20	130	32	30	7	-	**CUT22-H2020LZ-D32**	**CUT22-H2020RZ-D32**
	16 x 16	130	42	35	7	4	**CUT22-H1616LZ-D42**	**CUT22-H1616RZ-D42**
	20 x 20	130	42	35	7	-	**CUT22-H2020LZ-D42**	**CUT22-H2020RZ-D42**
E 3.1 mm **Type** CUT31	20 x 20	140	52	44	8	5	**CUT31-H2020LZ-D52**	**CUT31-H2020RZ-D52**
	25 x 25	140	52	44	8	-	**CUT31-H2525LZ-D52**	**CUT31-H2525RZ-D52**
	20 x 20	140	65	50	8	5	**CUT31-H2020LZ-D65**	**CUT31-H2020RZ-D65**
	25 x 25	140	65	50	8	-	**CUT31-H2525LZ-D65**	**CUT31-H2525RZ-D65**

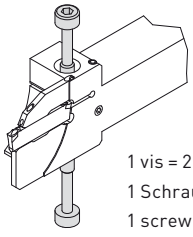
Pièces de rechange Ersatzteile Spare parts	Art. N°	Serrage Anzug Torque
CUT 22	**V-M4X10-BN7**	3.5 Nm
CUT 31	**V-M5X10-BN7**	4.5 Nm

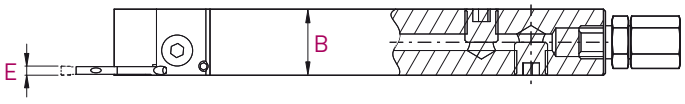
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

Ø max 65 mm

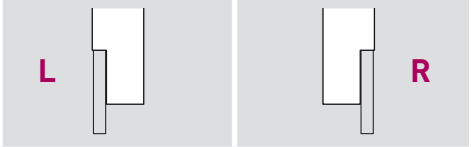
HZ-JET



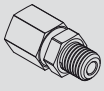


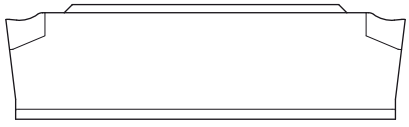


1 vis = 2 possibilités de serrage
1 Schraube = 2 Spannmöglichkeiten
1 screw = 2 clamp possibilities

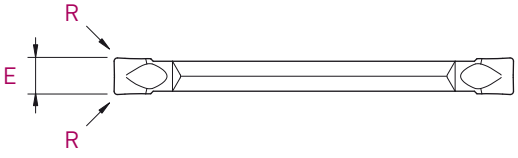


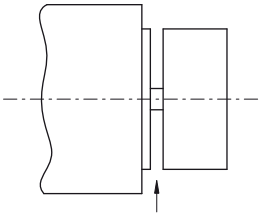
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	Art. N°	Art. N°
E 2.2 mm **Type** CUT22	16 x 16	130	42	36	8	4	**CUT22-H1616LZ-JET42**	**CUT22-H1616RZ-JET42**
	20 x 20	130	42	36	8	-	**CUT22-H2020LZ-JET42**	**CUT22-H2020RZ-JET42**
E 3.1 mm **Type** CUT31	16 x 16	140	65	49	9	9	**CUT31-H1616LZ-JET65**	**CUT31-H1616RZ-JET65**
	20 x 20	140	65	51	9	5	**CUT31-H2020LZ-JET65**	**CUT31-H2020RZ-JET65**
	25 x 25	140	65	51	9	-	**CUT31-H2525LZ-JET65**	**CUT31-H2525RZ-JET65**

Pièces de rechange Ersatzteile Spare parts		Serrage Anzug Torque		
	Art. N°		**Art. N°**	**Art. N°**
CUT 22	**V-M4X22-CUT**	3.5 Nm	**J-M8X1-D6**	**JB-M8X1**
CUT 31	**V-M5X25-CUT**	4.5 Nm	**J-M8X1-D6**	**JB-M8X1**





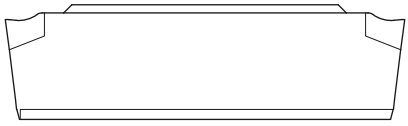




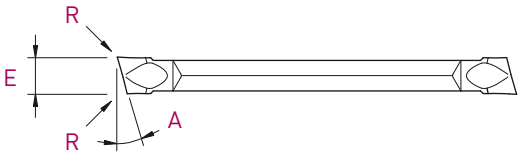


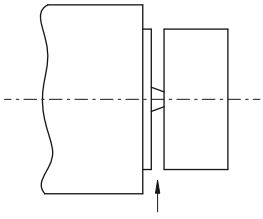
UN

Type	E ±0.1	R	Art. N°	TiAlN	Tmax	Zmax	HTA	HAC
CUT16	1.6	0.02	CUT16-UN-000F	●			●	●
	1.6	0.10	CUT16-UN-001	●	●	●	●	●
CUT22	2.2	0.02	CUT22-UN-000F	●			●	●
	2.2	0.20	CUT22-UN-002	●	●	●	●	●
CUT31	3.1	0.02	CUT31-UN-000F	●			●	●
	3.1	0.20	CUT31-UN-002	●	●	●	●	●





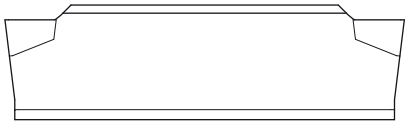


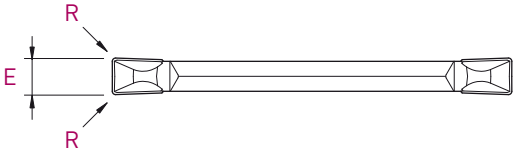


				UL				UR					
Type	E ±0.1	A	R	Art. N°	TiAlN	HTA	HAC	Art. N°	TiAlN	Tmax	Zmax	HTA	HAC
CUT16	1.6	8°	0.02	CUT16-UL-800F	●	●	●	CUT16-UR-800F	●			●	●
	1.6	15°	0.02	CUT16-UL-1500F	●	●	●	CUT16-UR-1500F	●			●	●
CUT22	2.2	8°	0.02	CUT22-UL-800F	●	●	●	CUT22-UR-800F	●			●	●
	2.2	8°	0.20	–				CUT22-UR-802		●	●		
	2.2	8°	0.20	CUT22-UL-802F	●	●	●	CUT22-UR-802F	●			●	●
	2.2	15°	0.02	CUT22-UL-1500F	●	●	●	CUT22-UR-1500F	●			●	●
CUT31	3.1	8°	0.02	CUT31-UL-800F	●	●	●	CUT31-UR-800F	●			●	●
	3.1	8°	0.20	CUT31-UL-802F	●	●	●	CUT31-UR-802F	●			●	●
	3.1	15°	0.02	CUT31-UL-1500F	●	●	●	CUT31-UR-1500F	●			●	●

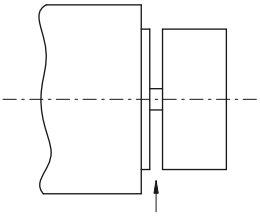
PN

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts





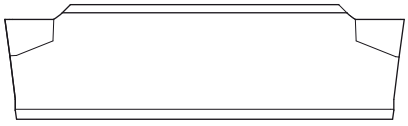




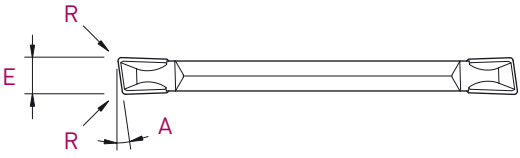
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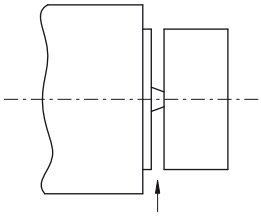


Type	E ±0.1	R	Art. N°	TiAlN	Tmax
CUT22	2.2	0.20	CUT22-PN-002	●	●
CUT31	3.1	0.20	CUT31-PN-002	●	●









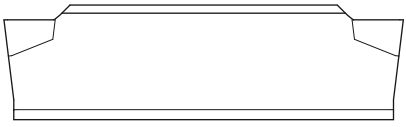
PR

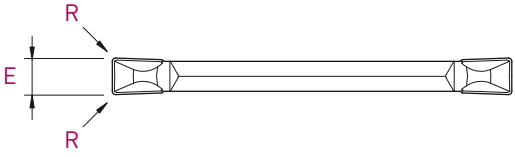


Type	E ±0.1	A	R	Art. N°	TiAlN	Tmax
CUT16	1.6	8°	0.10	**CUT16-PR-801**	●	●
CUT22	2.2	8°	0.20	**CUT22-PR-802**	●	●
CUT31	3.1	8°	0.20	**CUT31-PR-802**	●	●

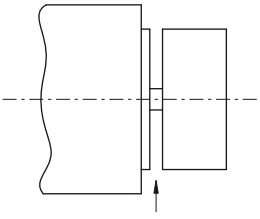
PNW

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

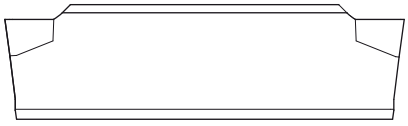


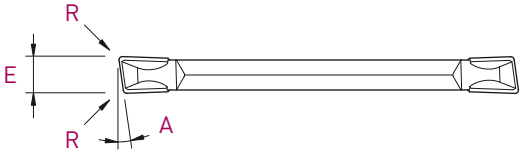




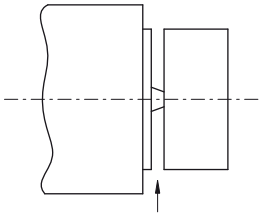


Type	E ±0.1	R	Art. N°	N S
CUT22	2.2	0.20	CUT22-PNW-002	●
CUT31	3.1	0.20	CUT31-PNW-002	●





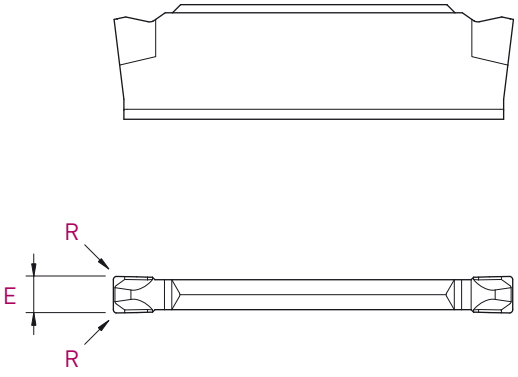




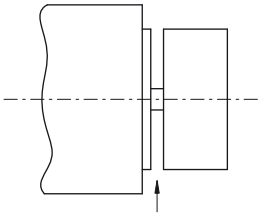
PRW



Type	E ±0.1	A	R	Art. N°	N S
CUT16	1.6	8°	0.10	CUT16-PRW-801	●
CUT22	2.2	8°	0.20	CUT22-PRW-802	●
CUT31	3.1	8°	0.20	CUT31-PRW-802	●





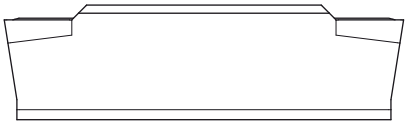


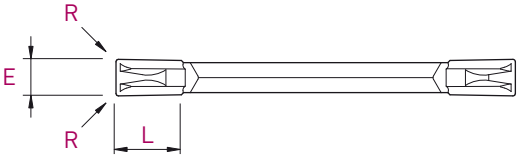
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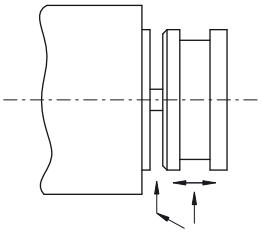
Type	E ±0.1	R	Art. N°	P M N S TiAlN	P M Tmax	P M Zmax
CUT22	2.2	0.20	CUT22-TN-002	●	●	●
CUT31	3.1	0.20	CUT31-TN-002	●	●	●

Plaquettes de fonçage, tournage et tronçonnage
WSP zum einstechen, drehen und abstechen
Solid carbide inserts for grooving, turning and cut off







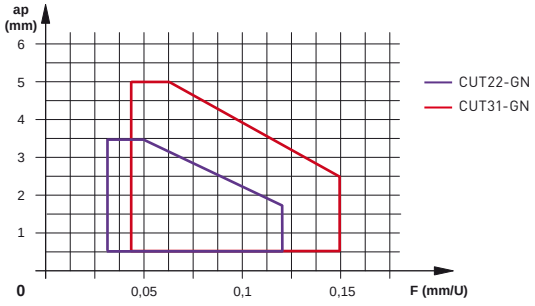


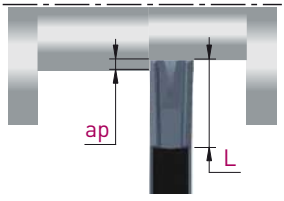
GN



Type	E ±0.1	L	R	Art. N°	P M N S TiAlN	P M Tmax	N S HAC
CUT22	2.2	3.5	0.15	CUT22-GN-002	●	●	●
CUT31	3.1	5.0	0.15	CUT31-GN-002	●	●	●

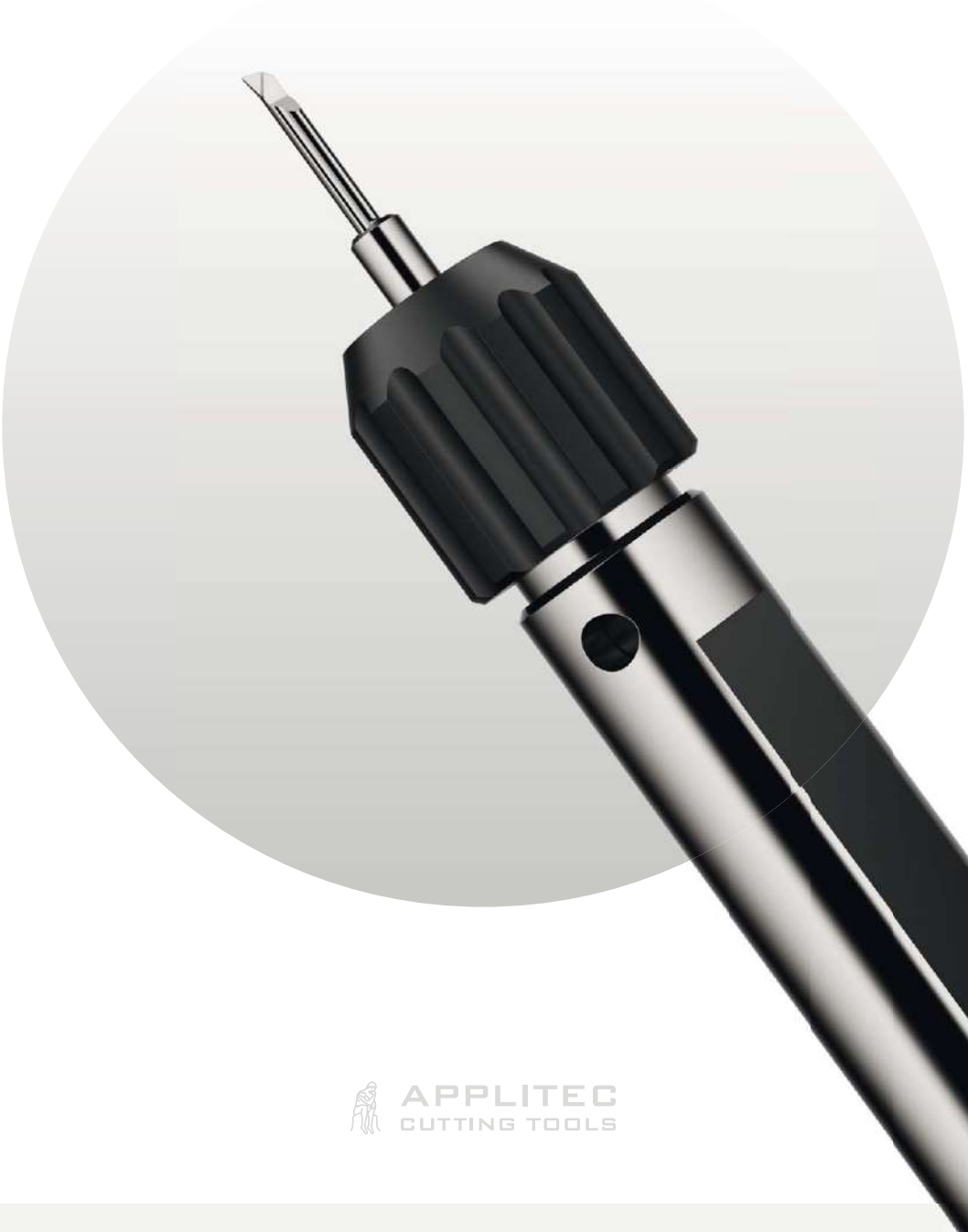
Conseils d'utilisation pour plaquettes type GN
Anwendungsempfehlungen für GN-Wendeplatten
Application recommendations for GN inserts





ap max = L dans matière à bonne usinabilité
ap max = L in Werkstoffe mit gute Zerspanbarkeit
ap max = L in material with good machinability

IN-Line



APPLITEC
CUTTING TOOLS

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H

HS

HY

B	H	4	–	D	20	–	100

Longueur
Länge
Length

Ø/⏍ queue
Schaft Ø/⏍
Shank Ø/⏍

Queue cylindrique
Zylindrischer Schaft
Cylindrical shank

Ø alésage
Bohrung Ø
Bore Ø

Porte-outils
Halter
Holders

Ligne produit d'alésage
Innendrehen Produktlinie
Boring product line



HK

B	HK	4	N	–	20	–	32R

- **32R** — Barres d'alésage compatibles (longueur L3)
  Kompatible Bohrstangen (Länge L3)
  Compatible boring bars (length L3)
- **20** — ⏍ queue
  Schaft ⏍
  Shank ⏍
- **N** — Géométrie du porte-outil
  Haltergeometrie
  Tool holder geometry
- **4** — Ø alésage
  Bohrung Ø
  Bore Ø
- **HK** — Porte-outils
  Halter
  Holders
- **B** — Ligne produit d'alésage
  Innendrehen Produktlinie
  Boring product line

Codification des barres d'alésage
Kodifizierung für Bohrstangen
Coding guide for holders



B Arrosage intégré
Intergrieter Kühlmittelzufuhr
Integrated coolant supply

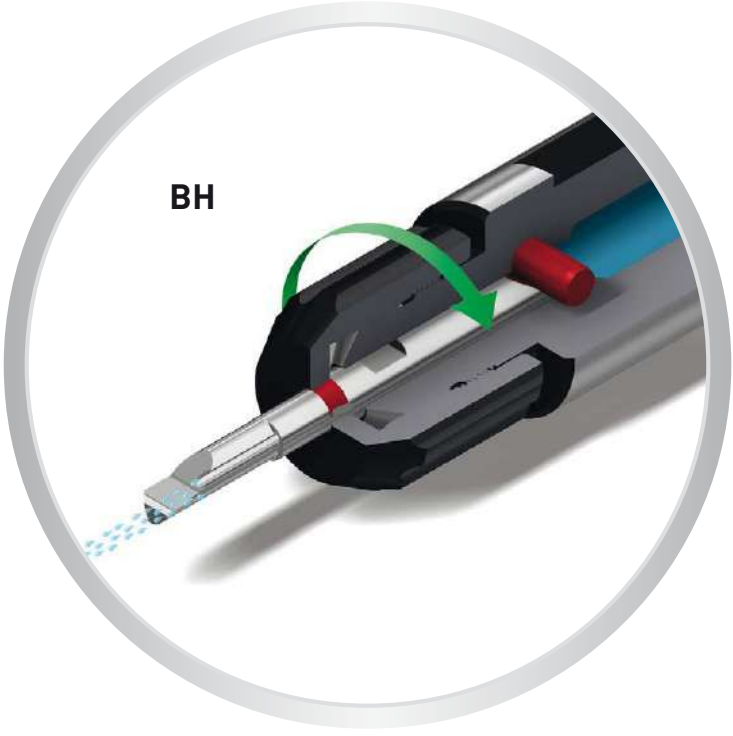


F Sans arrosage
Ohne Kühlung
Without coolant

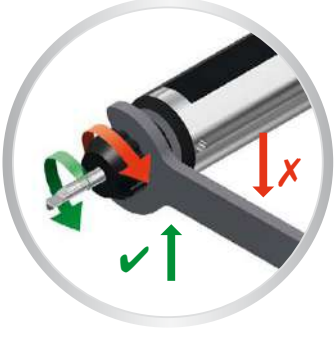
B	**B** Ou / Oder / Or **F**	**4**	**R**	–	**25**	–	**75**	–	**BAX**	–	**R05**	–	**ZN**

- **B** — Ligne produit d'alésage / Innendrehen Produktlinie / Boring product line
- **4** — Ø queue / Schaft Ø / Shank Ø
- **R** — Exécution R/L / Ausführung R/L / Execution R/L
- **25** — Ø minimum / Minimal Ø / Minimum Ø
- **75** — Longueur utile / Nutzlänge / Length
- **BAX** — Géométries de coupe / Schneidgeometrien / Cutting geometries
- **R05** — Indication complémentaire / Zusätzliche Angabe / Additional indication
  R = rayon / Radius / radius
- **ZN** — Nuance / Sorte / Grade

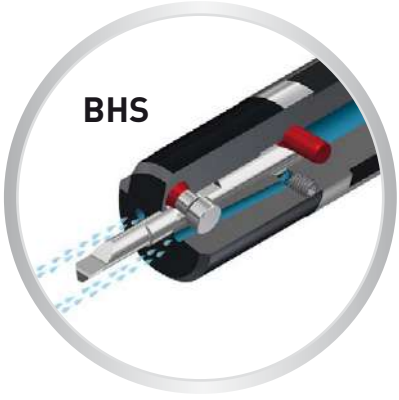
Arrosage par la barre d'alésage
Kühlung durch die Bohrstange
Cooling through the boring bar



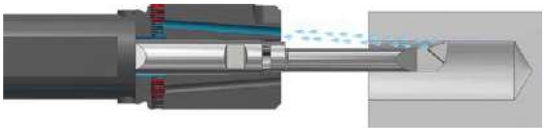


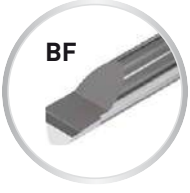


Système de serrage à vis transversale
Querverschraubungsspannsystem
Clamping system with transverse screw



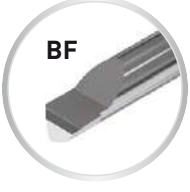
Arrosage sur l'arête de coupe
Kühlung auf der Schneidkante
Cooling on the cutting edge





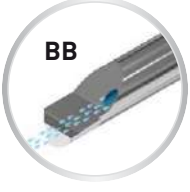
Arrosage favorisant l'évacuation des copeaux
Spanabfuhr fördernde Kühlung
Cooling for better chip outflow





Arrosage par le centre de l'outil
Zentrale Kühlmittelzufuhr
Cooling through the center of the tool





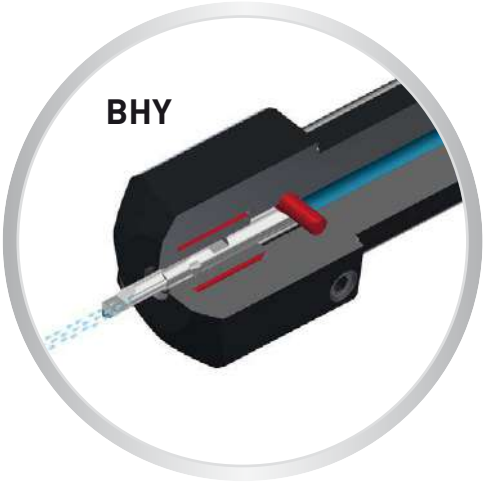
Infos et avantages
Infos und Vorteile
Infos and advantages

Porte-outils à serrage hydraulique
Hydro-Dehnspann-System Halter
Holders with hydraulic clamping system



Excellente absorption des vibrations
Ausgezeichnete Schwingungsdämpfung
Excellent vibration absorbtion

Arrosage par la barre d'alésage
Kühlung durch die Bohrstange
Cooling through the boring bar



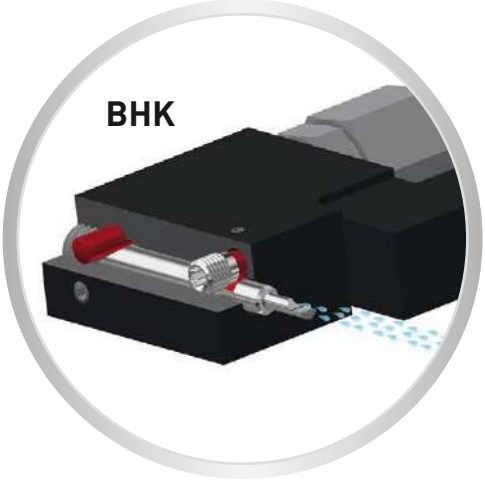
Infos et avantages
Infos und Vorteile
Infos and advantages

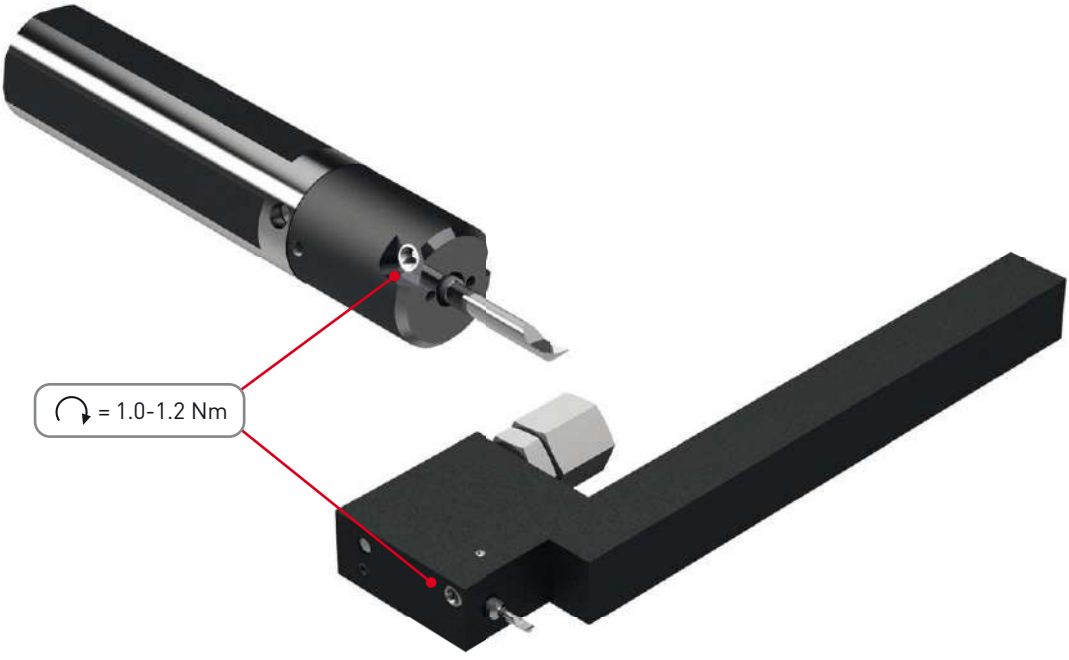
Porte-outils coudés
Gekröpfte Halter
Cranked holders

Système de serrage à vis transversale
Querverschraubungsspannsystem
Clamping system with transverse screw



Arrosage par la barre d'alésage
Kühlung durch die Bohrstange
Cooling through the boring bar





Nous recommandons le serrage des porte-outils type BHS et BHK avec ce type de tournevis dynamométrique.

Wir empfehlen für das Anziehen der Halter Typ BHS und BHK diese Art von Drehmomentschraubendreher.

For holders type BHS and BHK clamping, we recommend this kind of torque screwdriver.



Art. N°
SET-NM1.2-TX8

Nuances
Sorten
Grades

µK30

ZTAF



K30

ZN + revêtement PVD
ZN + PVD Beschichtung
ZN + PVD coating

TF **F** M E

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

- nuance universelle pour l'usage des aciers, aciers inoxydables, aciers alliés, alliages de titane
- bonne résistance à la température

- Vielzweck-Hartmetallsorte für die Bearbeitung von Stahl, rostfreien Stählen, Stahllegierung, Titanlegierung
- gute Warmfestigkeit

- universal grade for steel, stainless steel, alloyed steel, titanium alloys
- good heat resistance

µK30

ZTAXF



K30

ZN + revêtement PVD
ZN + PVD Beschichtung
ZN + PVD coating

TF **F** M E

P ★★★★☆
M ★★★★★
N ★☆☆☆☆
S ★★★★★

- nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant : chrome nickel, vanadium, molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte, für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend : Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade, recommended for following material : Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing : Chrome-nickel, Vanadium, Molybdenum, ...

µK30

ZN



K30

Non revêtu
Unbeschichtet
Uncoated

P ★☆☆☆☆
M ★☆☆☆☆
N ★★★★☆
S ★★★★☆

- nuance de base micro-grain tenace
- 1er choix pour l'usinage des métaux non ferreux

- zähe Basis Feinkornsorte
- erste Wahl für die Bearbeitung von Nichteisenmetalle

- tough base micro-grain grade
- first choice for non-ferrous materials

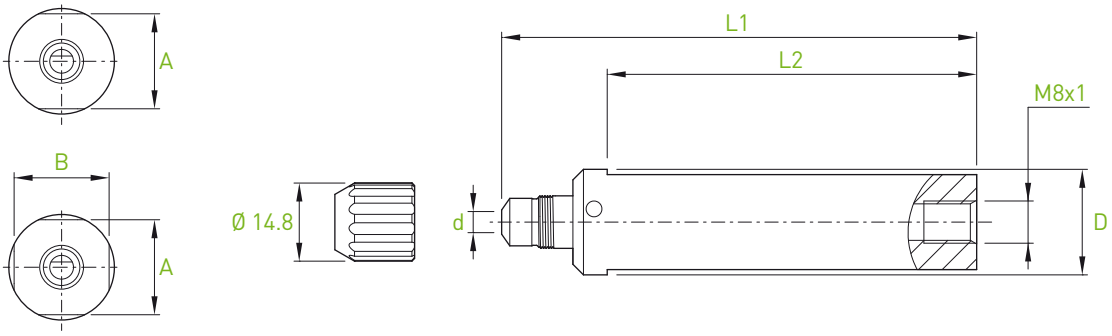
			Ø barre d'alésage Bohrstange Ø boring bar Ø		
Matière **Werkstoff** **Material**		VC (m/min)	Ø1.0 - Ø2.0 (mm/U)	Ø2.5 - Ø4.0 (mm/U)	Ø4.5 - Ø5.5 (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	60-100	0.02-0.03	0.02-0.08	0.03-0.10
Acier faiblement allié Leicht legierter Stahl Low alloyed steel	P	50-80	0.01-0.03	0.02-0.05	0.03-0.06
Acier fortement allié Legierter Stahl High alloyed steel	P	40-60	0.01-0.02	0.02-0.04	0.02-0.06
Acier inoxydable Rostfreistahl Stainless steel	M	40-90	0.01-0.03	0.02-0.05	0.03-0.08
Aluminium	N	60-150	0.01-0.03	0.02-0.06	0.03-0.10
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	60-150	0.01-0.03	0.02-0.05	0.03-0.08
Titane Titan Titanium	S	30-70	0.01-0.03	0.02-0.05	0.03-0.10

BH4-D

Porte-outils avec écrou de serrage
Halter mit Spannmutter
Holders with clamping nut

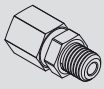






d	Bars	D	L1	L2	A x B	2 flats	4 flats	Art. N°
4	BB4... BF4...	10	75	55	8.8x8.8	●		**BH4-D10-75**
		12	75	55	11.2x11.2	●		**BH4-D12-75**
		12.7	75	55	11.2x11.2	●		**BH4-D12.7-75**
		15.87	75	55	14x14		●	**BH4-D15.87-75-F4**
		16	75	55	14x14	●		**BH4-D16-75**
		16	75	55	14x14		●	**BH4-D16-75-F4**
		16	110	90	14x14		●	**BH4-D16-110-F4**
		19.05	90	70	17x17		●	**BH4-D19.05-90-F4**
		20	90	70	18x18	●		**BH4-D20-90**
		20	90	70	18x18		●	**BH4-D20-90-F4**
		20	160	140	18x18		●	**BH4-D20-160-F4**
		22	90	70	20x20	●		**BH4-D22-90**
		22	90	70	20x20		●	**BH4-D22-90-F4**
		22	130	110	20x20		●	**BH4-D22-130-F4**
		25	100	80	23x23	●		**BH4-D25-100**
		25	100	80	23x23		●	**BH4-D25-100-F4**
		25	170	150	23x23		●	**BH4-D25-170-F4**
		25.4	100	80	23.4x23.4	●		**BH4-D25.4-100**
		28	100	80	26x26	●		**BH4-D28-100**

Pièces de rechange Ersatzteile Spare parts	 **Art. N°**	 **Art. N°**
BH4...	**BH4-M10**	**C-BH4-M10**

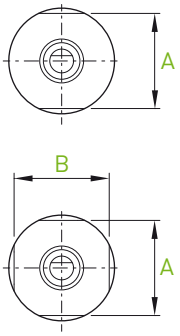
Option	 **Art. N°**
BH4...	**J-M8X1-D6**
	more option see JET-Line

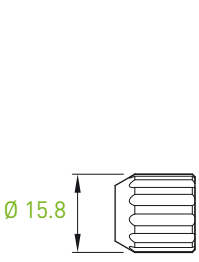
Porte-outils avec écrou de serrage
Halter mit Spannmutter
Holders with clamping nut

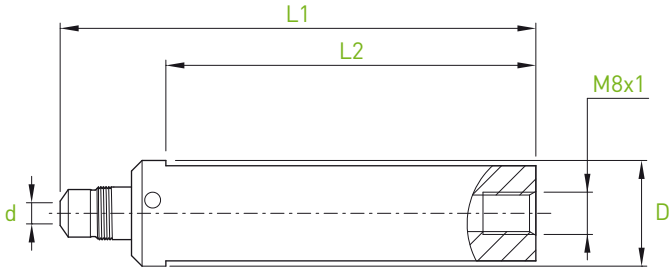
BH6-D





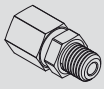






d	Bars	D	L1	L2	A x B	2 flats	4 flats	Art. N°
6	BB6... BF6...	12	75	55	11.2x11.2	●		**BH6-D12-75**
		12.7	75	55	11.2x11.2	●		**BH6-D12.7-75**
		15.87	75	55	14x14	●		**BH6-D15.87-75**
		16	75	55	14x14	●		**BH6-D16-75**
		19.05	90	70	17x17	●		**BH6-D19.05-90**
		20	90	70	18x18	●		**BH6-D20-90**
		20	90	70	18x18		●	**BH6-D20-90-F4**
		20	160	140	18x18		●	**BH6-D20-160-F4**
		22	90	70	20x20	●		**BH6-D22-90**
		22	90	70	20x20		●	**BH6-D22-90-F4**
		22	130	110	20x20		●	**BH6-D22-130-F4**
		25	100	80	23x23	●		**BH6-D25-100**
		25	100	80	23x23		●	**BH6-D25-100-F4**
		25	170	150	23x23		●	**BH6-D25-170-F4**
		25.4	100	80	23.4x23.4	●		**BH6-D25.4-100**
		28	100	80	26x26	●		**BH6-D28-100**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BH6...	**BH6-M12**	**C-BH6-M12**

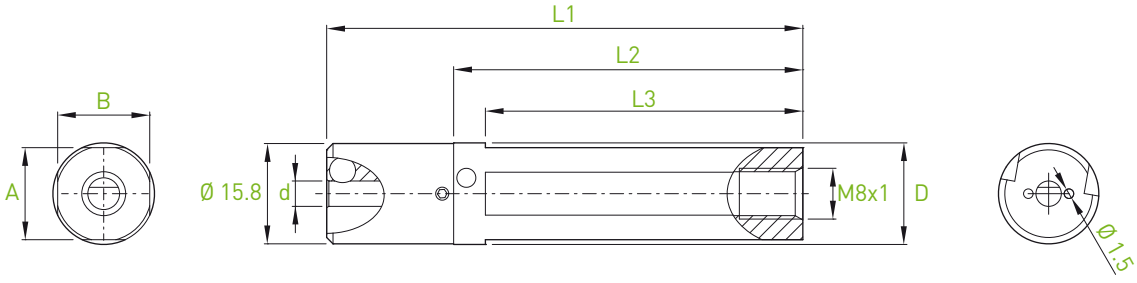
Option	 Art. N°
BH6...	**J-M8X1-D6**
	more option see JET-Line

BHS4-D

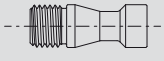
Porte-outils avec arrosage multiple
Halter mit mehrfaches Kühlungssystem
Holders with multiple coolant system

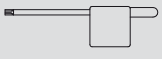
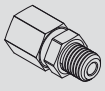
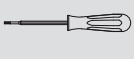






d	Bars	D	L1	L2	L3	A x B	Art. N°
4	BB4... BF4...	10	75	55	50	9.2x9.2	**BHS4-D10-75-F4**
		12	75	55	50	11x11	**BHS4-D12-75-F4**
		12.7	75	55	50	11.7x11.7	**BHS4-D12.7-75-F4**
		15.87	75	55	50	14.5x14.5	**BHS4-D15.87-75-F4**
		16	75	55	50	14.5x14.5	**BHS4-D16-75-F4**
		16	110	90	85	14.5x14.5	**BHS4-D16-110-F4**
		19.05	90	70	65	17x17	**BHS4-D19.05-90-F4**
		20	90	70	65	18x18	**BHS4-D20-90-F4**
		20	160	140	135	18x18	**BHS4-D20-160-F4**
		22	90	70	65	20x20	**BHS4-D22-90-F4**
		22	130	110	105	20x20	**BHS4-D22-130-F4**
		25	100	80	75	23x23	**BHS4-D25-100-F4**
		25	170	150	145	23x23	**BHS4-D25-170-F4**
		25.4	100	80	75	23x23	**BHS4-D25.4-100-F4**
		28	100	80	75	26x26	**BHS4-D28-100-F4**

Pièces de rechange Ersatzteile Spare parts	 Art. N°
BHS4...	**V-BHS-M4X0.5-T8**

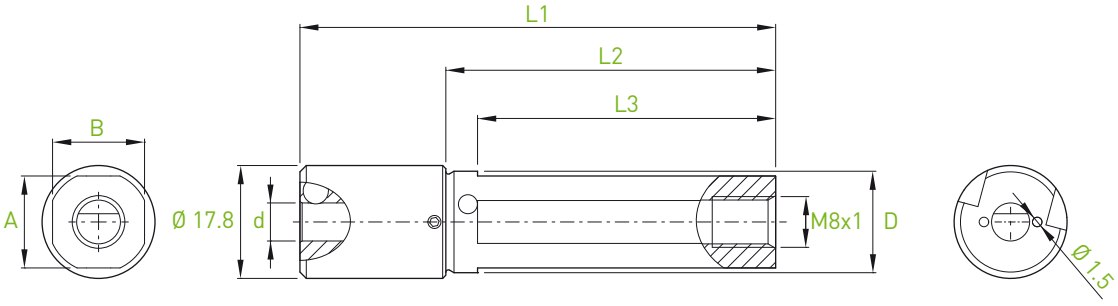
Option	 Art. N°	 Art. N°	 Art. N°
BHS4...	**C-T8**	**J-M8X1-D6** more option see JET-Line	**SET-NM1.2-TX8**

Porte-outils avec arrosage multiple
Halter mit mehrfaches Kühlungssystem
Holders with multiple coolant system

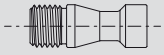
BHS6-D

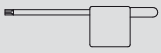
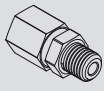
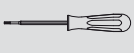






d	Bars	D	L1	L2	L3	A x B	Art. N°
6	BB6... BF6...	12	75	52	47	11x11	**BHS6-D12-75-F4**
		12.7	75	52	47	11.7x11.7	**BHS6-D12.7-75-F4**
		15.87	75	52	47	14.5x14.5	**BHS6-D15.87-75-F4**
		16	75	52	47	14.5x14.5	**BHS6-D16-75-F4**
		16	110	87	82	14.5x14.5	**BHS6-D16-110-F4**
		19.05	90	67	62	17x17	**BHS6-D19.05-90-F4**
		20	90	67	62	18x18	**BHS6-D20-90-F4**
		20	160	137	132	18x18	**BHS6-D20-160-F4**
		22	90	67	62	20x20	**BHS6-D22-90-F4**
		22	130	107	102	20x20	**BHS6-D22-130-F4**
		25	100	77	72	23x23	**BHS6-D25-100-F4**
		25	170	147	142	23x23	**BHS6-D25-170-F4**
		25.4	100	77	72	23x23	**BHS6-D25.4-100-F4**
		28	100	77	72	26x26	**BHS6-D28-100-F4**

Pièces de rechange Ersatzteile Spare parts	 Art. N°
BHS4...	**V-BHS-M4X0.5-T8**

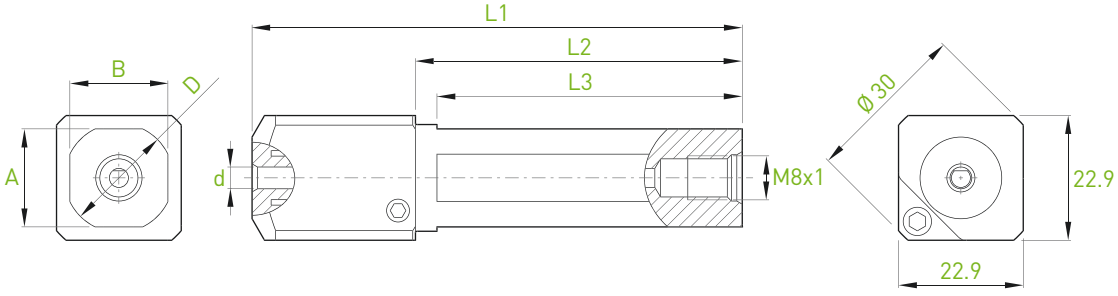
Option	 Art. N°	 Art. N°	 Art. N°
BHS6...	**C-T8**	**J-M8X1-D6** more option see JET-Line	**SET-NM1.2-TX8**

BHY4-D

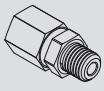
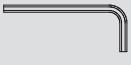
Porte-outils à serrage hydraulique
Hydro-Dehnspann-System Halter
Holders with hydraulic clamping system







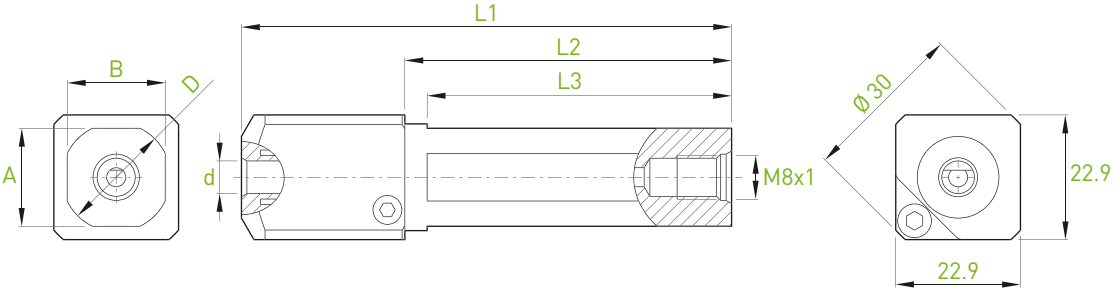
d	Bars	D	L1	L2	L3	A x B	Art. N°
4	BB4... BF4...	12	90	60	55	11.2x11.2	**BHY4-D12-90-F4**
		16	90	60	55	14.5x14.5	**BHY4-D16-90-F4**
		19.05	90	60	55	17x17	**BHY4-D19.05-90-F4**
		20	90	60	55	18x18	**BHY4-D20-90-F4**
		22	90	60	55	20x20	**BHY4-D22-90-F4**
		25	100	70	65	23x23	**BHY4-D25-100-F4**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BHY4...	**J-M8X1-D6** more option see JET-Line	**C-6P-3.0**

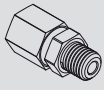
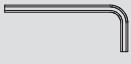
Porte-outils à serrage hydraulique
Hydro-Dehnspann-System Halter
Holders with hydraulic clamping system

BHY6-D



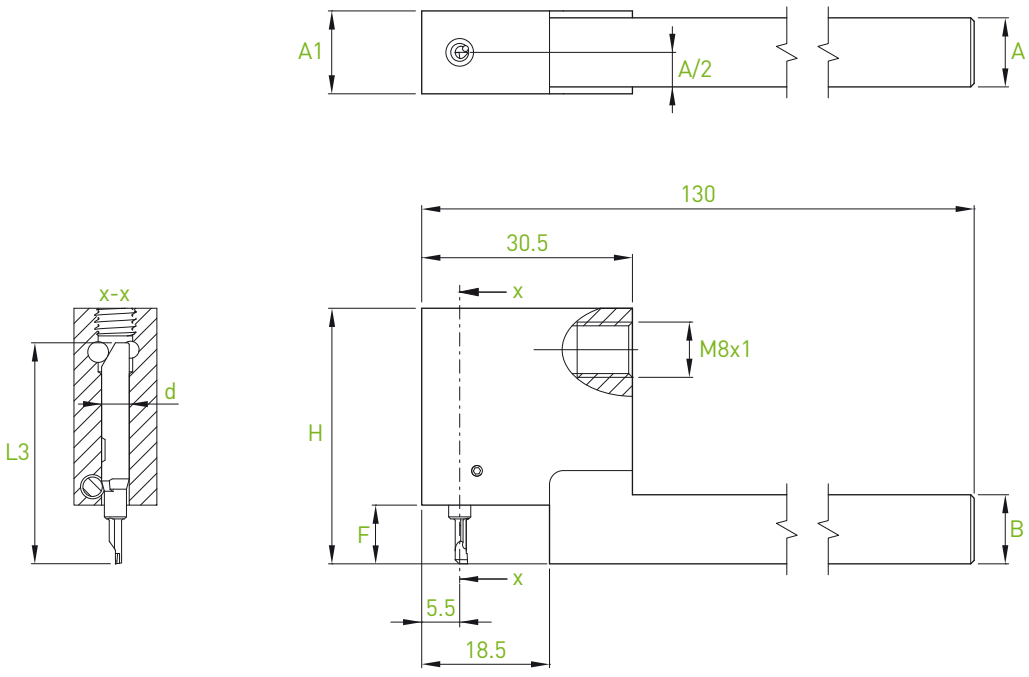


d	Bars	D	L1	L2	L3	A x B	Art. N°
6	BB6... BF6...	12	90	60	55	11.2x11.2	**BHY6-D12-90-F4**
		16	90	60	55	14.5x14.5	**BHY6-D16-90-F4**
		19.05	90	60	55	17x17	**BHY6-D19.05-90-F4**
		20	90	60	55	18x18	**BHY6-D20-90-F4**
		22	90	60	55	20x20	**BHY6-D22-90-F4**
		25	100	70	65	23x23	**BHY6-D25-100-F4**

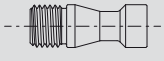
Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BHY6...	**J-M8X1-D6** more option see JET-Line	**C-6P-3.0**

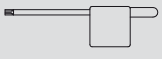
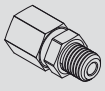
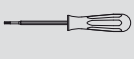
BHK4N

Porte-outils coudés
Kröpfhalter
Cranked holders



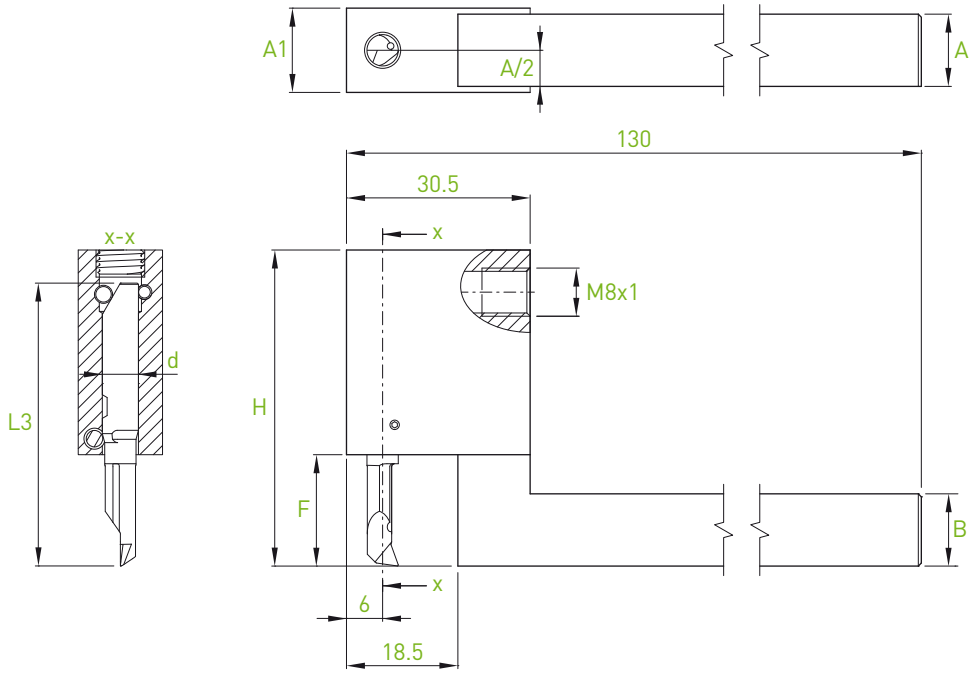
d	Bars	L3	A x B	F	H	A1	Art. N°
4	BB4R... BF4R...	32	8x8	8.5	37	12	**BHK4N-0808X-32R**
			10x10	8.5	37	12	**BHK4N-1010X-32R**
			12x12	8.5	37	12	**BHK4N-1212X-32R**
			16x16	8.5	37	16	**BHK4N-1616X-32R**
		37	8x8	13.5	42	12	**BHK4N-0808X-37R**
			10x10	13.5	42	12	**BHK4N-1010X-37R**
			12x12	13.5	42	12	**BHK4N-1212X-37R**
			16x16	13.5	42	16	**BHK4N-1616X-37R**
		42	10x10	18.5	47	12	**BHK4N-1010X-42R**
			12x12	18.5	47	12	**BHK4N-1212X-42R**
			16x16	18.5	47	16	**BHK4N-1616X-42R**

Pièces de rechange Ersatzteile Spare parts	
	Art. N°
BHK4N...	**V-BHK-M4X0.5-T8**

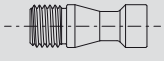
Option			
	Art. N°	**Art. N°**	**Art. N°**
BHK4N...	**C-T8**	**J-M8X1-D6** more option see JET-Line	**SET-NM1.2-TX8**

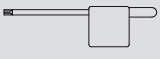
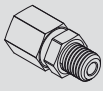
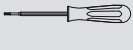
Porte-outils coudés
Kröpfhalter
Cranked holders

BHK6N



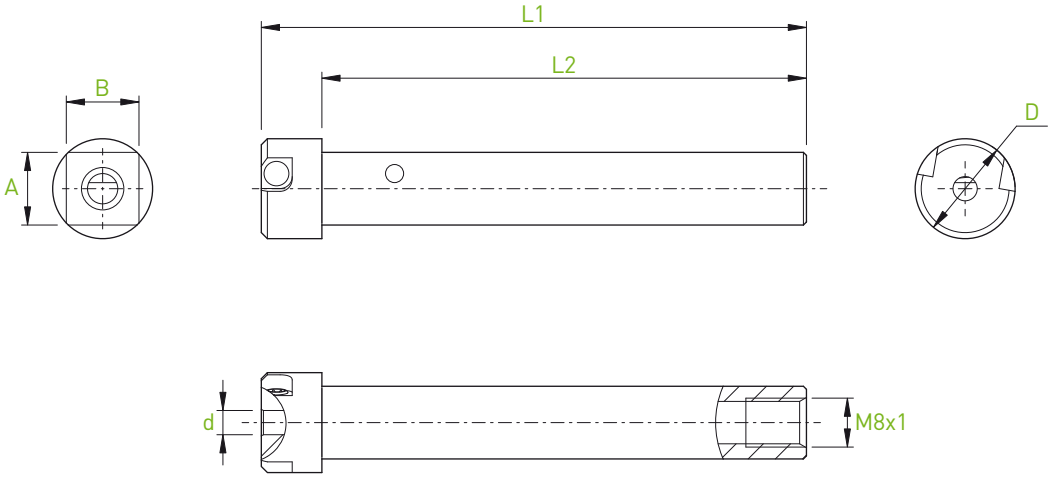
d	Bars	L3	A x B	F	H	A1	Art. N°
6	BB6R... BF6R...	47	10x10	18.5	52.5	12	**BHK6N-1010X-47R**
			12x12	18.5	52.5	12	**BHK6N-1212X-47R**
			16x16	18.5	52.5	16	**BHK6N-1616X-47R**
		57	10x10	28.5	62.5	12	**BHK6N-1010X-57R**
			12x12	28.5	62.5	12	**BHK6N-1212X-57R**
			16x16	28.5	62.5	16	**BHK6N-1616X-57R**

Pièces de rechange Ersatzteile Spare parts	 Art. N°
BHK6N...	**V-BHK-M4X0.5-T8**

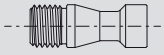
Option	 Art. N°	 Art. N°	 Art. N°
BHK6N...	**C-T8**	**J-M8X1-D6** more option see JET-Line	**SET-NM1.2-TX8**

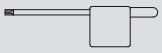
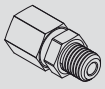
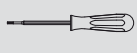
BHS4

Porte-outils section carrée
Viereckige Halter
Square holders



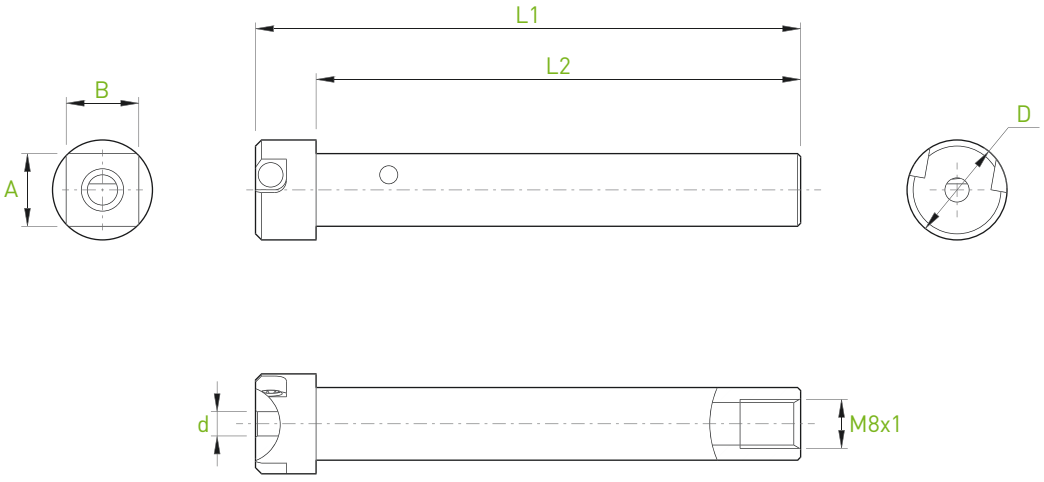
d	Bars	A x B	L1	L2	D	Art. N°
4	BB4... BF4...	12x12	90	80	16.5	**BHS4-1212-90**
		16x16	100	90	15.5	**BHS4-1616-100**

Pièces de rechange Ersatzteile Spare parts	
	Art. N°
BHS4...	**V-BHS-M4X0.5-T8**

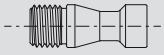
Option			
	Art. N°	Art. N°	Art. N°
BHS4...	**C-T8**	**J-M8X1-D6**	**SET-NM1.2-TX8**
		more option see JET-Line	

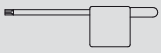
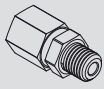
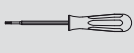
Porte-outils section carrée
Viereckige Halter
Square holders

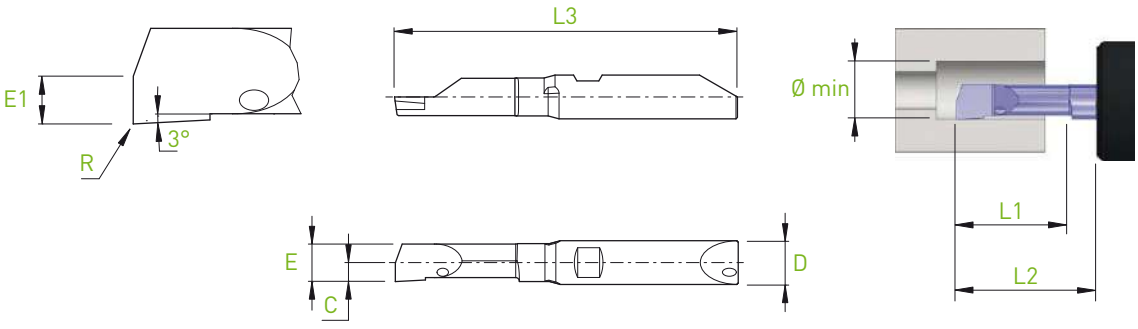
BHS6



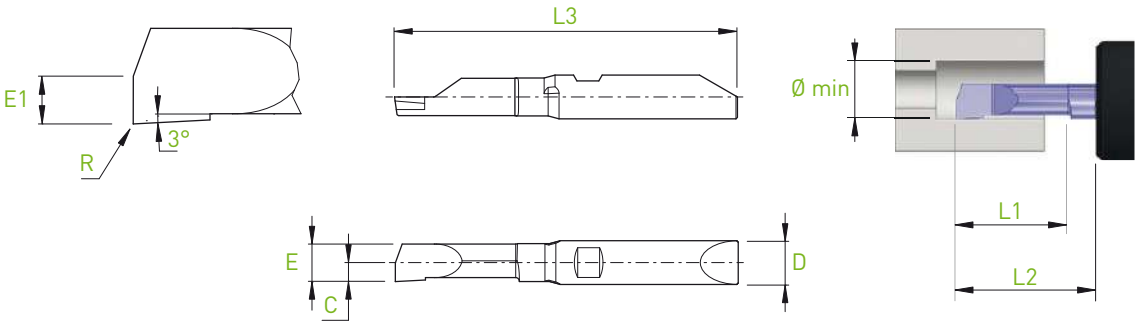
d	Bars	A x B	L1	L2	D	Art. N°
6	BB6... BF6...	12x12	90	80	17.5	**BHS6-1212-90**
		16x16	100	-	-	**BHS4-1616-100**

Pièces de rechange Ersatzteile Spare parts	
	Art. N°
BHS6...	**V-BHS-M4X0.5-T8**

Option			
	Art. N°	Art. N°	Art. N°
BHS6...	**C-T8**	**J-M8X1-D6**	**SET-NM1.2-TX8**
		more option see JET-Line	



												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	E1	C	R	L3	Art. N°	P M N S ZTAF	P M S ZTAXF	P N S ZN	P M N S ZTAF	P N S ZN
4	BH4... BHS4... BHY4... BHK4...	0.3	0.9	10	8.5	0.27	0.13	0.15	0	32	**BB4R/L-0309-BA**	●	●	●	●	●
		0.4	1.2	10	8.5	0.36	0.18	0.20	0	32	**BB4R/L-0412-BA**	●	●	●	●	●
		0.5	1.5	10	8.5	0.45	0.22	0.25	0	32	**BB4R/L-0515-BA**	●	●	●	●	●
		0.6	1.8	10	8.5	0.54	0.27	0.30	0	32	**BB4R/L-0618-BA**	●	●	●	●	●
		0.7	2.1	10	8.5	0.63	0.31	0.35	0	32	**BB4R/L-0721-BA**	●	●	●	●	●
		0.8	2.4	10	8.5	0.72	0.36	0.40	0	32	**BB4R/L-0824-BA**	●	●	●	●	●
		0.9	2.7	10	8.5	0.81	0.40	0.45	0	32	**BB4R/L-0927-BA**	●	●	●	●	●
		1.0	3.0	10	8.5	0.90	0.45	0.60	0.02	32	**BB4R/L-1030-BA-R02**	●	●	●	●	●
		1.2	3.6	10	8.5	1.08	0.54	0.60	0.02	32	**BB4R/L-1236-BA-R02**	●	●	●	●	●
		1.5	4.5	10	8.5	1.35	0.67	0.65	0.02	32	**BB4R/L-1545-BA-R02**	●	●	●	●	●
		2.0	6.0	10	8.5	1.80	0.90	1.15	0.02	32	**BB4R/L-2060-BA-R02**	●	●	●	●	●
		2.5	7.5	10	8.5	2.25	1.13	1.30	0.02	32	**BB4R/L-2575-BA-R02**	●	●	●	●	●
		3.0	9.0	15	13.5	2.70	1.35	1.35	0.05	37	**BB4R/L-3090-BA-R05**	●	●	●	●	●
		3.5	10.5	15	13.5	3.15	1.58	1.60	0.05	37	**BB4R/L-35105-BA-R05**	●	●	●	●	●

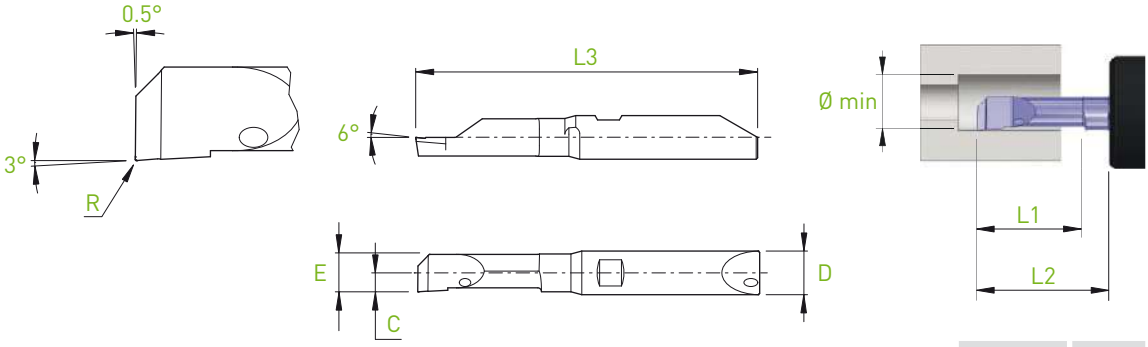


												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	E1	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	0.3	0.9	10	8.5	0.27	0.13	0.15	0	32	**BF4R/L-0309-BA**	●	●	●	●	●
		0.4	1.2	10	8.5	0.36	0.18	0.20	0	32	**BF4R/L-0412-BA**	●	●	●	●	●
		0.5	1.5	10	8.5	0.45	0.22	0.25	0	32	**BF4R/L-0515-BA**	●	●	●	●	●
		0.6	1.8	10	8.5	0.54	0.27	0.30	0	32	**BF4R/L-0618-BA**	●	●	●	●	●
		0.7	2.1	10	8.5	0.63	0.31	0.35	0	32	**BF4R/L-0721-BA**	●	●	●	●	●
		0.8	2.4	10	8.5	0.72	0.36	0.40	0	32	**BF4R/L-0824-BA**	●	●	●	●	●
		0.9	2.7	10	8.5	0.81	0.40	0.45	0	32	**BF4R/L-0927-BA**	●	●	●	●	●
		1.0	3.0	10	8.5	0.90	0.45	0.60	0.02	32	**BF4R/L-1030-BA-R02**	●	●	●	●	●
		1.2	3.6	10	8.5	1.08	0.54	0.60	0.02	32	**BF4R/L-1236-BA-R02**	●	●	●	●	●
		1.5	4.5	10	8.5	1.35	0.67	0.65	0.02	32	**BF4R/L-1545-BA-R02**	●	●	●	●	●
		2.0	6.0	10	8.5	1.80	0.90	1.15	0.02	32	**BF4R/L-2060-BA-R02**	●	●	●	●	●
		2.5	7.5	10	8.5	2.25	1.13	1.30	0.02	32	**BF4R/L-2575-BA-R02**	●	●	●	●	●
		3.0	9.0	15	13.5	2.70	1.35	1.35	0.05	37	**BF4R/L-3090-BA-R05**	●	●	●	●	●
		3.5	10.5	15	13.5	3.15	1.58	1.60	0.05	37	**BF4R/L-35105-BA-R05**	●	●	●	●	●

BAX

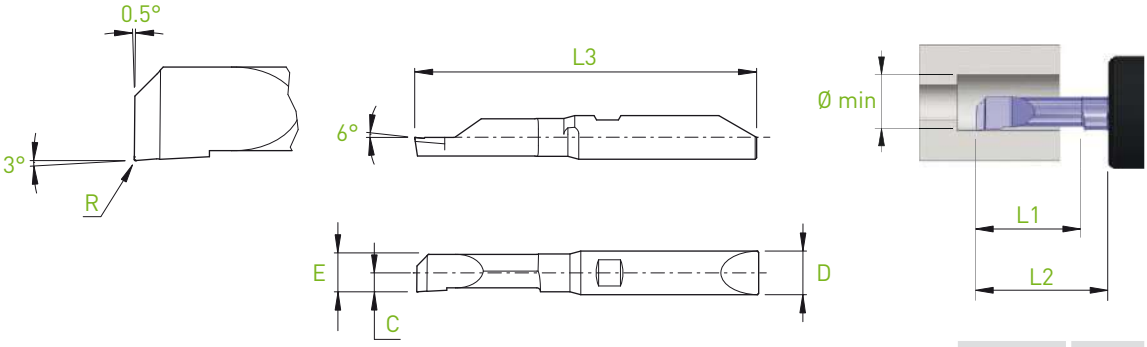
BB4... / BB6...

Alésage
Ausbohren
Boring



											R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	0.5	1.5	10	8.5	0.45	0.25	0	32	**BB4R/L-0515-BAX**	●	●	●	●	●
		0.6	1.8	10	8.5	0.54	0.30	0	32	**BB4R/L-0618-BAX**	●	●	●	●	●
		0.7	2.1	10	8.5	0.63	0.35	0	32	**BB4R/L-0721-BAX**	●	●	●	●	●
		0.8	2.4	10	8.5	0.72	0.40	0	32	**BB4R/L-0824-BAX**	●	●	●	●	●
		0.9	2.7	10	8.5	0.81	0.45	0	32	**BB4R/L-0927-BAX**	●	●	●	●	●
		1.0	3.0	10	8.5	0.90	0.60	0.02	32	**BB4R/L-1030-BAX-R02**	●	●	●	●	●
			5.0	10	8.5	0.90	0.60	0.02	32	**BB4R/L-1050-BAX-R02**	●	●	●	●	●
		1.5	4.5	10	8.5	1.35	0.65	0.02	32	**BB4R/L-1545-BAX-R02**	●	●	●	●	●
			7.5	10	8.5	1.35	0.65	0.02	32	**BB4R/L-1575-BAX-R02**	●	●	●	●	●
		2.0	6.0	10	8.5	1.80	1.15	0.02	32	**BB4R/L-2060-BAX-R02**	●	●	●	●	●
			10.0	15	13.5	1.80	1.15	0.02	37	**BB4R/L-20100-BAX-R02**	●	●	●	●	●
		2.5	7.5	10	8.5	2.25	1.30	0.05	32	**BB4R/L-2575-BAX-R05**	●	●	●	●	●
			12.5	15	13.5	2.25	1.30	0.05	37	**BB4R/L-25125-BAX-R05**	●	●	●	●	●
		3.0	9.0	15	13.5	2.70	1.35	0.05	37	**BB4R/L-3090-BAX-R05**	●	●	●	●	●
			15.0	20	18.5	2.70	1.35	0.05	42	**BB4R/L-30150-BAX-R05**	●	●	●	●	●
		3.5	10.5	15	13.5	3.15	1.60	0.05	37	**BB4R/L-35105-BAX-R05**	●	●	●	●	●
			17.5	20	18.5	3.15	1.60	0.05	42	**BB4R/L-35175-BAX-R05**	●	●	●	●	●

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	3.80	2.20	0.05	47	**BB6R/L-40120-BAX-R05**	●	●	●	●	●
			20.0	30	28.5	3.80	2.20	0.05	57	**BB6R/L-40200-BAX-R05**	●	●	●	●	●
		4.5	13.5	20	18.5	4.28	2.30	0.05	47	**BB6R/L-45135-BAX-R05**	●	●	●	●	●
			22.5	30	28.5	4.28	2.30	0.05	57	**BB6R/L-45225-BAX-R05**	●	●	●	●	●
		5.0	15.0	20	18.5	4.75	2.40	0.05	47	**BB6R/L-50150-BAX-R05**	●	●	●	●	●
			25.0	30	28.5	4.75	2.40	0.05	57	**BB6R/L-50250-BAX-R05**	●	●	●	●	●
		5.5	16.5	20	18.5	5.15	2.60	0.05	47	**BB6R/L-55165-BAX-R05**	●	●	●	●	●
			27.5	30	28.5	5.15	2.60	0.05	57	**BB6R/L-55275-BAX-R05**	●	●	●	●	●



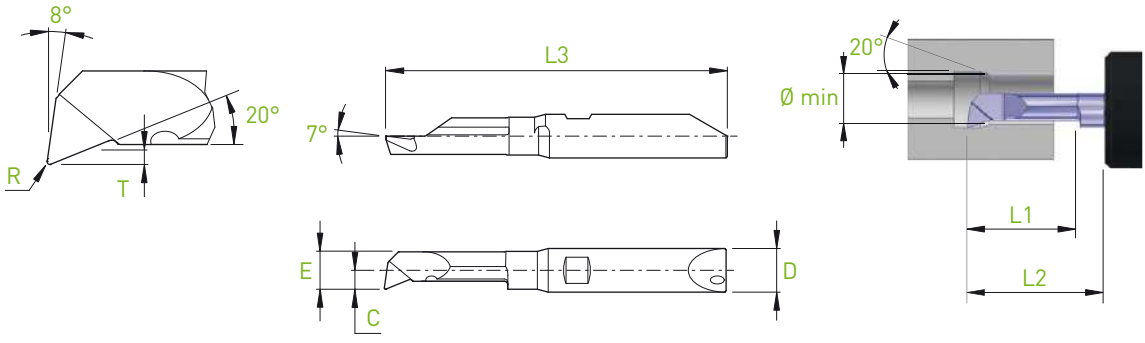
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	R	L3	Art. N°	R P M N S ZTAF	R P M S ZTAXF	R P N S ZN	L P M N S ZTAF	L P N S ZN
4	BH4... BHS4... BHY4... BHK4...	0.5	1.5	10	8.5	0.45	0.25	0	32	**BF4R/L-0515-BAX**	●	●	●	●	●
		0.6	1.8	10	8.5	0.54	0.30	0	32	**BF4R/L-0618-BAX**	●	●	●	●	●
		0.7	2.1	10	8.5	0.63	0.35	0	32	**BF4R/L-0721-BAX**	●	●	●	●	●
		0.8	2.4	10	8.5	0.72	0.40	0	32	**BF4R/L-0824-BAX**	●	●	●	●	●
		0.9	2.7	10	8.5	0.81	0.45	0	32	**BF4R/L-0927-BAX**	●	●	●	●	●
		1.0	3.0	10	8.5	0.90	0.60	0.02	32	**BF4R/L-1030-BAX-R02**	●	●	●	●	●
			5.0	10	8.5	0.90	0.60	0.02	32	**BF4R/L-1050-BAX-R02**	●	●	●	●	●
		1.5	4.5	10	8.5	1.35	0.65	0.02	32	**BF4R/L-1545-BAX-R02**	●	●	●	●	●
			7.5	10	8.5	1.35	0.65	0.02	32	**BF4R/L-1575-BAX-R02**	●	●	●	●	●
		2.0	6.0	10	8.5	1.80	1.15	0.02	32	**BF4R/L-2060-BAX-R02**	●	●	●	●	●
			10.0	15	13.5	1.80	1.15	0.02	37	**BF4R/L-20100-BAX-R02**	●	●	●	●	●
		2.5	7.5	10	8.5	2.25	1.30	0.05	32	**BF4R/L-2575-BAX-R05**	●	●	●	●	●
			12.5	15	13.5	2.25	1.30	0.05	37	**BF4R/L-25125-BAX-R05**	●	●	●	●	●
		3.0	9.0	15	13.5	2.70	1.35	0.05	37	**BF4R/L-3090-BAX-R05**	●	●	●	●	●
			15.0	20	18.5	2.70	1.35	0.05	42	**BF4R/L-30150-BAX-R05**	●	●	●	●	●
		3.5	10.5	15	13.5	3.15	1.60	0.05	37	**BF4R/L-35105-BAX-R05**	●	●	●	●	●
			17.5	20	18.5	3.15	1.60	0.05	42	**BF4R/L-35175-BAX-R05**	●	●	●	●	●

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	3.80	2.20	0.05	47	**BF6R/L-40120-BAX-R05**	●	●	●	●	●
			20.0	30	28.5	3.80	2.20	0.05	57	**BF6R/L-40200-BAX-R05**	●	●	●	●	●
		4.5	13.5	20	18.5	4.28	2.30	0.05	47	**BF6R/L-45135-BAX-R05**	●	●	●	●	●
			22.5	30	28.5	4.28	2.30	0.05	57	**BF6R/L-45225-BAX-R05**	●	●	●	●	●
		5.0	15.0	20	18.5	4.75	2.40	0.05	47	**BF6R/L-50150-BAX-R05**	●	●	●	●	●
			25.0	30	28.5	4.75	2.40	0.05	57	**BF6R/L-50250-BAX-R05**	●	●	●	●	●
		5.5	16.5	20	18.5	5.15	2.60	0.05	47	**BF6R/L-55165-BAX-R05**	●	●	●	●	●
			27.5	30	28.5	5.15	2.60	0.05	57	**BF6R/L-55275-BAX-R05**	●	●	●	●	●

BCX

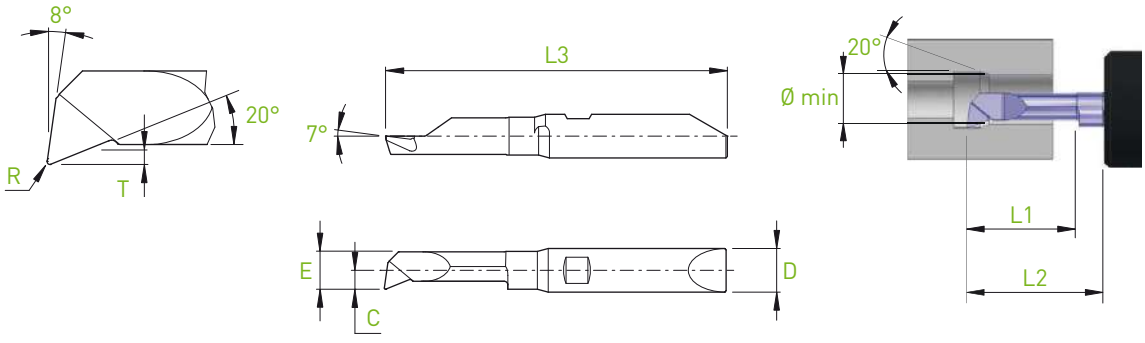
BB4... / BB6...

Alésage-copiage
Ausbohren-kopieren
Boring-chambering



												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	ZTAF P M N S	ZTAXF P M N S	ZN P N S	ZTAF P M N S	ZN P N S
4	BH4... BHS4... BHY4... BHK4...	1.0	3.0	10	8.5	0.15	0.90	0.70	0.05	32	**BB4R/L-1030-BCX-R05**	●	●	●	●	●
			5.0	10	8.5	0.15	0.90	0.70	0.05	32	**BB4R/L-1050-BCX-R05**	●	●	●	●	●
		1.5	4.5	10	8.5	0.23	1.35	0.75	0.05	32	**BB4R/L-1545-BCX-R05**	●	●	●	●	●
			7.5	10	8.5	0.23	1.35	0.75	0.05	32	**BB4R/L-1575-BCX-R05**	●	●	●	●	●
		2.0	6.0	10	8.5	0.30	1.80	1.15	0.05	32	**BB4R/L-2060-BCX-R05**	●	●	●	●	●
			10.0	15	13.5	0.30	1.80	1.15	0.05	37	**BB4R/L-20100-BCX-R05**	●	●	●	●	●
		2.5	7.5	10	8.5	0.38	2.25	1.30	0.10	32	**BB4R/L-2575-BCX-R10**	●	●	●	●	●
			12.5	15	13.5	0.38	2.25	1.30	0.10	37	**BB4R/L-25125-BCX-R10**	●	●	●	●	●
		3.0	9.0	15	13.5	0.45	2.70	1.35	0.10	37	**BB4R/L-3090-BCX-R10**	●	●	●	●	●
			15.0	20	18.5	0.45	2.70	1.35	0.10	42	**BB4R/L-30150-BCX-R10**	●	●	●	●	●
		3.5	10.5	15	13.5	0.53	3.15	1.60	0.10	37	**BB4R/L-35105-BCX-R10**	●	●	●	●	●
			17.5	20	18.5	0.53	3.15	1.60	0.10	42	**BB4R/L-35175-BCX-R10**	●	●	●	●	●

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.60	3.80	2.20	0.15	47	**BB6R/L-40120-BCX-R15**	●	●	●	●	●
			20.0	30	28.5	0.60	3.80	2.20	0.15	57	**BB6R/L-40200-BCX-R15**	●	●	●	●	●
		4.5	13.5	20	18.5	0.68	4.28	2.30	0.15	47	**BB6R/L-45135-BCX-R15**	●	●	●	●	●
			22.5	30	28.5	0.68	4.28	2.30	0.15	57	**BB6R/L-45225-BCX-R15**	●	●	●	●	●
		5.0	15.0	20	18.5	0.75	4.75	2.40	0.15	47	**BB6R/L-50150-BCX-R15**	●	●	●	●	●
			25.0	30	28.5	0.75	4.75	2.40	0.15	57	**BB6R/L-50250-BCX-R15**	●	●	●	●	●
		5.5	16.5	20	18.5	0.83	5.15	2.60	0.15	47	**BB6R/L-55165-BCX-R15**	●	●	●	●	●
			27.5	30	28.5	0.83	5.15	2.60	0.15	57	**BB6R/L-55275-BCX-R15**	●	●	●	●	●



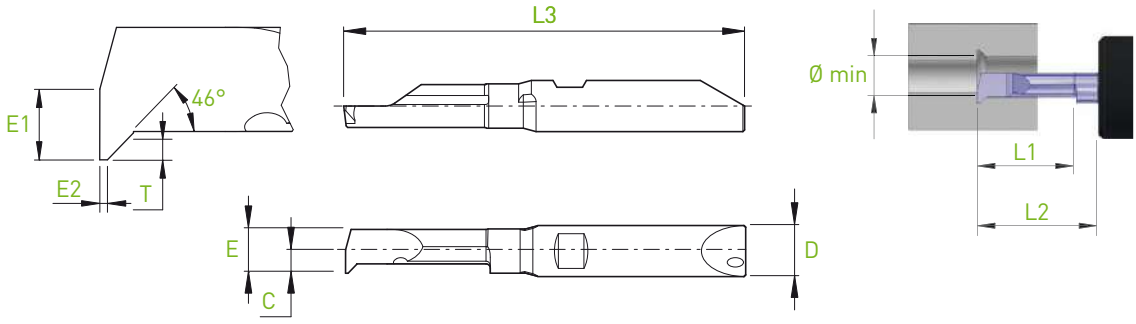
												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	1.0	3.0	10	8.5	0.15	0.90	0.70	0.05	32	BF4R/L-1030-BCX-R05	●	●	●	●	●
			5.0	10	8.5	0.15	0.90	0.70	0.05	32	BF4R/L-1050-BCX-R05	●	●	●	●	●
		1.5	4.5	10	8.5	0.23	1.35	0.75	0.05	32	BF4R/L-1545-BCX-R05	●	●	●	●	●
			7.5	10	8.5	0.23	1.35	0.75	0.05	32	BF4R/L-1575-BCX-R05	●	●	●	●	●
		2.0	6.0	10	8.5	0.30	1.80	1.15	0.05	32	BF4R/L-2060-BCX-R05	●	●	●	●	●
			10.0	15	13.5	0.30	1.80	1.15	0.05	37	BF4R/L-20100-BCX-R05	●	●	●	●	●
		2.5	7.5	10	8.5	0.38	2.25	1.30	0.10	32	BF4R/L-2575-BCX-R10	●	●	●	●	●
			12.5	15	13.5	0.38	2.25	1.30	0.10	37	BF4R/L-25125-BCX-R10	●	●	●	●	●
		3.0	9.0	15	13.5	0.45	2.70	1.35	0.10	37	BF4R/L-3090-BCX-R10	●	●	●	●	●
			15.0	20	18.5	0.45	2.70	1.35	0.10	42	BF4R/L-30150-BCX-R10	●	●	●	●	●
		3.5	10.5	15	13.5	0.53	3.15	1.60	0.10	37	BF4R/L-35105-BCX-R10	●	●	●	●	●
			17.5	20	18.5	0.53	3.15	1.60	0.10	42	BF4R/L-35175-BCX-R10	●	●	●	●	●

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.60	3.80	2.20	0.15	47	BF6R/L-40120-BCX-R15	●	●	●	●	●
			20.0	30	28.5	0.60	3.80	2.20	0.15	57	BF6R/L-40200-BCX-R15	●	●	●	●	●
		4.5	13.5	20	18.5	0.68	4.28	2.30	0.15	47	BF6R/L-45135-BCX-R15	●	●	●	●	●
			22.5	30	28.5	0.68	4.28	2.30	0.15	57	BF6R/L-45225-BCX-R15	●	●	●	●	●
		5.0	15.0	20	18.5	0.75	4.75	2.40	0.15	47	BF6R/L-50150-BCX-R15	●	●	●	●	●
			25.0	30	28.5	0.75	4.75	2.40	0.15	57	BF6R/L-50250-BCX-R15	●	●	●	●	●
		5.5	16.5	20	18.5	0.83	5.15	2.60	0.15	47	BF6R/L-55165-BCX-R15	●	●	●	●	●
			27.5	30	28.5	0.83	5.15	2.60	0.15	57	BF6R/L-55275-BCX-R15	●	●	●	●	●

C45

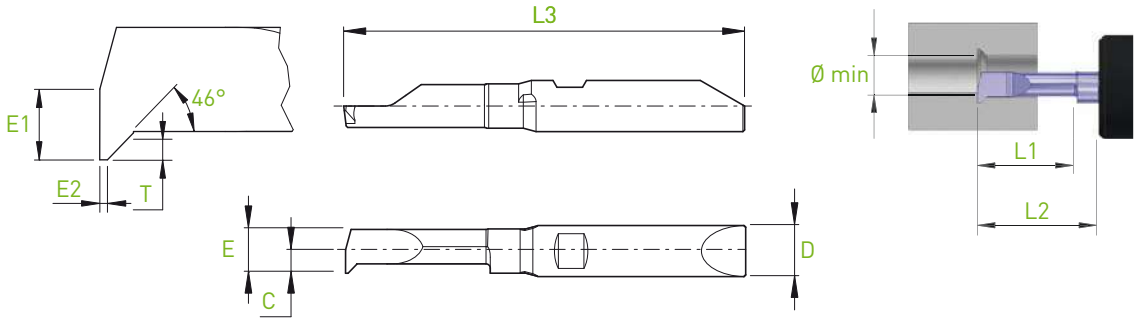
BB4... / BB6...

Copiage
Kopieren
Chambering



													R			L	
													P M N S	P M N S	P N S	P M N S	P N S
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	E1	C	E2	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	0.3	0.6	10	8.5	0.05	0.27	0.13	0.15	0.03	32	**BB4R/L-0306-C45-E03**	●	●	●	●	●
		0.4	0.8	10	8.5	0.07	0.36	0.18	0.20	0.03	32	**BB4R/L-0408-C45-E03**	●	●	●	●	●
		0.5	1.0	10	8.5	0.08	0.45	0.22	0.25	0.03	32	**BB4R/L-0510-C45-E03**	●	●	●	●	●
		0.6	1.2	10	8.5	0.10	0.54	0.27	0.30	0.03	32	**BB4R/L-0612-C45-E03**	●	●	●	●	●
		0.7	1.2	10	8.5	0.12	0.63	0.32	0.35	0.03	32	**BB4R/L-0714-C45-E03**	●	●	●	●	●
		0.8	1.6	10	8.5	0.14	0.72	0.36	0.40	0.05	32	**BB4R/L-0816-C45-E05**	●	●	●	●	●
		0.9	1.8	10	8.5	0.15	0.81	0.41	0.45	0.05	32	**BB4R/L-0918-C45-E05**	●	●	●	●	●
		1.0	3.0	10	8.5	0.17	0.90	0.45	0.70	0.10	32	**BB4R/L-1030-C45-E10**	●	●	●	●	●
		1.2	3.6	10	8.5	0.20	1.08	0.54	0.70	0.10	32	**BB4R/L-1236-C45-E10**	●	●	●	●	●
		1.5	4.5	10	8.5	0.25	1.35	0.67	0.75	0.10	32	**BB4R/L-1545-C45-E10**	●	●	●	●	●
		2.0	6.0	10	8.5	0.34	1.80	0.90	1.15	0.20	32	**BB4R/L-2060-C45-E20**	●	●	●	●	●
		2.5	7.5	10	8.5	0.43	2.25	1.13	1.30	0.20	32	**BB4R/L-2575-C45-E20**	●	●	●	●	●
		3.0	9.0	15	13.5	0.51	2.70	1.35	1.35	0.30	37	**BB4R/L-3090-C45-E30**	●	●	●	●	●
		3.5	10.5	15	13.5	0.60	3.15	1.58	1.60	0.30	37	**BB4R/L-35105-C45-E30**	●	●	●	●	●

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	E1	C	E2	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.68	3.80	1.90	2.30	0.40	47	**BB6R/L-40120-C45-E40**	●	●	●	●	●
		5.0	15.0	20	18.5	0.85	4.75	2.37	2.50	0.50	47	**BB6R/L-50150-C45-E50**	●	●	●	●	●



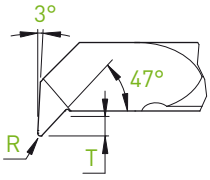
													R			L	
													P M N S	P M S	P N S	P M N S	P N S
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	E1	C	E2	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	0.3	0.6	10	8.5	0.05	0.27	0.13	0.15	0.03	32	**BF4R/L-0306-C45-E03**	●	●	●	●	●
		0.4	0.8	10	8.5	0.07	0.36	0.18	0.20	0.03	32	**BF4R/L-0408-C45-E03**	●	●	●	●	●
		0.5	1.0	10	8.5	0.08	0.45	0.22	0.25	0.03	32	**BF4R/L-0510-C45-E03**	●	●	●	●	●
		0.6	1.2	10	8.5	0.10	0.54	0.27	0.30	0.03	32	**BF4R/L-0612-C45-E03**	●	●	●	●	●
		0.7	1.4	10	8.5	0.12	0.63	0.32	0.35	0.03	32	**BF4R/L-0714-C45-E03**	●	●	●	●	●
		0.8	1.6	10	8.5	0.14	0.72	0.36	0.40	0.05	32	**BF4R/L-0816-C45-E05**	●	●	●	●	●
		0.9	1.8	10	8.5	0.15	0.81	0.41	0.45	0.05	32	**BF4R/L-0918-C45-E05**	●	●	●	●	●
		1.0	3.0	10	8.5	0.17	0.90	0.45	0.70	0.10	32	**BF4R/L-1030-C45-E10**	●	●	●	●	●
		1.2	3.6	10	8.5	0.20	1.08	0.54	0.70	0.10	32	**BF4R/L-1236-C45-E10**	●	●	●	●	●
		1.5	4.5	10	8.5	0.25	1.35	0.67	0.75	0.10	32	**BF4R/L-1545-C45-E10**	●	●	●	●	●
		2.0	6.0	10	8.5	0.34	1.80	0.90	1.15	0.20	32	**BF4R/L-2060-C45-E20**	●	●	●	●	●
		2.5	7.5	10	8.5	0.43	2.25	1.13	1.30	0.20	32	**BF4R/L-2575-C45-E20**	●	●	●	●	●
		3.0	9.0	15	13.5	0.51	2.70	1.35	1.35	0.30	37	**BF4R/L-3090-C45-E30**	●	●	●	●	●
		3.5	10.5	15	13.5	0.60	3.15	1.58	1.60	0.30	37	**BF4R/L-35105-C45-E30**	●	●	●	●	●

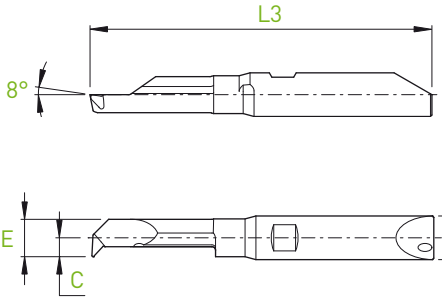
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	E1	C	E2	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.68	3.80	1.90	2.30	0.40	47	**BF6R/L-40120-C45-E40**	●	●	●	●	●
		5.0	15.0	20	18.5	0.85	4.75	2.37	2.50	0.50	47	**BF6R/L-50150-C45-E50**	●	●	●	●	●

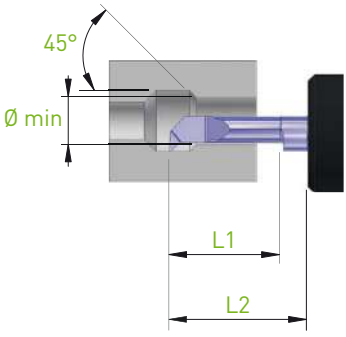
C45X

BB4... / BB6...

Copiage
Kopieren
Chambering

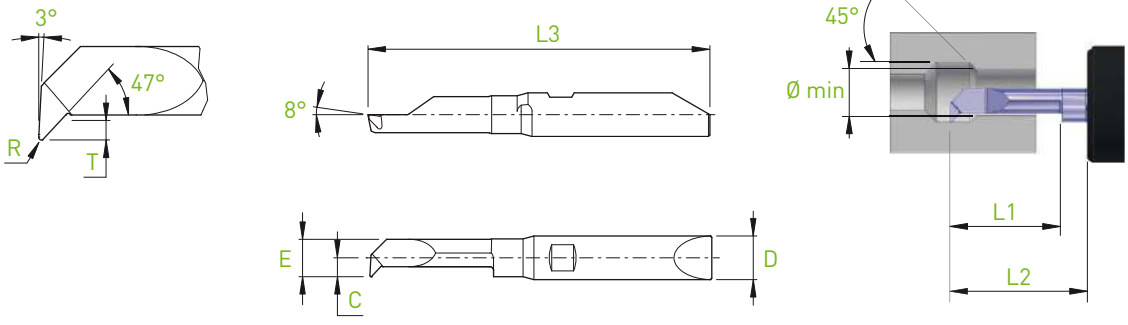






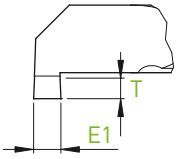
												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	2.5	7.5	10	8.5	0.50	2.25	1.35	0.10	32	**BB4R/L-2575-C45X-R10**	●	●	●	●	●
			12.5	15	13.5	0.50	2.25	1.35	0.10	37	**BB4R/L-25125-C45X-R10**	●	●	●	●	●
		3.0	9.0	15	13.5	0.60	2.70	1.45	0.10	37	**BB4R/L-3090-C45X-R10**	●	●	●	●	●
			15.0	20	18.5	0.60	2.70	1.45	0.10	42	**BB4R/L-30150-C45X-R10**	●	●	●	●	●
		3.5	10.5	15	13.5	0.70	3.15	1.60	0.10	37	**BB4R/L-35105-C45X-R10**	●	●	●	●	●
			17.5	20	18.5	0.70	3.15	1.60	0.10	42	**BB4R/L-35175-C45X-R10**	●	●	●	●	●

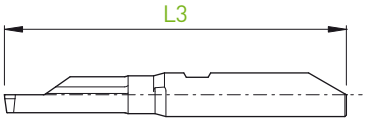
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.80	3.80	2.30	0.15	47	**BB6R/L-40120-C45X-R15**	●	●	●	●	●
			20.0	30	28.5	0.80	3.80	2.30	0.15	57	**BB6R/L-40200-C45X-R15**	●	●	●	●	●
		4.5	13.5	20	18.5	0.90	4.28	2.40	0.15	47	**BB6R/L-45135-C45X-R15**	●	●	●	●	●
			22.5	30	28.5	0.90	4.28	2.40	0.15	57	**BB6R/L-45225-C45X-R15**	●	●	●	●	●
		5.0	15.0	20	18.5	1.00	4.75	2.50	0.15	47	**BB6R/L-50150-C45X-R15**	●	●	●	●	●
			25.0	30	28.5	1.00	4.75	2.50	0.15	57	**BB6R/L-50250-C45X-R15**	●	●	●	●	●
		5.5	16.5	20	18.5	1.10	5.15	2.60	0.15	47	**BB6R/L-55165-C45X-R15**	●	●	●	●	●
			27.5	30	28.5	1.10	5.15	2.60	0.15	57	**BB6R/L-55275-C45X-R15**	●	●	●	●	●

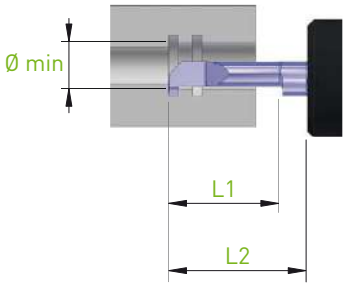


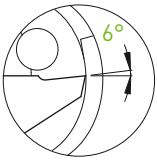
												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	2.5	7.5	10	8.5	0.50	2.25	1.35	0.10	32	**BF4R/L-2575-C45X-R10**	●	●	●	●	●
			12.5	15	13.5	0.50	2.25	1.35	0.10	37	**BF4R/L-25125-C45X-R10**	●	●	●	●	●
		3.0	9.0	15	13.5	0.60	2.70	1.45	0.10	37	**BF4R/L-3090-C45X-R10**	●	●	●	●	●
			15.0	20	18.5	0.60	2.70	1.45	0.10	42	**BF4R/L-30150-C45X-R10**	●	●	●	●	●
		3.5	10.5	15	13.5	0.70	3.15	1.60	0.10	37	**BF4R/L-35105-C45X-R10**	●	●	●	●	●
			17.5	20	18.5	0.70	3.15	1.60	0.10	42	**BF4R/L-35175-C45X-R10**	●	●	●	●	●

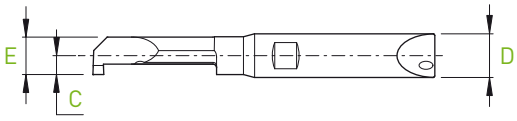
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.80	3.80	2.30	0.15	47	**BF6R/L-40120-C45X-R15**	●	●	●	●	●
			20.0	30	28.5	0.80	3.80	2.30	0.15	57	**BF6R/L-40200-C45X-R15**	●	●	●	●	●
		4.5	13.5	20	18.5	0.90	4.28	2.40	0.15	47	**BF6R/L-45135-C45X-R15**	●	●	●	●	●
			22.5	30	28.5	0.90	4.28	2.40	0.15	57	**BF6R/L-45225-C45X-R15**	●	●	●	●	●
		5.0	15.0	20	18.5	1.00	4.75	2.50	0.15	47	**BF6R/L-50150-C45X-R15**	●	●	●	●	●
			25.0	30	28.5	1.00	4.75	2.50	0.15	57	**BF6R/L-50250-C45X-R15**	●	●	●	●	●
		5.5	16.5	20	18.5	1.10	5.15	2.60	0.15	47	**BF6R/L-55165-C45X-R15**	●	●	●	●	●
			27.5	30	28.5	1.10	5.15	2.60	0.15	57	**BF6R/L-55275-C45X-R15**	●	●	●	●	●





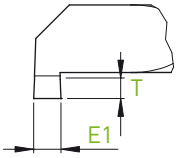


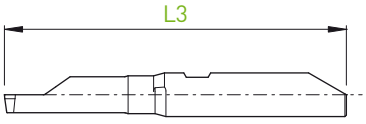


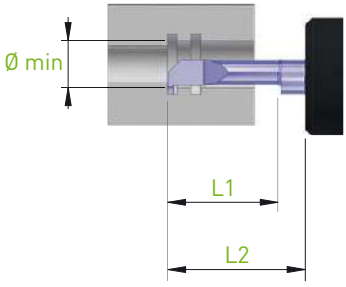


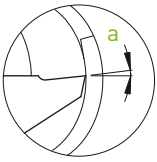
												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	C	L3	Art. N°	P M N S ZTAF	P M N S ZTAXF	P N S ZN	P M N S ZTAF	P N S ZN
4	BH4... BHS4... BHY4... BHK4...	3.0	9.0	15	13.5	0.50	0.60	2.70	1.45	37	BB4R/L-3090-G050X	●	●	●	●	●
			15.0	20	18.5	0.50	0.60	2.70	1.45	42	BB4R/L-30150-G050X	●	●	●	●	●
		3.5	10.5	15	13.5	0.75	0.70	3.15	1.60	37	BB4R/L-35105-G075X	●	●	●	●	●
			17.5	20	18.5	0.75	0.70	3.15	1.60	42	BB4R/L-35175-G075X	●	●	●	●	●

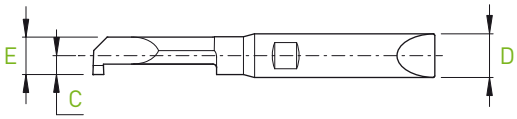
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	1.00	0.80	3.80	2.20	47	BB6R/L-40120-G100X	●	●	●	●	●
			20.0	30	28.5	1.00	0.80	3.80	2.20	57	BB6R/L-40200-G100X	●	●	●	●	●
		4.5	13.5	20	18.5	1.00	0.90	4.28	2.40	47	BB6R/L-45135-G100X	●	●	●	●	●
						1.50					BB6R/L-45135-G150X	●	●	●	●	●
			22.5	30	28.5	1.00	0.90	4.28	2.40	57	BB6R/L-45225-G100X	●	●	●	●	●
						1.50					BB6R/L-45225-G150X	●	●	●	●	●
		5.0	15.0	20	18.5	1.00	1.00	4.75	2.50	47	BB6R/L-50150-G100X	●	●	●	●	●
						1.50					BB6R/L-50150-G150X	●	●	●	●	●
			25.0	30	28.5	1.00	1.00	4.75	2.50	57	BB6R/L-50250-G100X	●	●	●	●	●
						1.50					BB6R/L-50250-G150X	●	●	●	●	●
		5.5	16.5	20	18.5	1.00	1.10	5.15	2.60	47	BB6R/L-55165-G100X	●	●	●	●	●
						1.50					BB6R/L-55165-G150X	●	●	●	●	●
						2.00					BB6R/L-55165-G200X	●	●	●	●	●
			27.5	30	28.5	1.00	1.10	5.15	2.60	57	BB6R/L-55275-G100X	●	●	●	●	●
						1.50					BB6R/L-55275-G150X	●	●	●	●	●
						2.00					BB6R/L-55275-G200X	●	●	●	●	●





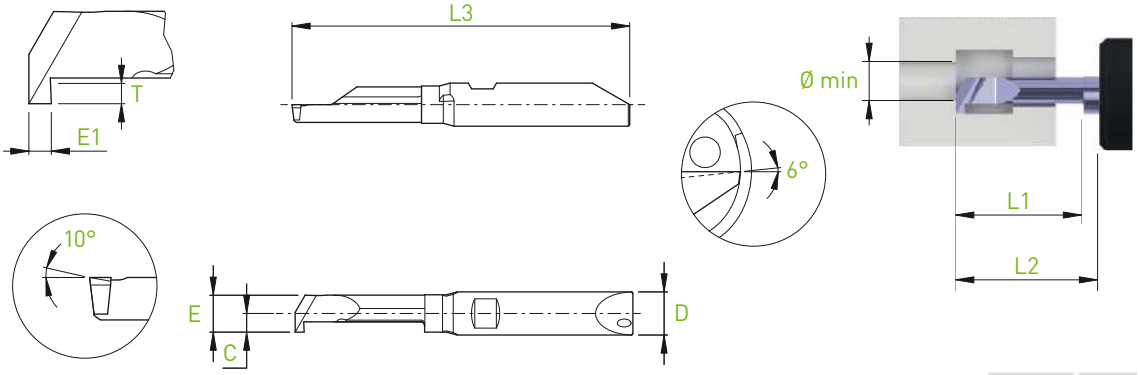






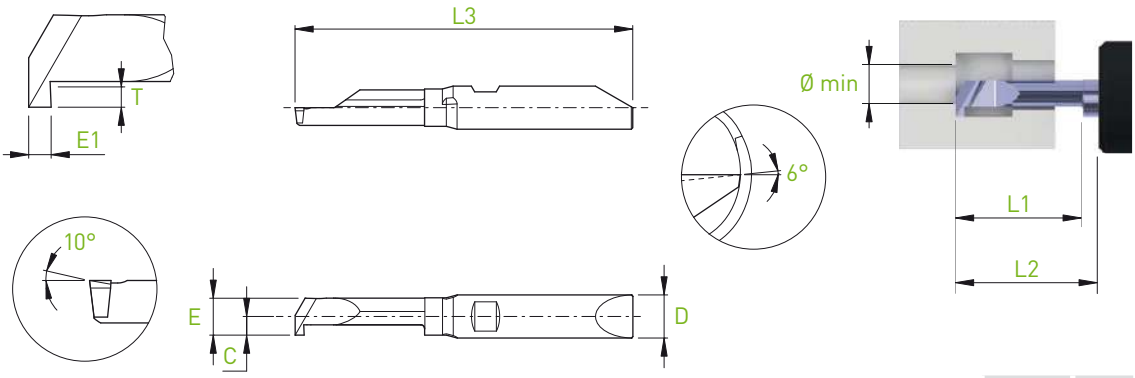
													R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	a	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	0.5	1.0	10	8.5	0.15	0.10	0.45	3°	0.25	32	BF4R/L-0510-G015X	●	●	●	●	●
		0.7	1.4	10	8.5	0.20	0.14	0.63		0.35	32	BF4R/L-0714-G020X	●	●	●	●	●
		1.0	2.0	10	8.5	0.30	0.20	0.90		0.60	32	BF4R/L-1020-G030X	●	●	●	●	●
		1.5	3.0	10	8.5	0.40	0.30	1.35	6°	0.80	32	BF4R/L-1530-G040X	●	●	●	●	●
		2.0	6.0	10	8.5	0.40	0.40	1.80		1.15	32	BF4R/L-2060-G040X	●	●	●	●	●
		2.5	7.5	10	8.5	0.50	0.50	2.25		1.15	32	BF4R/L-2575-G050X	●	●	●	●	●
		3.0	9.0	15	13.5	0.50	0.60	2.70		1.45	37	BF4R/L-3090-G050X	●	●	●	●	●
			15.0	20	18.5	0.50	0.60	2.70		1.45	42	BF4R/L-30150-G050X	●	●	●	●	●
		3.5	10.5	15	13.5	0.75	0.70	3.15		1.60	37	BF4R/L-35105-G075X	●	●	●	●	●
			17.5	20	18.5	0.75	0.70	3.15		1.60	42	BF4R/L-35175-G075X	●	●	●	●	●

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	a	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	1.00	0.80	3.80	6°	2.20	47	BF6R/L-40120-G100X	●	●	●	●	●
			20.0	30	28.5	1.00	0.80	3.80		2.20	57	BF6R/L-40200-G100X	●	●	●	●	●
		4.5	13.5	20	18.5	1.00	0.90	4.28		2.40	47	BF6R/L-45135-G100X	●	●	●	●	●
						1.50						BF6R/L-45135-G150X	●	●	●	●	●
			22.5	30	28.5	1.00	0.90	4.28		2.40	57	BF6R/L-45225-G100X	●	●	●	●	●
						1.50						BF6R/L-45225-G150X	●	●	●	●	●
		5.0	15.0	20	18.5	1.00	1.00	4.75		2.50	47	BF6R/L-50150-G100X	●	●	●	●	●
						1.50						BF6R/L-50150-G150X	●	●	●	●	●
			25.0	30	28.5	1.00	1.00	4.75		2.50	57	BF6R/L-50250-G100X	●	●	●	●	●
						1.50						BF6R/L-50250-G150X	●	●	●	●	●
		5.5	16.5	20	18.5	1.00	1.10	5.15		2.60	47	BF6R/L-55165-G100X	●	●	●	●	●
						1.50						BF6R/L-55165-G150X	●	●	●	●	●
						2.00						BF6R/L-55165-G200X	●	●	●	●	●
			27.5	30	28.5	1.00	1.10	5.15		2.60	57	BF6R/L-55275-G100X	●	●	●	●	●
						1.50						BF6R/L-55275-G150X	●	●	●	●	●
						2.00						BF6R/L-55275-G200X	●	●	●	●	●



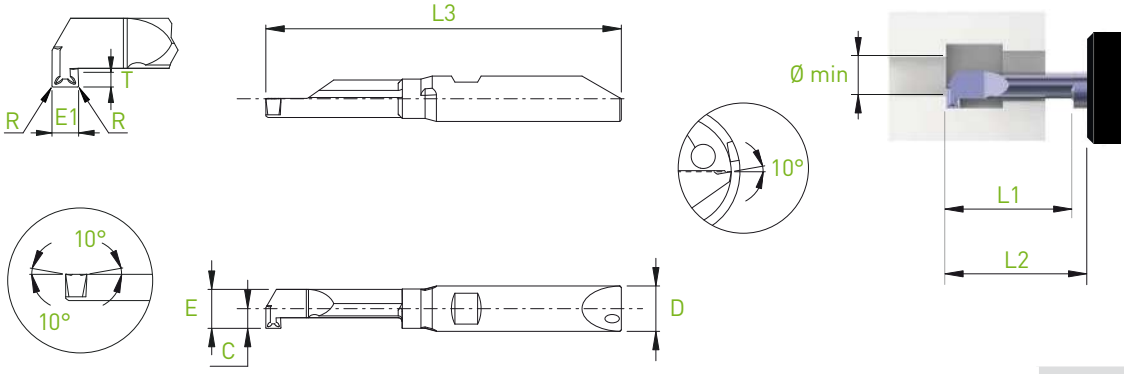
												R			L	
												P M N S	P M S	P N S	P M N S	P N S
D h5	Holder	Ø min	L1	**L2** BH4... BHY4...	**L2** BHS4... BHK4...	E1	T	E	C	L3	**Art. N°**	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	3.0	9.0	15	13.5	1.00	0.60	2.7	1.45	37	**BB4R/L-3090-GT100X**	●	●	●	●	●
			15.0	20	18.5	1.00	0.60	2.7	1.45	42	**BB4R/L-30150-GT100X**	●	●	●	●	●
		3.5	10.5	15	13.5	1.00	0.70	3.15	1.6	37	**BB4R/L-35105-GT100X**	●	●	●	●	●
			17.5	20	18.5	1.00	0.70	3.15	1.6	42	**BB4R/L-35175-GT100X**	●	●	●	●	●

D h5	Holder	Ø min	L1	**L2** BH6... BHY6...	**L2** BHS6... BHK6...	E1	T	E	C	L3	**Art. N°**	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	14.0	20	18.5	1.25	0.80	3.8	2.2	47	**BB6R/L-40140-GT125X**	●	●	●	●	●
			22.0	30	28.5	1.25	0.80	3.8	2.2	57	**BB6R/L-40220-GT125X**	●	●	●	●	●
		4.5	16.0	20	18.5	1.25	0.90	4.28	2.4	47	**BB6R/L-45160-GT125X**	●	●	●	●	●
			25.0	30	28.5	1.25	0.90	4.28	2.4	57	**BB6R/L-45250-GT125X**	●	●	●	●	●
		5.0	17.5	20	18.5	1.25	1.00	4.75	2.5	47	**BB6R/L-50175-GT125X**	●	●	●	●	●
			27.5	30	28.5	1.25	1.00	4.75	2.5	57	**BB6R/L-50275-GT125X**	●	●	●	●	●
		5.5	17.5	20	18.5	1.25	1.10	5.15	2.6	47	**BB6R/L-55175-GT125X**	●	●	●	●	●
			27.5	30	28.5	1.25	1.10	5.15	2.6	57	**BB6R/L-55275-GT125X**	●	●	●	●	●



												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	3.0	9.0	15	13.5	1.00	0.60	2.7	1.45	37	**BF4R/L-3090-GT100X**	●	●	●	●	●
			15.0	20	18.5	1.00	0.60	2.7	1.45	42	**BF4R/L-30150-GT100X**	●	●	●	●	●
		3.5	10.5	15	13.5	1.00	0.70	3.15	1.6	37	**BF4R/L-35105-GT100X**	●	●	●	●	●
			17.5	20	18.5	1.00	0.70	3.15	1.6	42	**BF4R/L-35175-GT100X**	●	●	●	●	●

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	14.0	20	18.5	1.25	0.80	3.8	2.2	47	**BF6R/L-40140-GT125X**	●	●	●	●	●
			22.0	30	28.5	1.25	0.80	3.8	2.2	57	**BF6R/L-40220-GT125X**	●	●	●	●	●
		4.5	16.0	20	18.5	1.25	0.90	4.28	2.4	47	**BF6R/L-45160-GT125X**	●	●	●	●	●
			25.0	30	28.5	1.25	0.90	4.28	2.4	57	**BF6R/L-45250-GT125X**	●	●	●	●	●
		5.0	17.5	20	18.5	1.25	1.00	4.75	2.5	47	**BF6R/L-50175-GT125X**	●	●	●	●	●
			27.5	30	28.5	1.25	1.00	4.75	2.5	57	**BF6R/L-50275-GT125X**	●	●	●	●	●
		5.5	17.5	20	18.5	1.25	1.10	5.15	2.6	47	**BF6R/L-55175-GT125X**	●	●	●	●	●
			27.5	30	28.5	1.25	1.10	5.15	2.6	57	**BF6R/L-55275-GT125X**	●	●	●	●	●



R

D	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN
													P M N S	P M S	P N S
6	BH6... BHS6... BHY6... BHK6...	4.0	14.0	20	18.5	1.25	0.80	3.8	2.2	0.08	47	**BB6R-40140-GT125ZFX-R08**	●	●	●
			22.0	30	28.5	1.25	0.80	3.8	2.2	0.08	57	**BB6R-40220-GT125ZFX-R08**	●	●	●
		4.5	16.0	20	18.5	1.25	0.90	4.28	2.4	0.08	47	**BB6R-45160-GT125ZFX-R08**	●	●	●
			25.0	30	28.5	1.25	0.90	4.28	2.4	0.08	57	**BB6R-45250-GT125ZFX-R08**	●	●	●
		5.0	17.5	20	18.5	1.25	1.00	4.75	2.5	0.08	47	**BB6R-50175-GT125ZFX-R08**	●	●	●
			17.5	20	18.5	2.00	1.00	4.75	2.5	0.08	47	**BB6R-50175-GT200ZFX-R08**	●	●	●
			27.5	30	28.5	1.25	1.00	4.75	2.5	0.08	57	**BB6R-50275-GT125ZFX-R08**	●	●	●
			27.5	30	28.5	2.00	1.00	4.75	2.5	0.08	57	**BB6R-50275-GT200ZFX-R08**	●	●	●
		5.5	17.5	20	18.5	1.25	1.10	5.15	2.6	0.08	47	**BB6R-55175-GT125ZFX-R08**	●	●	●
			17.5	20	18.5	2.00	1.10	5.15	2.6	0.08	47	**BB6R-55175-GT200ZFX-R08**	●	●	●
			27.5	30	28.5	1.25	1.10	5.15	2.6	0.08	57	**BB6R-55275-GT125ZFX-R08**	●	●	●
			27.5	30	28.5	2.00	1.10	5.15	2.6	0.08	57	**BB6R-55275-GT200ZFX-R08**	●	●	●

GT-ZFX

Géométrie de coupe innovante avec brise copeaux de dernière génération
Innovative Schneidgeometrie mit Spanbrecher der neuesten Generation
Innovative cutting geometry with next-generation chip breaker



Laser geometry

Très bonne maîtrise du copeau pour matières difficiles

Sehr gute Spankontrolle für schwierige Werkstoffe

Very efficient chip control for difficult materials



Three-directional

Géométrie tri-directionnelle permettant un usinage optimal aussi bien en fonçage qu'en tournage, avant et arrière

Drei-direktionale Geometrie für eine optimale Bearbeitung sowohl im Senken als auch im Drehen, vorwärts und rückwärts

Three-directional geometry enabling optimal machining in both plunging and turning, forward and reverse



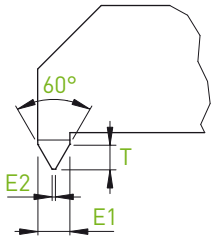
Sharp cutting edge

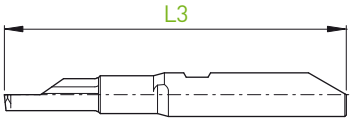
L'arête de coupe vive assure une finition de haute qualité, réduisant l'effort et l'usure des outils

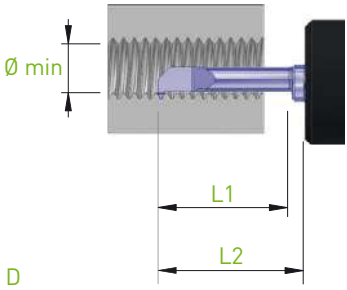
Die scharfe Schneidkante sorgt für eine hochwertige Oberflächengüte und verringert sowohl die Schnittkräfte als auch den Werkzeugverschleiss

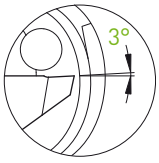
The sharp cutting edge ensures a high-quality finish while reducing cutting forces and tool wear

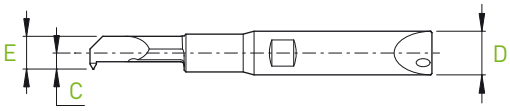






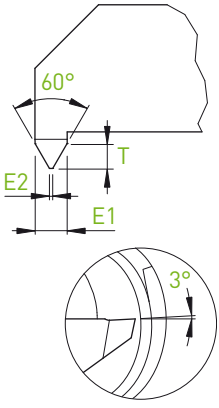


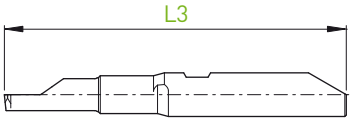


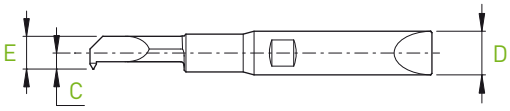


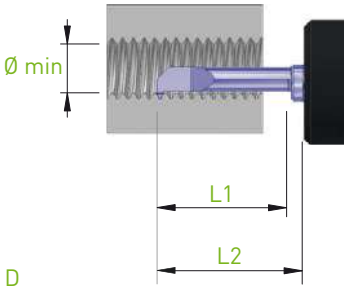
															R		L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	ZTAF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	1.25	3.2	10	8.5	0.20-0.35	80	0.30	0.02	0.25	1.10	0.80	32	**BB4R/L-1232-TP60**	●	●	●	●
		1.6	4.0	10	8.5	0.25-0.40	72-64	0.35	0.03	0.28	1.41	0.90	32	**BB4R/L-1640-TP60**	●	●	●	●
		2.5	6.0	10	8.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	32	**BB4R/L-2560-TP60**	●	●	●	●
			9.0	15	13.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	37	**BB4R/L-2590-TP60**	●	●	●	●
		3.3	8.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	**BB4R/L-3380-TP60**	●	●	●	●
			12.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	**BB4R/L-33120-TP60**	●	●	●	●

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	ZTAF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.2	10.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	**BB6R/L-42100-TP60**	●	●	●	●
			15.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	**BB6R/L-42150-TP60**	●	●	●	●
		5.0	12.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	**BB6R/L-50120-TP60**	●	●	●	●
			18.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	**BB6R/L-50180-TP60**	●	●	●	●



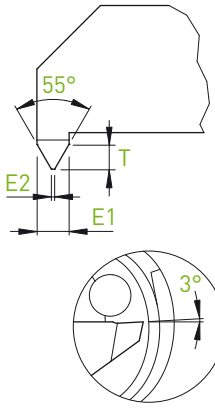


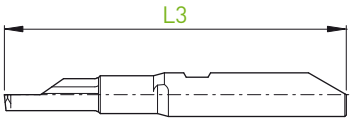


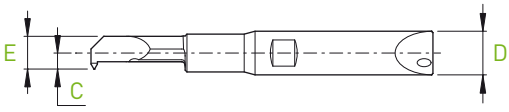


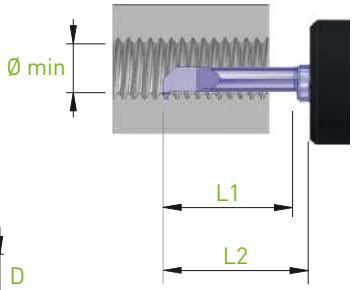
															R		L	
D h5	Holder	Ø min	L1	**L2** BH4... BHY4...	**L2** BHS4... BHK4...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	**Art. N°**	ZTAF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	1.25	3.2	10	8.5	0.20-0.35	80	0.30	0.02	0.25	1.10	0.80	32	**BF4R/L-1232-TP60**	●	●	●	●
		1.6	4.0	10	8.5	0.25-0.40	72-64	0.35	0.03	0.28	1.41	0.90	32	**BF4R/L-1640-TP60**	●	●	●	●
		2.5	6.0	10	8.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	32	**BF4R/L-2560-TP60**	●	●	●	●
			9.0	15	13.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	37	**BF4R/L-2590-TP60**	●	●	●	●
		3.3	8.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	**BF4R/L-3380-TP60**	●	●	●	●
			12.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	**BF4R/L-33120-TP60**	●	●	●	●

D h5	Holder	Ø min	L1	**L2** BH6... BHY6...	**L2** BHS6... BHK6...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	**Art. N°**	ZTAF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.2	10.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	**BF6R/L-42100-TP60**	●	●	●	●
			15.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	**BF6R/L-42150-TP60**	●	●	●	●
		5.0	12.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	**BF6R/L-50120-TP60**	●	●	●	●
			18.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	**BF6R/L-50180-TP60**	●	●	●	●



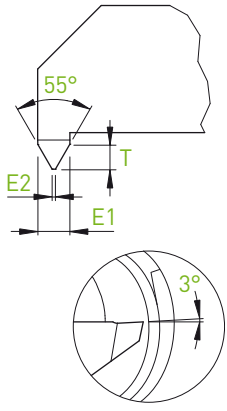


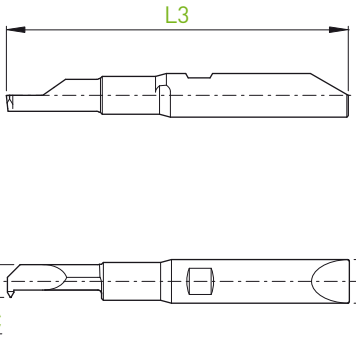


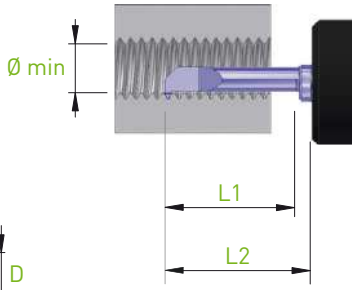


														R		L	
D h5	Holder	Ø min	L1	**L2** BH4... BHY4...	**L2** BHS4... BHK4...	P (TPI)	E1	E2 (0/-0.02)	T	E	C	L3	**Art. N°**	ZTAF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	1.85	4.5	10	8.5	48	0.54	0.09	0.44	1.67	0.97	32	**BB4R**/L-**1845-TP55**	●	●	●	●
		2.55	6.0	10	8.5	40	0.64	0.10	0.52	2.25	1.35	32	**BB4R**/L-**2560-TP55**	●	●	●	●

D h5	Holder	Ø min	L1	**L2** BH6... BHY6...	**L2** BHS6... BHK6...	P (TPI)	E1	E2 (0/-0.02)	T	E	C	L3	**Art. N°**	ZTAF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	3.70	11.0	20	18.5	32-24	1.08	0.13	0.91	3.33	1.83	47	**BB6R**/L-**37110-TP55**	●	●	●	●
		5.10	15.0	20	18.5	26-20	1.30	0.16	1.09	4.60	2.05	47	**BB6R**/L-**51150-TP55**	●	●	●	●
		5.50	16.0	20	18.5	22-16	1.48	0.19	1.24	5.15	2.60	47	**BB6R**/L-**55160-TP55**	●	●	●	●



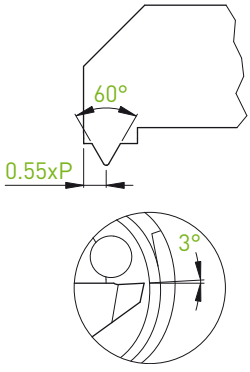


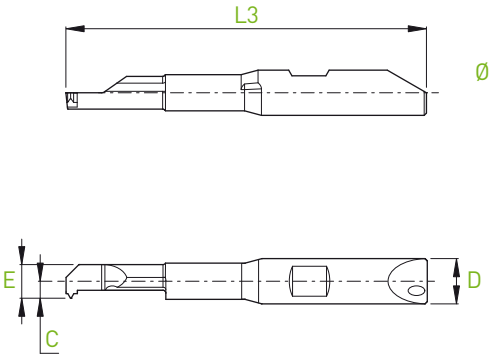


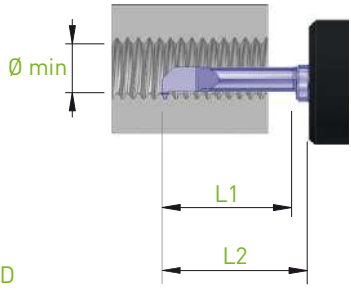
														R		L	
D h5	Holder	Ø min	L1	**L2** BH4... BHY4...	**L2** BHS4... BHK4...	P (TPI)	E1	E2 (0/-0.02)	T	E	C	L3	**Art. N°**	ZTAF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	1.85	4.5	10	8.5	48	0.54	0.09	0.44	1.67	0.97	32	**BF4R/L-1845-TP55**	●	●	●	●
		2.55	6.0	10	8.5	40	0.64	0.10	0.52	2.25	1.35	32	**BF4R/L-2560-TP55**	●	●	●	●

D h5	Holder	Ø min	L1	**L2** BH6... BHY6...	**L2** BHS6... BHK6...	P (TPI)	E1	E2 (0/-0.02)	T	E	C	L3	**Art. N°**	ZTAF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	3.70	11.0	20	18.5	32-24	1.08	0.13	0.91	3.33	1.83	47	**BF6R/L-37110-TP55**	●	●	●	●
		5.10	15.0	20	18.5	26-20	1.30	0.16	1.09	4.60	2.05	47	**BF6R/L-51150-TP55**	●	●	●	●
		5.50	16.0	20	18.5	22-16	1.48	0.19	1.24	5.15	2.60	47	**BF6R/L-55160-TP55**	●	●	●	●

Profil complet métrique
Metrisches Vollprofil
Metric full profile





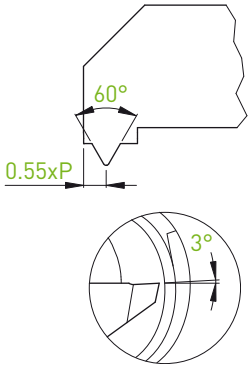


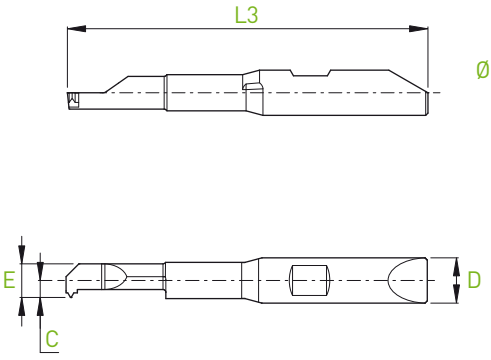
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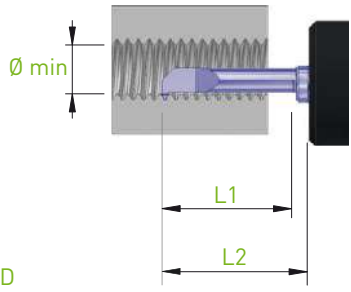
D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	L3	Art. N°	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	M3x0.5	2.50	0.50	6.0	10	8.5	2.25	1.35	32	**BB4R-2560-TM-0.50**	●	●
		M4x0.7	3.30	0.70	8.0	15	13.5	2.97	1.50	37	**BB4R-3380-TM-0.70**	●	●

D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	L3	Art. N°	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	M5x0.8	4.20	0.80	10.0	20	18.5	3.78	2.10	47	**BB6R-42100-TM-0.80**	●	●
		M6x1.0	5.00	1.00	12.0	20	18.5	4.50	2.20	47	**BB6R-50120-TM-1.00**	●	●

Profil complet métrique
Metrisches Vollprofil
Metric full profile







R

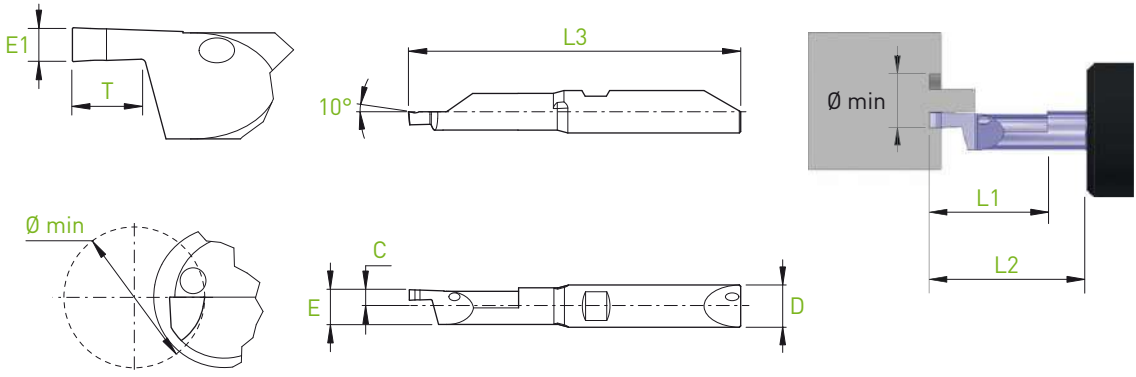
D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	L3	Art. N°	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	M3x0.5	2.50	0.50	6.0	10	8.5	2.25	1.35	32	**BF4R-2560-TM-0.50**	●	●
		M4x0.7	3.30	0.70	8.0	15	13.5	2.97	1.50	37	**BF4R-3380-TM-0.70**	●	●

D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	L3	Art. N°	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	M5x0.8	4.20	0.80	10.0	20	18.5	3.78	2.10	47	**BF6R-42100-TM-0.80**	●	●
		M6x1.0	5.00	1.00	12.0	20	18.5	4.50	2.20	47	**BF6R-50120-TM-1.00**	●	●

FEG

BB6...

Gorge frontale extérieure
Aussen axiales stechen
External axial grooving



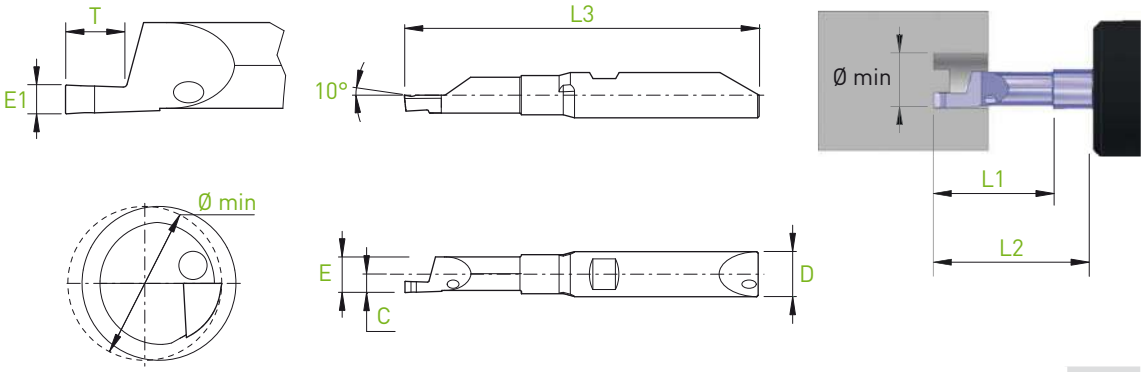
R

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	E1	L3	Art. N°	P M N S ZTAF	P N S ZN
6	BH6... BHS6... BHY6... BHK6...	5.0	15.0	20	18.5	3.00	4.90	2.30	1.50	47	**BB6R-50150-FEG150X**	●	●

Gorge frontale intérieure
Innen axiales stechen
Internal axial grooving

BB6...

FIG



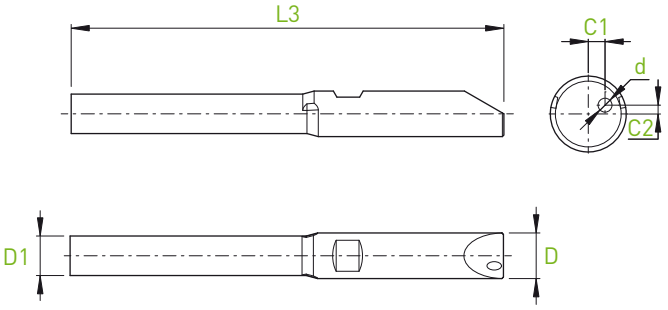
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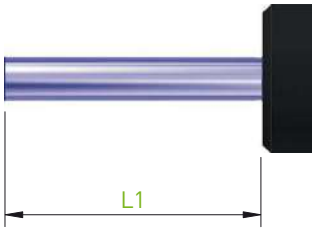
D h5	Holder	Ø min	L1	**L2** BH6... BHY6...	**L2** BHS6... BHK6...	T	E	C	E1	L3	**Art. N°**	P M N S ZTAF	P N S ZN
6	BH6... BHS6... BHY6... BHK6...	5.0	15.0	20	18.5	3.00	4.75	2.45	1.50	47	**BB6R-50150-FIG150X**	●	●

BB_E

BB4... / BB6...

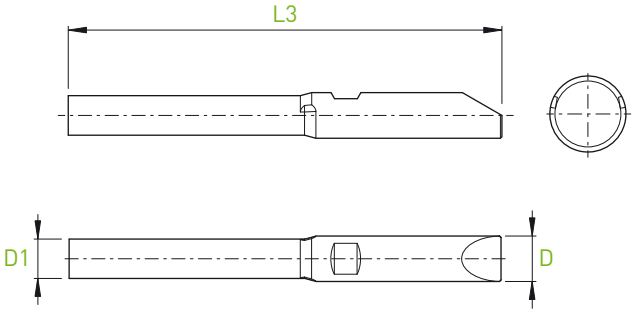
Ébauches avec arrosage
Rohlinge mit Kühlung
Blanks with coolant

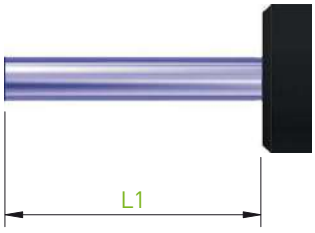




D h5	Holder	**L1** BH4... BHY4...	**L1** BHS4... BHK4...	D1	C1	C2	d	L3	**Art. N°**	ZN
4	BH4... BHS4... BHY4... BHK4...	20.0	18.5	3.20	0.84	0.55	0.85	42	**BB4R-E42**	●

D h5	Holder	**L1** BH6... BHY6...	**L1** BHS6... BHK6...	D1	C1	C2	d	L3	**Art. N°**	ZN
6	BH6... BHS6... BHY6... BHK6...	30.0	28.5	5.20	1.33	0.70	1.10	57	**BB6R-E57**	●



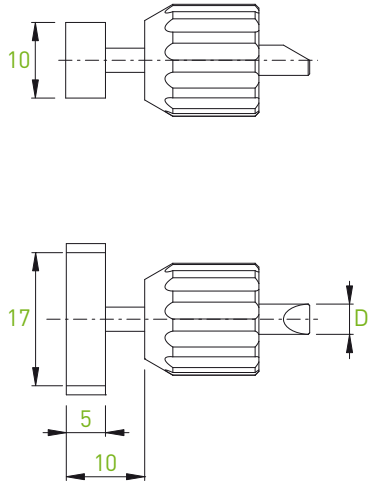


D h5	Holder	**L1** BH4... BHY4...	**L1** BHS4... BHK4...	D1	L3	**Art. N°**	ZN
4	BH4... BHS4... BHY4... BHK4...	20.0	18.5	3.20	42	**BF4-E42**	●

D h5	Holder	**L1** BH6... BHY6...	**L1** BHS6... BHK6...	D1	L3	**Art. N°**	ZN
6	BH6... BHS6... BHY6... BHK6...	30.0	28.5	5.20	57	**BF6-E57**	●

BH4 / BH6 | MASTER

Jauges d'alignement
Richtplatten
Adjusting tools

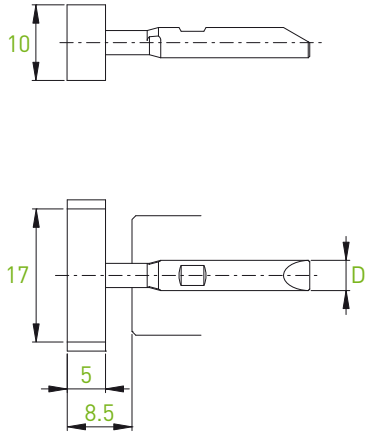




D h5	Art. N°	
4	BH4-MASTER	●
6	BH6-MASTER	●

BHSY... | MASTER

Jauges d'alignement
Richtplatten
Adjusting tools





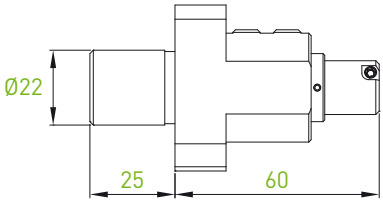
D h5	Art. N°	
4	BHSY4-MASTER	●
6	BHSY6-MASTER	●



Art. N°
BWD1-2022-STAR-SRR



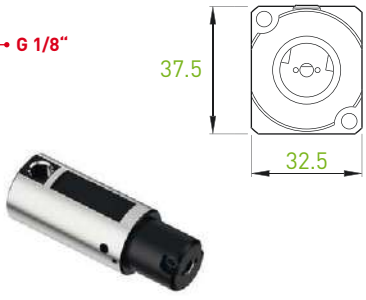
Art. N°
BHS4-D20-55-BWD1
BHS6-D20-55-BWD1



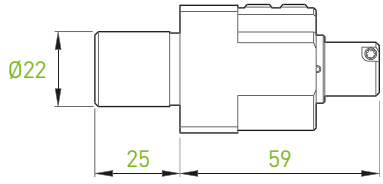
Types of STAR machines
SR10J (T22+T24)
SB16/20 Types C + D + E (T21-T24)
SB20R Types E + G + N (T21-T24)
SR20J / JN (T21-T24)
SR20R / II / III (T21-T24)
SR20R IV (T21-T24)
SR32J/JN (T21-T24)
SW12RII (T21-T24)
SV20R (T21-T24)
ECAS12/20 (T21-T24)
SW20 (T21-T23)



Art. N°
BWD1-2022-STAR-SW



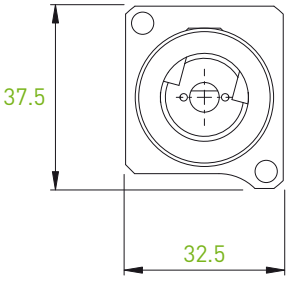
Art. N°
BHS4-D20-55-BWD1
BHS6-D20-55-BWD1

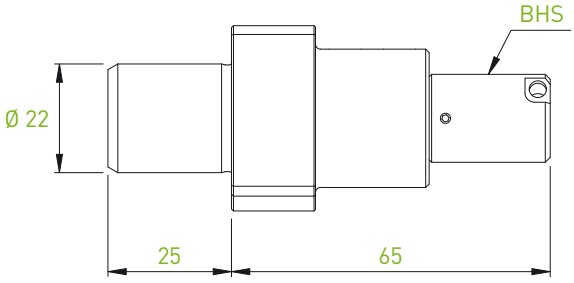


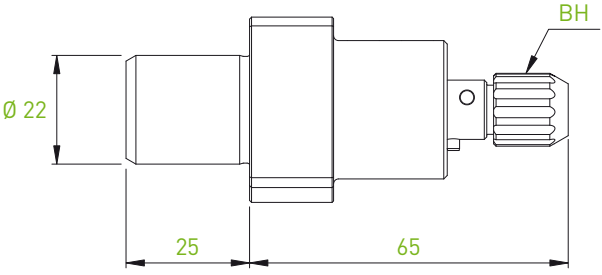
Types of STAR machines
SW12RII (T21-T28)
SW20 (T21-T23 + T25-T27)
SV20R (T21-T28)
SR-20R IV (T21-T28)
SB12/20R (T22-T24)
SR38 (T21-T28)

BH4 / BH6
BHS4 / BHS6

Porte-outils avec arrosage pour contre-opération - Machines STAR
Halter mit Kühlungssystem für Gegenbearbeitung – STAR Maschinen
Backworking holders with through coolant – STAR Machines









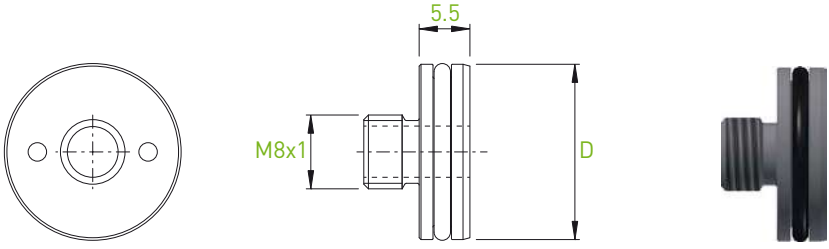
Art. N°
BWD1-1222-STAR-SW-B

Art. N°
BHS4-D12-51-BWD1-B
BHS6-D12-51-BWD1-B

Art. N°
BH4-D12-51-BWD1-B
BH6-D12-51-BWD1-B

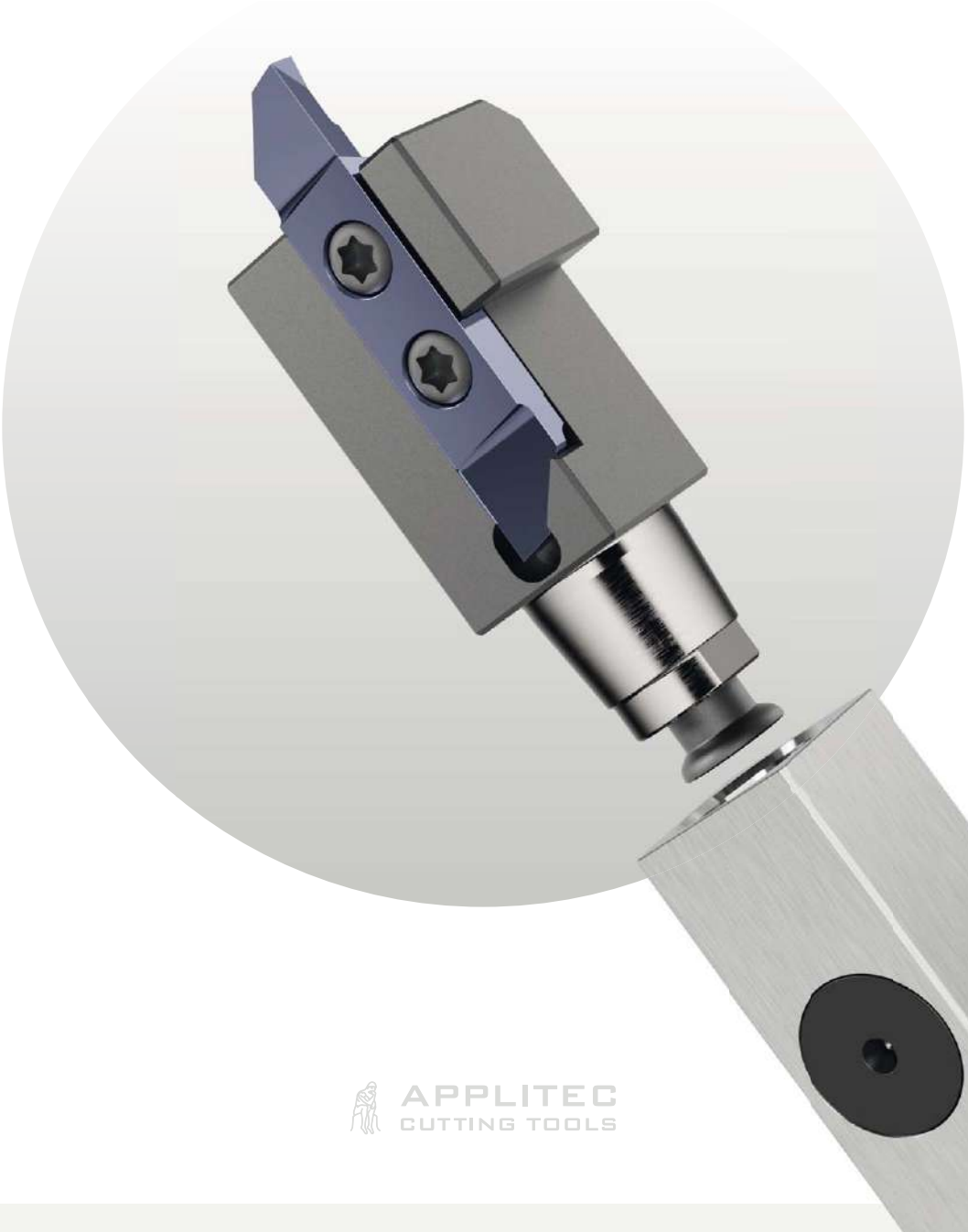
Types of STAR machines
SW12R II (T21-T28)
SW20 (T21-T23 + T25-T27)
SV20R (T21-T28)
SR-20R IV (T21-T28)
SB12/20R (T22-T24)
SR38 (T21-T28)





D	Art. N°	
19.05	JB-M8X1-D19.05	●
20	JB-M8X1-D20	●
22	JB-M8X1-D22	●
25	JB-M8X1-D25	●
25.4	JB-M8X1-D25.4	●

SWITCH-Line



APPLITEC
CUTTING TOOLS

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Supports carrés
Viereckige Halter
Square holders

> 13.07

Têtes interchangeables | Wechselköpfe | Interchangeable heads

TOP-Line 		LW-730-740-JET LW-750-760-JET LW-770-780-JET	> 13.08 > 13.09 > 13.10
ONE-Line 		LW-130-JET LW-140-JET	> 13.11
TURN-Line 	88°	LW-310-320-JET LW-310-BC/320-BC-JET	> 13.12 > 13.13
	85°	LW-330-340-JET	> 13.14
ISO-Line 	80°	LW-SCL-JET LW-SCM-JET	> 13.15 > 13.16
	55°	LW-SDJ-JET LW-SDN-JET LW-SDH-JET	> 13.17 > 13.18 > 13.19
	35°	LW-SVJ-JET LW-SVV-JET	> 13.20 > 13.21

Supports cylindriques
Zylindrische Halter
Cylinder holders
LW-D

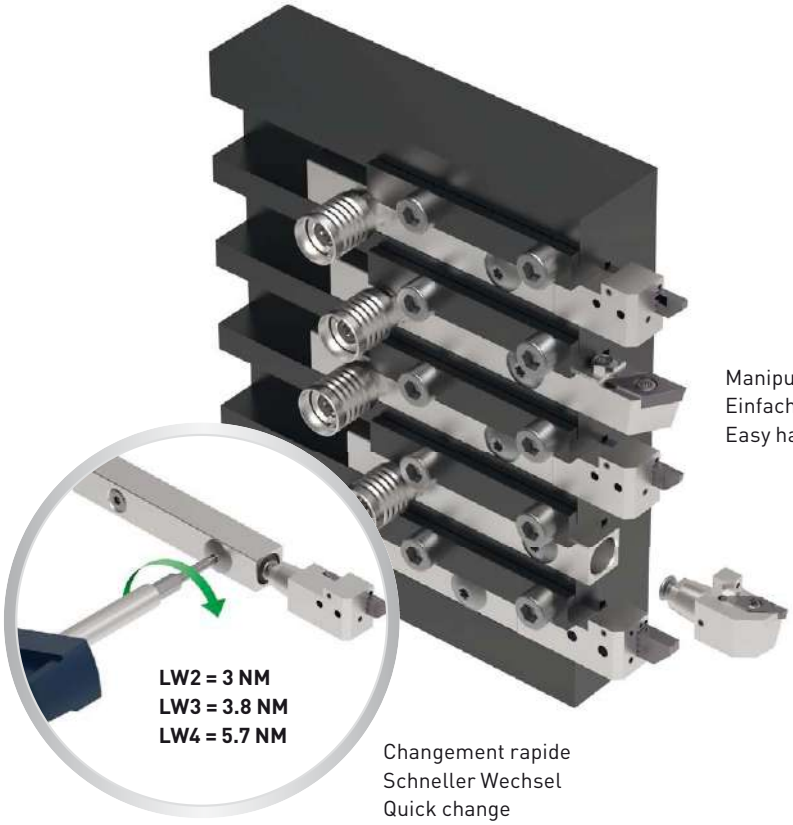
> 13.22

Têtes interchangeables porte-pince
Spannzangenwechselköpfe
Interchangeable head gripper holder
LW-E

> 13.23

Porte-outils
Halter
Holders
HSK / PSC

> 13.24

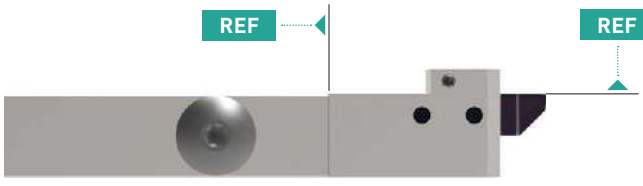


Manipulation facilitée
Einfache Handhabung
Easy handling

Changement rapide
Schneller Wechsel
Quick change

Lubrification intégrée
Integrierte Kühlung
Integrated coolant

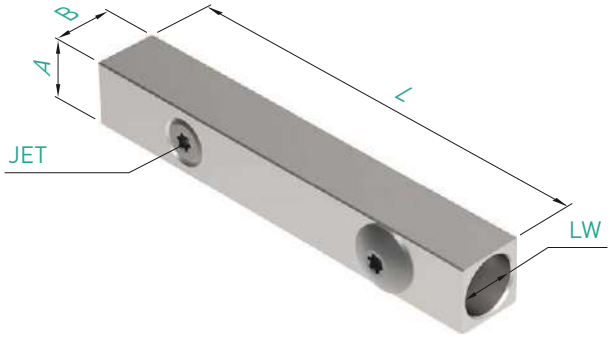




Excellente répétitivité
Ausgezeichnete Wiederholgenauigkeit
Excellent repeatability

Désignations - Carrés
Bezeichnungen – Quadrate
Designations – Squares

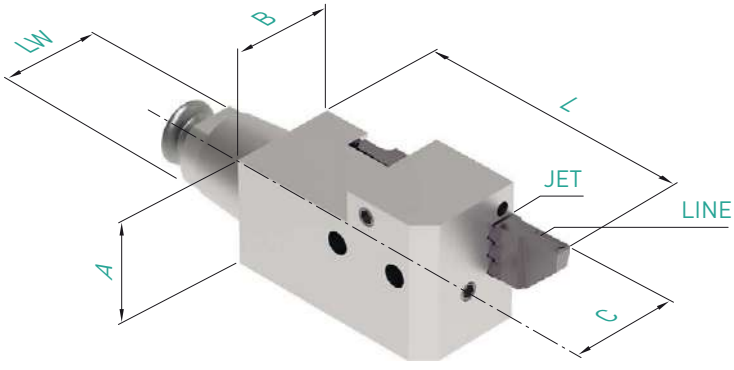
Infos et avantages
Infos und Vorteile
Infos and advantages



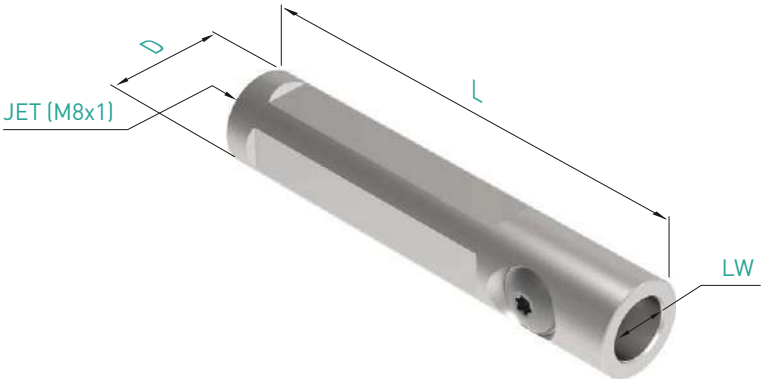
LW	A x B	L	JET
Interface	Section	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant

Désignations - Têtes interchangeables
Bezeichnungen - Wechselköpfe
Designations - Interchangeable heads

Infos et avantages
Infos und Vorteile
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LW	LINE	A x B	C	L	JET
Interface	Serie	Section	Localisation axe Achselokalisation Axis location	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant



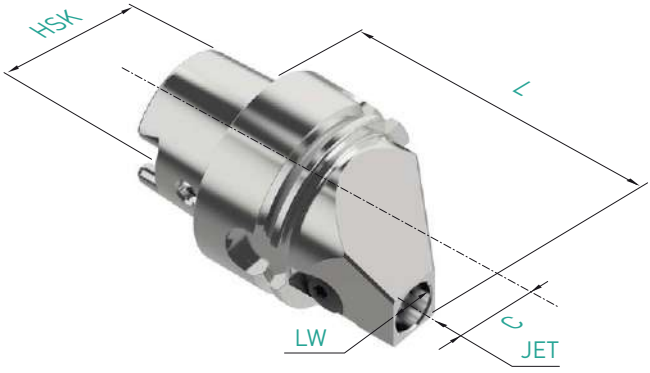
LW	D	L	JET
Interface	Ø	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant



LW	E	D	L
Interface	Pince type Spannzange Typ Gripper type	Ø	Longueur Länge Length

Désignations - HSK
Bezeichnungen - HSK
Designations - HSK

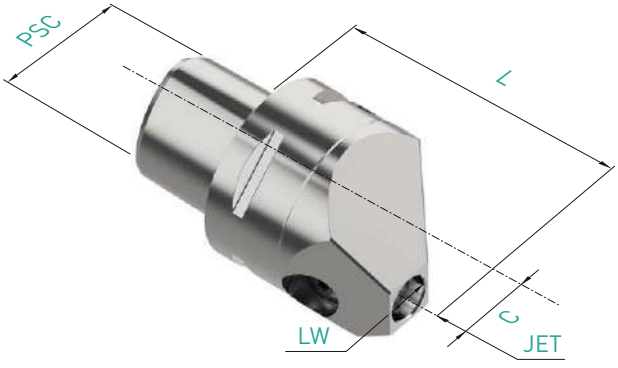
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Infos und Vorteile
Infos and advantages



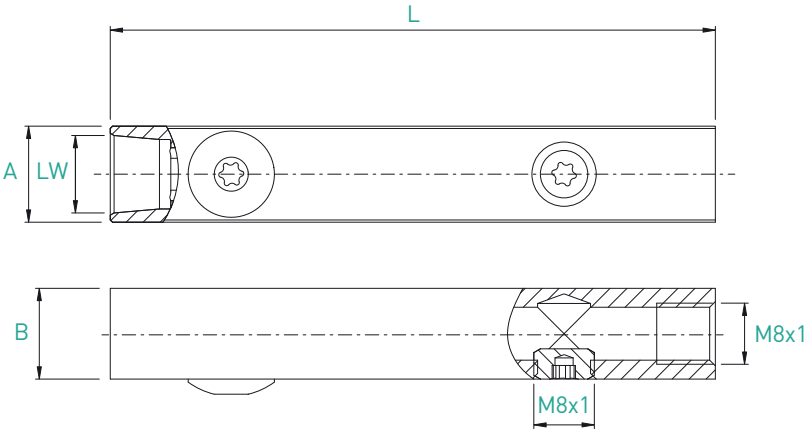
HSK	LW	C	L	JET	X
Machine interface	Interface tête interchangeable Wechselkopfschnittstelle Interchangeable head interface	Localisation axe Achsellokalisation Axis location LW	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant	Spécificité fabricant machine Spezifität Maschinenhersteller Specificity machine manufacturer

Désignations - Têtes interchangeables
Bezeichnungen - Wechselköpfe
Designations - Interchangeable heads

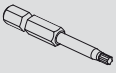
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Infos und Vorteile
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PSC	LW	C	L	JET	X
Machine interface	Interface tête interchangeable Wechselkopfschnittstelle Interchangeable head interface	Localisation axe Achsellokalisation Axis location LW	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant	Spécificité fabricant machine Spezifität Maschinenhersteller Specificity machine manufacturer





				Pièces de rechange Ersatzteile Spare parts		Options	
							
LW	A x B	L	Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW2	10x10	80	**LW2-1010-80-JET**	**JB-M8X1**	**LW2-ER1.010.012**	**CD-NM3.0**	**TX15-E6.3**
LW3	12x12	80	**LW3-1212-80-JET**	**JB-M8X1**	**LW3-ER1.012.014**	**CD-NM3.8**	**TX15-E6.3**
LW3	12.7x12	80	**LW3-12.7-80-JET**				
LW4	15.87x16	80	**LW4-15.87-80-JET**	**JB-M8X1**	**LW4-ER1.014.019**	**CD-NM5.7**	**TX20-E6.3**
LW4	16x16	80	**LW4-1616-80-JET**				



Utilisation d'une clé dynamométrique recommandée

Benutzung eines Drehmomentschlüssel empfohlen

Recommended use of a torque wrench

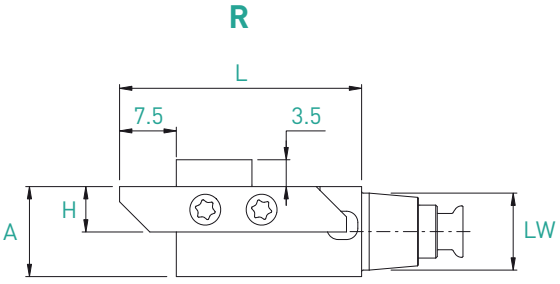
Options	
	Art. N°
	M8X1
	voir JET-LINE siehe JET-LINE see JET-LINE

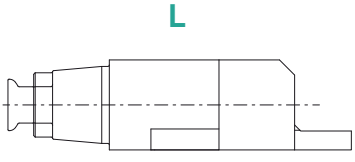
LW-730/740-JET

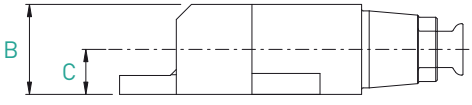
TOP-Line

Têtes interchangeables
Wechselköpfe
Interchangeable heads

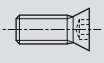
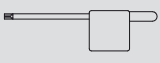






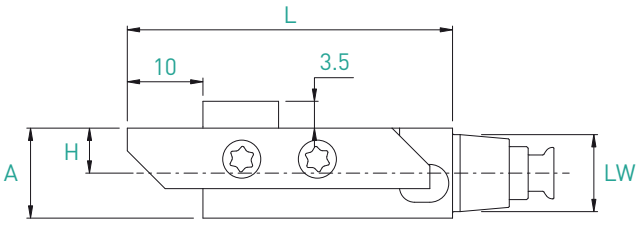


						L	R
Plaquettes WSP Inserts	LW	A x B	H	C	L	**Art. N°**	**Art. N°**
73_-74_	LW3	12x12	6	6	32	**LW3-730-12-0632-JET**	**LW3-740-12-0632-JET**
	LW4	16x16	8	8	32	**LW4-730-16-0832-JET**	**LW4-740-16-0832-JET**

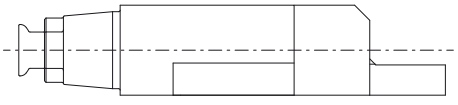
	Pièces de rechange Ersatzteile Spare parts		Options
			
LW	**Art. N°**	**Art. N°**	**Art. N°**
LW3	**V-M3X7-T8**	**LW3-U00.ER1.000**	**C-T8**
LW4		**LW4-U00.ER1.000**	

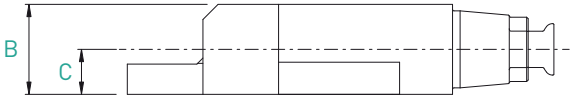


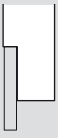
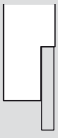
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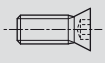
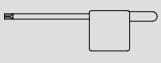


L



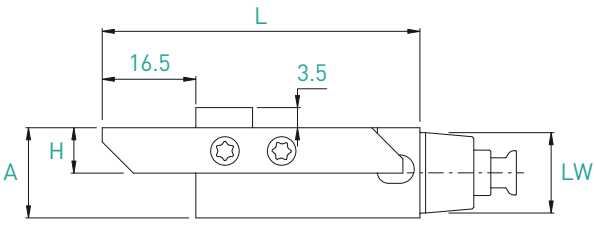


Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
75_-76_	LW3	12x12	6	6	43	**LW3-750-12-0643-JET**	**LW3-760-12-0643-JET**
	LW4	16x16	8	8	43	**LW4-750-16-0843-JET**	**LW4-760-16-0843-JET**

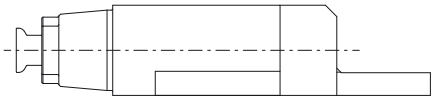
	Pièces de rechange Ersatzteile Spare parts		Options
			
LW	Art. N°	Art. N°	Art. N°
LW3	**V-M4X9-T15**	**LW3-U00.ER1.000**	**C-T15**
LW4		**LW4-U00.ER1.000**	

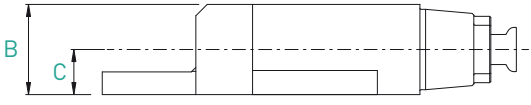


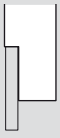
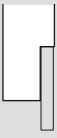
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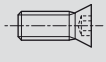


L



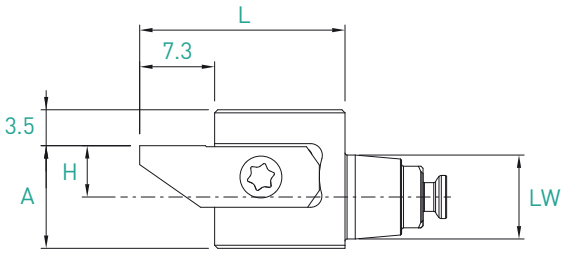


Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	 R Art. N°
77_-78_	LW4	16x16	8	8	56	**LW4-770-16-0856-JET**	**LW4-780-16-0856-JET**

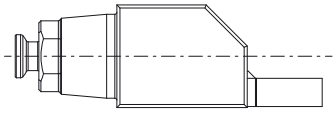
	Pièces de rechange Ersatzteile Spare parts		Options
			
LW	**Art. N°**	**Art. N°**	**Art. N°**
LW4	**V-M4X9-T15**	**LW4-U00.ER1.000**	**C-T15**

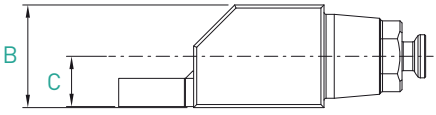


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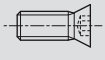
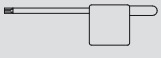


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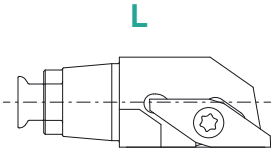


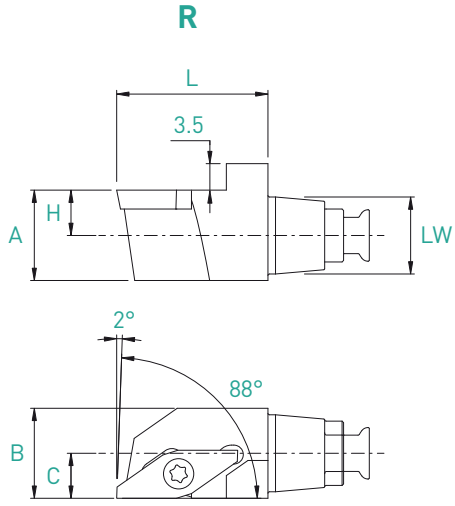


						L	R
Plaquettes WSP Inserts	LW	A x B	H	C	L	**Art. N°**	**Art. N°**
13_-14_	LW2	10x10	5	5	20	**LW2-130-10-0520-JET**	**LW2-140-10-0520-JET**

	Pièces de rechange Ersatzteile Spare parts		Options
			
LW	**Art. N°**	**Art. N°**	**Art. N°**
LW4	**V-M3X7-T8**	**LW2-U00.ER1.000**	**C-T8**





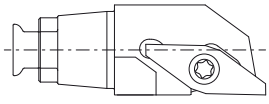


						L	R
Plaquettes WSP Inserts	LW	A x B	H	C	L	**Art. N°**	**Art. N°**
31_-32_	LW2	10x10	5	5	20	**LW2-310-10-0520-JET**	**LW2-320-10-0520-JET**
	LW3	12x12	6	6	20	**LW3-310-12-0620-JET**	**LW3-320-12-0620-JET**
	LW4	16x16	8	8	25	**LW4-310-16-0825-JET**	**LW4-320-16-0825-JET**

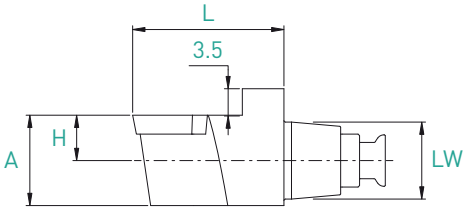
	Pièces de rechange Ersatzteile Spare parts		Options
LW	**Art. N°**	**Art. N°**	**Art. N°**
LW2	**V-M2.5X7.8-T8**	**LW2-U00.ER1.000**	**C-T8**
LW3		**LW3-U00.ER1.000**	
LW4		**LW4-U00.ER1.000**	

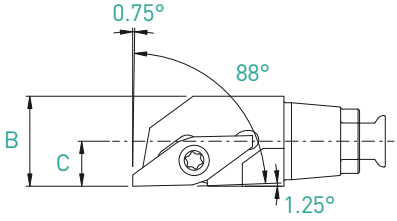


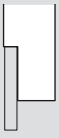
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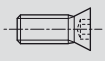
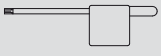


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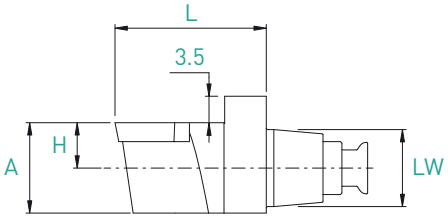


Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
31_-32_	LW2	10x10	5	5	20	**LW2-310-10-0520-BC-JET**	**LW2-320-10-0520-BC-JET**
	LW3	12x12	6	6	20	**LW3-310-12-0620-BC-JET**	**LW3-320-12-0620-BC-JET**
	LW4	16x16	8	8	25	**LW4-310-16-0825-BC-JET**	**LW4-320-16-0825-BC-JET**

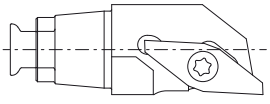
	Pièces de rechange Ersatzteile Spare parts		Options
			
LW	**Art. N°**	**Art. N°**	**Art. N°**
LW2	**V-M2.5X7.8-T8**	**LW2-U00.ER1.000**	**C-T8**
LW3		**LW3-U00.ER1.000**	
LW4		**LW4-U00.ER1.000**	

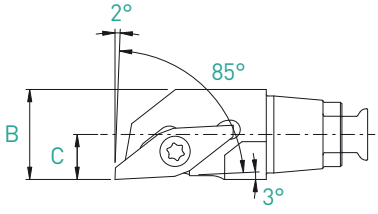


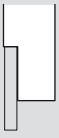
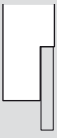
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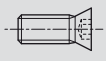
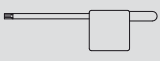


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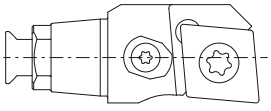


						L 	 R
Plaquettes WSP Inserts	LW	A x B	H	C	L	**Art. N°**	**Art. N°**
33_-34_	LW2	10x10	5	5	20	**LW2-330-10-0520-JET**	**LW2-340-10-0520-JET**
	LW3	12x12	6	6	20	**LW3-330-12-0620-JET**	**LW3-340-12-0620-JET**
	LW4	16x16	8	8	25	**LW4-330-16-0825-JET**	**LW4-340-16-0825-JET**

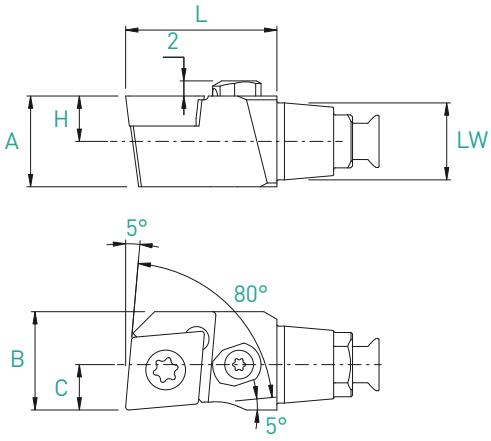
	Pièces de rechange Ersatzteile Spare parts		Options
			
LW	**Art. N°**	**Art. N°**	**Art. N°**
LW2	**V-M2.5X7.8-T8**	**LW2-U00.ER1.000**	**C-T8**
LW3		**LW3-U00.ER1.000**	
LW4		**LW4-U00.ER1.000**	

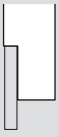


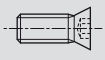
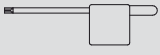
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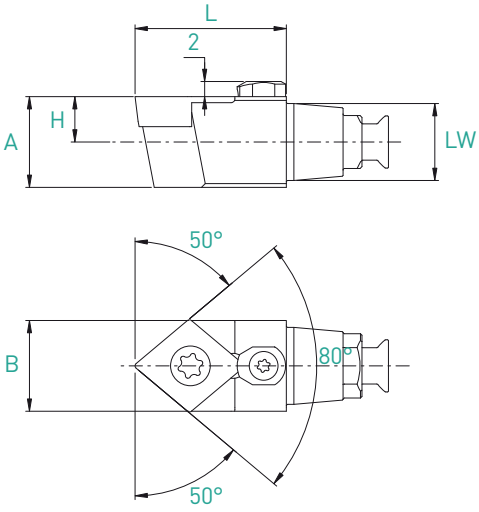
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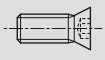
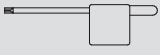
						L 	R 
Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
CC..-0602..	LW2	10x10	5	5	20	**LW2-SCLCL-10-0520-06-JET**	**LW2-SCLCR-10-0520-06-JET**
	LW3	12x12	6	6	20	**LW3-SCLCL-12-0620-06-JET**	**LW3-SCLCR-12-0620-06-JET**
	LW4	16x16	8	8	25	**LW4-SCLCL-16-0825-06-JET**	**LW4-SCLCR-16-0825-06-JET**
CC..-09T3..	LW3	12x12	6	6	20	**LW3-SCLCL-12-0620-09-JET**	**LW3-SCLCR-12-0620-09-JET**
	LW4	16x16	8	8	25	**LW4-SCLCL-16-0825-09-JET**	**LW4-SCLCR-16-0825-09-JET**

		Pièces de rechange Ersatzteile Spare parts			Options
					
Plaquettes WSP Inserts	LW	Art. N°	Art. N°	Art. N°	Art. N°
CC..-0602..	LW2	**V-M2.5X7.8-T8**	**LWX-ER1.007.004**	**LW2-U00.ER1.000**	**C-T8**
	LW3			**LW3-U00.ER1.000**	
	LW4			**LW4-U00.ER1.000**	
CC..-09T3..	LW3	**V-M4X9-T15-ISO**		**LW3-U00.ER1.000**	**C-T15**
	LW4			**LW4-U00.ER1.000**	



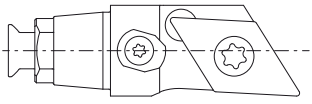


Plaquettes WSP Inserts	LW	A x B	H	L	Art. N°
CC..-0602..	LW2	10x10	5	20	**LW2-SCMCN-10-0020-06-JET**
	LW3	12x12	6	20	**LW3-SCMCN-12-0020-06-JET**
	LW4	16x16	8	25	**LW4-SCMCN-16-0025-06-JET**
CC..-09T3..	LW3	12x12	6	20	**LW3-SCMCN-12-0020-09-JET**
	LW4	16x16	8	25	**LW4-SCMCN-16-0025-09-JET**

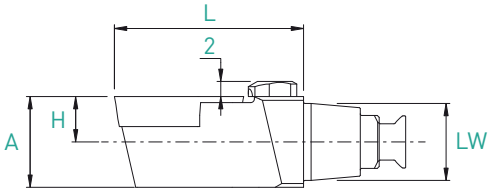
		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW	 **Art. N°**	 **Art. N°**	 **Art. N°**	 **Art. N°**
CC..-0602..	LW2	**V-M2.5X7.8-T8**	**LWX-ER1.007.004**	**LW2-U00.ER1.000**	**C-T8**
	LW3			**LW3-U00.ER1.000**	
	LW4			**LW4-U00.ER1.000**	
CC..-09T3..	LW3	**V-M4X9-T15-ISO**		**LW3-U00.ER1.000**	**C-T15**
	LW4			**LW4-U00.ER1.000**	

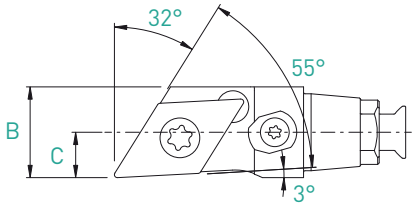


L



R

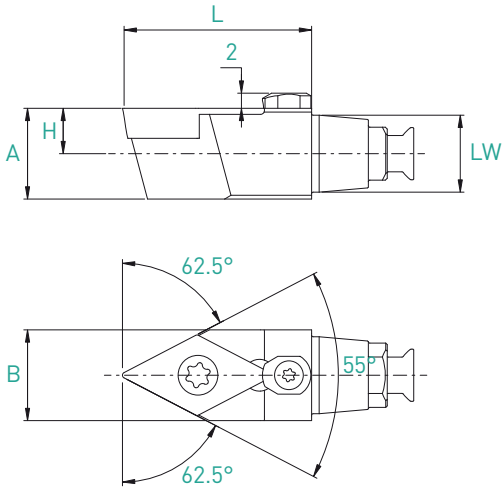




Plaquettes WSP Inserts	LW	A x B	H	C	L	L Art. N°	R Art. N°
DC..-0702..	LW2	10x10	5	5	20	**LW2-SDJCL-10-0520-07-JET**	**LW2-SDJCR-10-0520-07-JET**
	LW3	12x12	6	6	20	**LW3-SDJCL-12-0620-07-JET**	**LW3-SDJCR-12-0620-07-JET**
	LW4	16x16	8	8	25	**LW4-SDJCL-16-0825-07-JET**	**LW4-SDJCR-16-0825-07-JET**
DC..-11T3..	LW3	12x12	6	6	25	**LW3-SDJCL-12-0625-11-JET**	**LW3-SDJCR-12-0625-11-JET**
	LW4	16x16	8	8	25	**LW4-SDJCL-16-0825-11-JET**	**LW4-SDJCR-16-0825-11-JET**

		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW	Art. N°	Art. N°	Art. N°	Art. N°
DC..-0702..	LW2	**V-M2.5X7.8-T8**	**LWX-ER1.007.004**	**LW2-U00.ER1.000**	**C-T8**
	LW3			**LW3-U00.ER1.000**	
	LW4			**LW4-U00.ER1.000**	
DC..-11T3..	LW3	**V-M4X9-T15-ISO**		**LW3-U00.ER1.000**	**C-T15**
	LW4			**LW4-U00.ER1.000**	



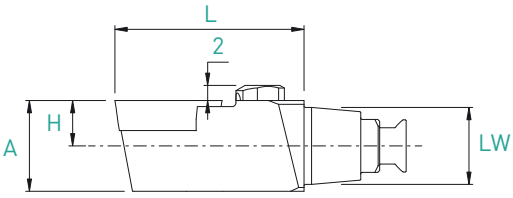


Plaquettes WSP Inserts	LW	A x B	H	L	Art. N°
DC..-0702..	LW2	10x10	5	20	**LW2-SDNCN-10-0020-07-JET**
	LW3	12x12	6	20	**LW3-SDNCN-12-0020-07-JET**
	LW4	16x16	8	25	**LW4-SDNCN-16-0025-07-JET**
DC..-11T3..	LW3	12x12	6	25	**LW3-SDNCN-12-0025-11-JET**
	LW4	16x16	8	25	**LW4-SDNCN-16-0025-11-JET**

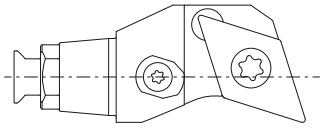
		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
DC..-0702..	LW2	**V-M2.5X7.8-T8**	**LWX-ER1.007.004**	**LW2-U00.ER1.000**	**C-T8**
	LW3			**LW3-U00.ER1.000**	
	LW4			**LW4-U00.ER1.000**	
DC..-11T3..	LW3	**V-M4X9-T15-ISO**		**LW3-U00.ER1.000**	**C-T15**
	LW4			**LW4-U00.ER1.000**	

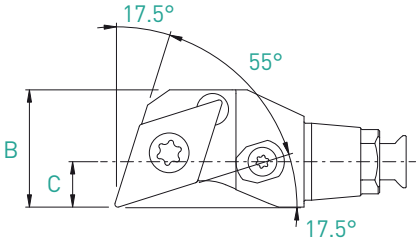


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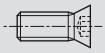


L



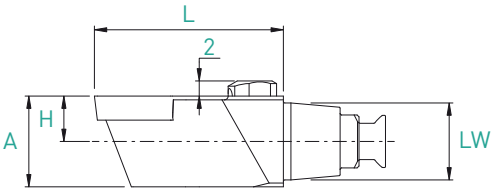


						L	R
Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
DC..-0702..	LW2	10x10	5	5	20	**LW2-SDHCL-10-0520-07-JET**	**LW2-SDHCR-10-0520-07-JET**
	LW3	12x15.5	6	6	20	**LW3-SDHCL-12-0620-07-JET**	**LW3-SDHCR-12-0620-07-JET**
	LW4	16x16	8	8	25	**LW4-SDHCL-16-0825-07-JET**	**LW4-SDHCR-16-0825-07-JET**
DC..-11T3..	LW3	12x15.5	6	6	25	**LW3-SDHCL-12-0625-11-JET**	**LW3-SDHCR-12-0625-11-JET**
	LW4	16x16	8	8	25	**LW4-SDHCL-16-0825-11-JET**	**LW4-SDHCR-16-0825-11-JET**

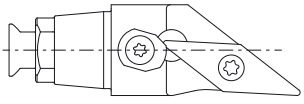
		Pièces de rechange Ersatzteile Spare parts			Options
					
Plaquettes WSP Inserts	LW	Art. N°	Art. N°	Art. N°	Art. N°
DC..-0702..	LW2	**V-M2.5X7.8-T8**	**LWX-ER1.007.004**	**LW2-U00.ER1.000**	**C-T8**
	LW3			**LW3-U00.ER1.000**	
	LW4			**LW4-U00.ER1.000**	
DC..-11T3..	LW3	**V-M4X9-T15-ISO**		**LW3-U00.ER1.000**	**C-T15**
	LW4			**LW4-U00.ER1.000**	

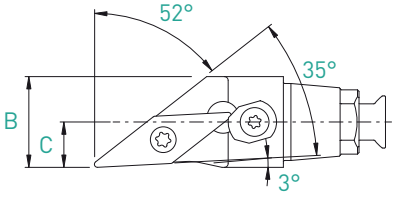


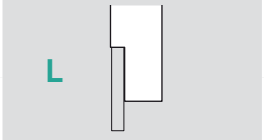
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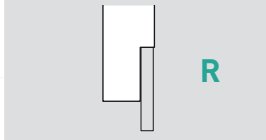


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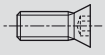
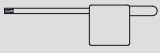




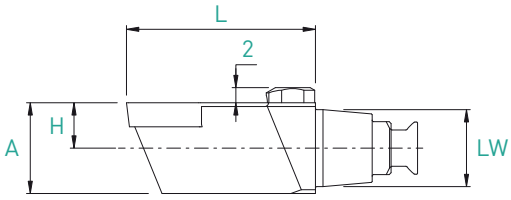


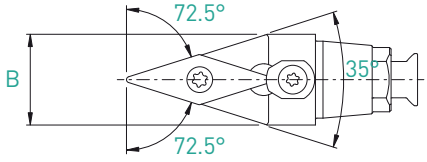


Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
VC..-1103..	LW2	10x10	5	5	25	**LW2-SVJCL-10-0525-11-JET**	**LW2-SVJCR-10-0525-11-JET**
	LW3	12x12	6	6	25	**LW3-SVJCL-12-0625-11-JET**	**LW3-SVJCR-12-0625-11-JET**
	LW4	16x16	8	8	25	**LW4-SVJCL-16-0825-11-JET**	**LW4-SVJCR-16-0825-11-JET**
VC..-1303..	LW3	12x12	6	6	30	**LW3-SVJCL-12-0630-13-JET**	**LW3-SVJCR-12-0630-13-JET**
	LW4	16x16	8	8	30	**LW4-SVJCL-16-0830-13-JET**	**LW4-SVJCR-16-0830-13-JET**
VC..-1604..	LW4	16x16	8	8	35	**LW4-SVJCL-16-0835-16-JET**	**LW4-SVJCR-16-0835-16-JET**

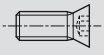
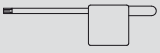
		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW	 Art. N°	 Art. N°	 Art. N°	 Art. N°
VC..-1103..	LW2	**V-M2.5X7.8-T8**	**LWX-ER1.007.004**	**LW2-U00.ER1.000**	**C-T8**
	LW3			**LW3-U00.ER1.000**	
	LW4			**LW4-U00.ER1.000**	
VC..-1303..	LW3	**V-M3X7.3-T8-ISO**		**LW3-U00.ER1.000**	**C-T15**
	LW4			**LW4-U00.ER1.000**	
VC..-1604..	LW4	**V-M4X9-T15-ISO**		**LW4-U00.ER1.000**	**C-T15**





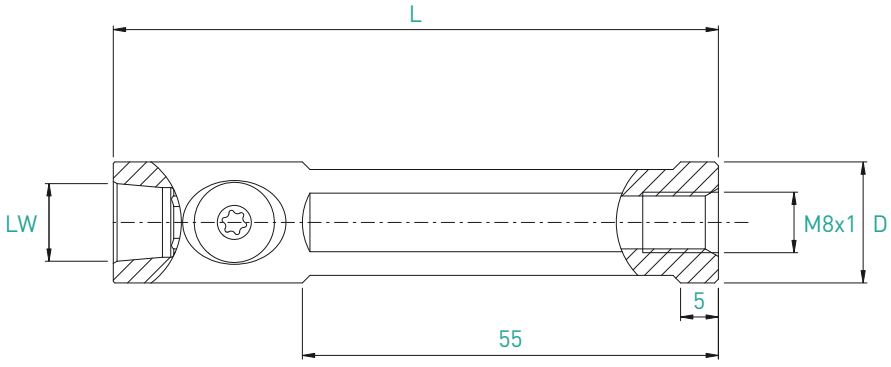


Plaquettes WSP Inserts	LW	A x B	H	L	Art. N°
VC..-1103..	LW2	10x10	5	25	**LW2-SVVCN-10-0025-11-JET**
	LW3	12x12	6	25	**LW3-SVVCN-12-0025-11-JET**
	LW4	16x16	8	25	**LW4-SVVCN-16-0025-11-JET**
VC..-1303..	LW3	12x12	6	30	**LW3-SVVCN-12-0030-13-JET**
	LW4	16x16	8	30	**LW4-SVVCN-16-0030-13-JET**
VC..-1604..	LW4	16x16	8	35	**LW4-SVVCN-16-0035-16-JET**

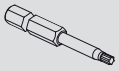
		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW	 Art. N°	 Art. N°	 Art. N°	 Art. N°
VC..-1103..	LW2	**V-M2.5X7.8-T8**	**LWX-ER1.007.004**	**LW2-U00.ER1.000**	**C-T8**
	LW3			**LW3-U00.ER1.000**	
	LW4			**LW4-U00.ER1.000**	
VC..-1303..	LW3	**V-M3X7.3-T8-ISO**		**LW3-U00.ER1.000**	
	LW4			**LW4-U00.ER1.000**	
VC..-1604..	LW4	**V-M4X9-T15-ISO**		**LW4-U00.ER1.000**	**C-T15**

LW-D

Supports cylindriques
Zylindrische Halter
Cylinder holders





					Pièces de rechange Ersatzteile Spare parts		Options	
								
LW	D	L	L1	Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3	16	80	55	**LW3-D16-80-JET**	**LW3-ER1.012.014**	**JB-M8X1**	**CD-NM3.8**	**TX15-E6.3**
LW4	19.05	80	55	**LW4-D19.05-80-JET**	**LW4-ER1.014.018**		**CD-NM5.7**	**TX20-E6.3**
	20	80	55	**LW4-D20-80-JET**				
	22	80	55	**LW4-D22-80-JET**	**LW4-ER1.014.019**			
	25	80	55	**LW4-D25-80-JET**	**LW4-ER1.015.023**			
	25.4	80	55	**LW4-D25.4-80-JET**				

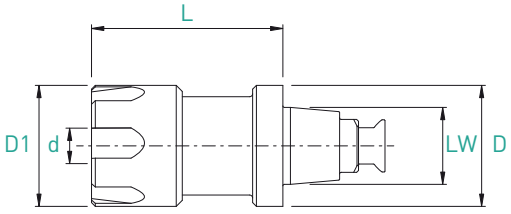


Utilisation d'une clé dynamométrique recommandée

Benutzung eines Drehmomentschlüssel empfohlen

Recommended use of a torque wrench

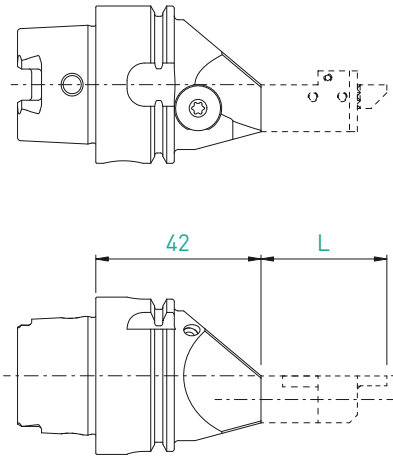
Options	
	Art. N°
	M8X1
	voir JET-LINE siehe JET-LINE see JET-LINE



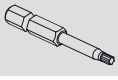
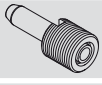


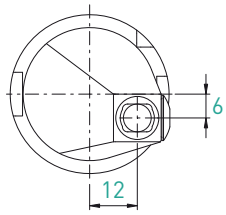
LW	D	D1	L	Pince type	d	Art. N°	Pièces de rechange Ersatzteile Spare parts Art. N°	Art. N°
LW3	16	16	26	ER11	0.5-7	**LW3-E11-D16-26**	**E11-ER1.001-012**	**LW3-U00.ER1.00**
LW4	19	16	26	ER11	0.5-7	**LW4-E11-D19-26**		**LW4-U00.ER1.00**
	19	22	35	ER16	0.5-10	**LW4-E16-D19-35**	**E16-ER1.001-018**	

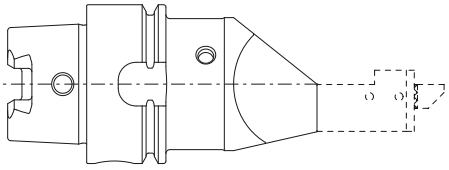




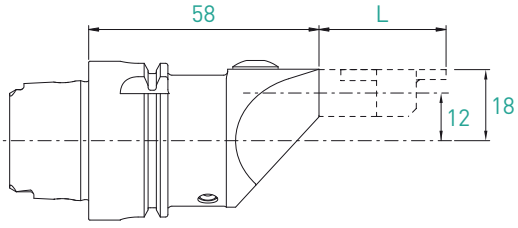
					BUMOTEC S191
LW	Compatibility	Page	L	**Art. N°**	**Art. N°**
LW3	LW3-740..	13.06	32	**HSK-T40-LW3-0642-JET**	**HSK-A40-LW3-0642-JET-BU**
	LW3-760..	13.07	43		
	LW3-320-340..	13.09/13.11	20		
	LW3-SCLCR..	13.12	20		
	LW3-SCMCN..	13.13	20		
	LW3-SDJCR..	13.14	20		
	LW3-SDNCN..	13.15	20		
	LW3-SDHCR..	13.16	20		
	LW3-SVJCR..	13.17	25		

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**HSK-40-JET-M12X1**	**C-HSK-40-JET**

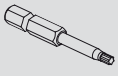
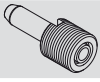




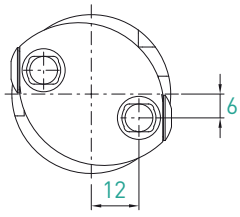


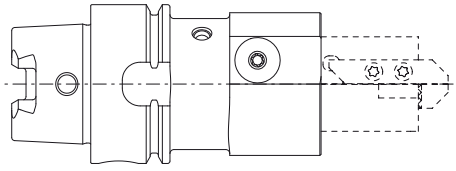


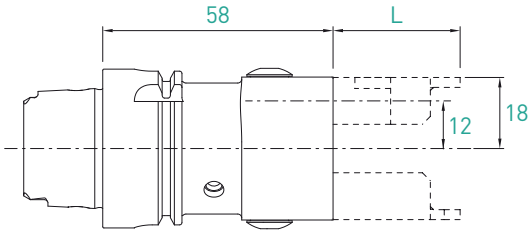
					BUMOTEC S191
LW	Compatibility	Page	L	**Art. N°**	**Art. N°**
LW3	LW3-740..	6	32	**HSK-T40-LW3-1258-JET**	**HSK-A40-LW3-1258-JET-BU**
	LW3-760..	7	43		
	LW3-320-340..	9/11	20		
	LW3-SCLCR..	12	20		
	LW3-SCMCN..	13	20		
	LW3-SDJCR..	14	20		
	LW3-SDNCN..	15	20		
	LW3-SDHCR..	16	20		
	LW3-SVJCR..	17	25		

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**HSK-40-JET-M12X1**	**C-HSK-40-JET**

HSK-T40-LW3/2

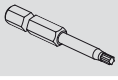
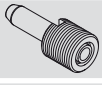


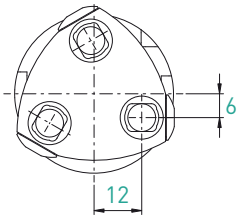


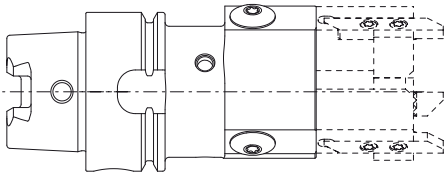




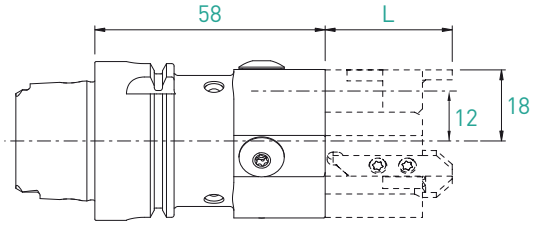
LW	Compatibility	Page	L	Art. N°
LW3	LW3-740..	13.06	32	HSK-T40-LW3/2-1258-JET
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**HSK-40-JET-M12X1**	**C-HSK-40-JET**

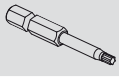
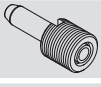


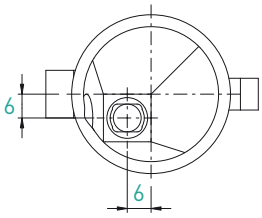


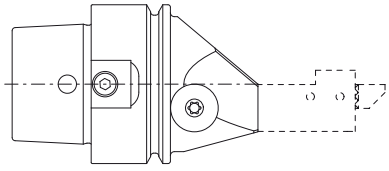


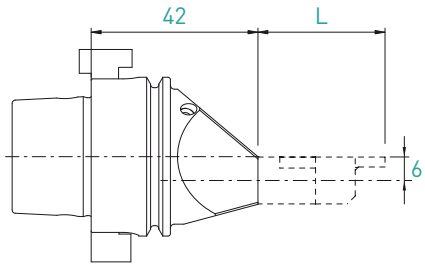


LW	Compatibility	Page	L	Art. N°
LW3	LW3-740..	13.06	32	HSK-T40-LW3/3-1258-JET
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**HSK-40-JET-M12X1**	**C-HSK-40-JET**

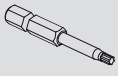
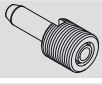


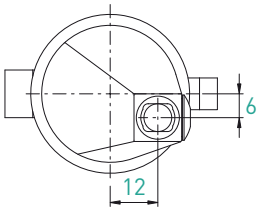


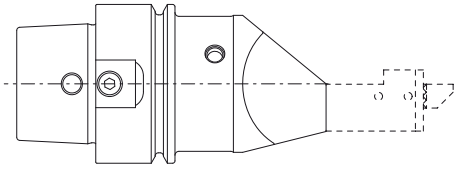




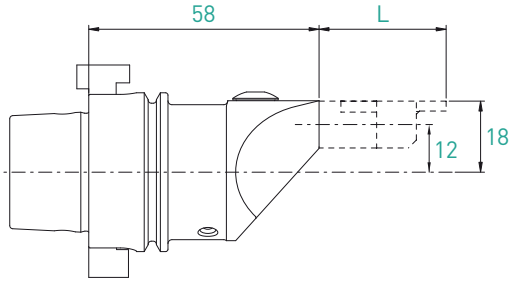
				WILLEMIN-MACODEL
LW	Compatibility	Page	L	**Art. N°**
LW3	LW3-740..	13.06	32	**HSK-E40-LW3-0642-JET-WM**
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**HSK-40-JET-M12X1**	**C-HSK-40-JET**

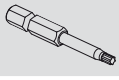
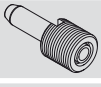


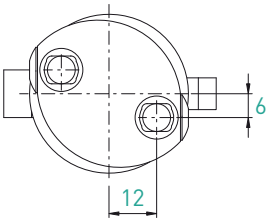


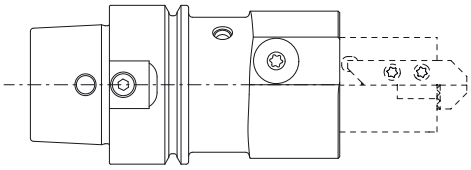


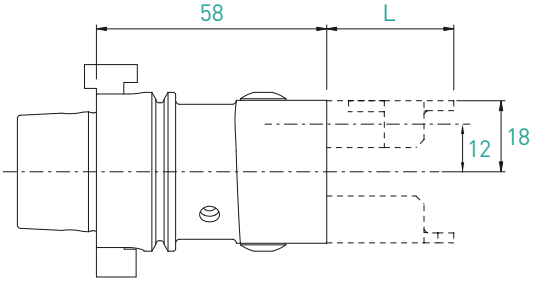


				WILLEMIN-MACODEL
LW	Compatibility	Page	L	**Art. N°**
LW3	LW3-740..	13.06	32	**HSK-E40-LW3-1258-JET-WM**
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**HSK-40-JET-M12X1**	**C-HSK-40-JET**

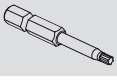
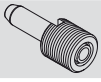


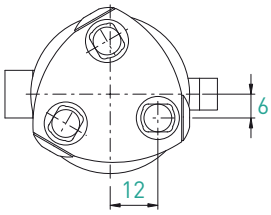


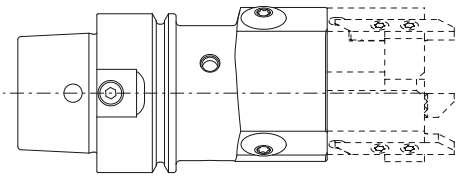




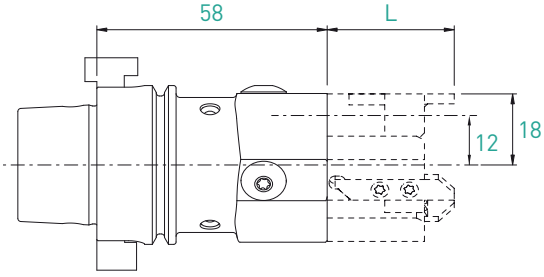
				WILLEMIN-MACODEL
LW	Compatibility	Page	L	**Art. N°**
LW3	LW3-740..	13.06	32	**HSK-E40-LW3/2-1258-JET-WM**
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**HSK-40-JET-M12X1**	**C-HSK-40-JET**

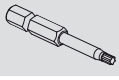
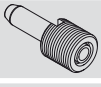




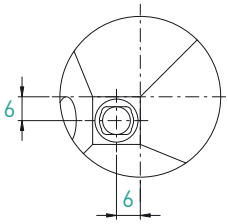


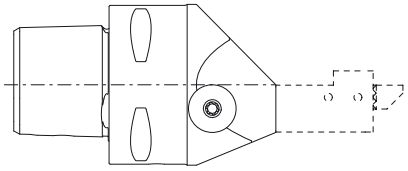


				WILLEMIN-MACODEL
LW	Compatibility	Page	L	**Art. N°**
LW3	LW3-740..	13.06	32	**HSK-E40-LW3/3-1258-JET-WM**
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

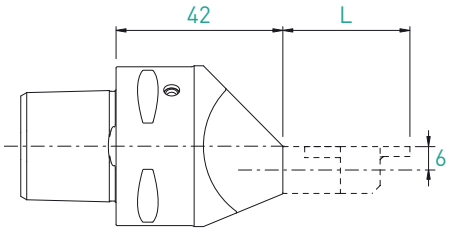
Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**HSK-40-JET-M12X1**	**C-HSK-40-JET**

PSC4-LW3

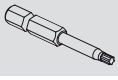


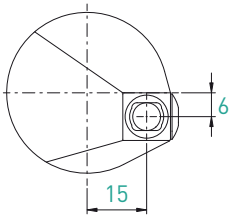


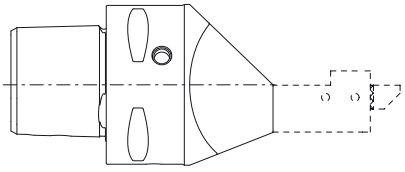




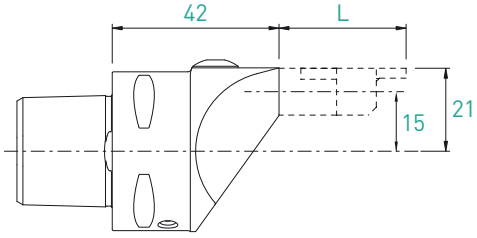
LW	Compatibility	Page	L	Art. N°
LW3	LW3-740..	13.06	32	PSC4-LW3-0642-JET
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**PSC4-JET-M14X1.5**	**C-PSC4-JET**

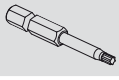




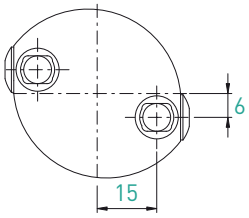


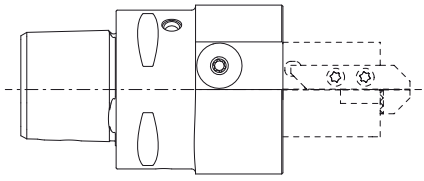


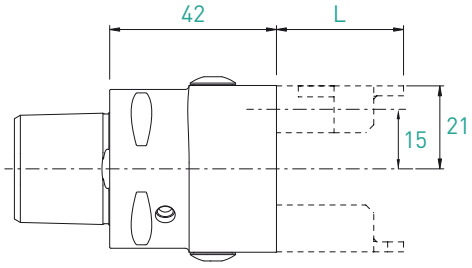
LW	Compatibility	Page	L	Art. N°
LW3	LW3-740..	13.06	32	**PSC4-LW3-1542-JET**
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**PSC4-JET-M14X1.5**	**C-PSC4-JET**

PSC4-LW3/2

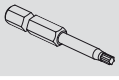


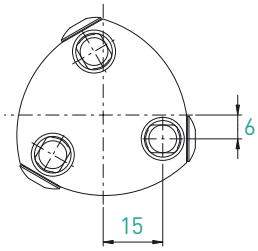


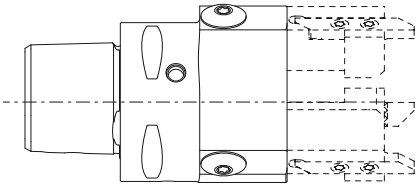


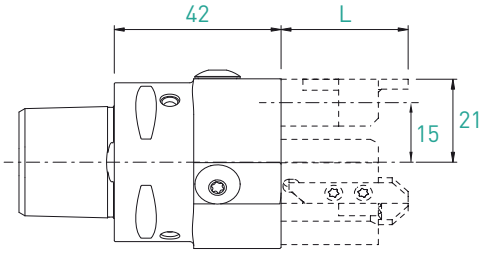


LW	Compatibility	Page	L	Art. N°
LW3	LW3-740..	13.06	32	PSC4-LW3/2-1542-JET
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**PSC4-JET-M14X1.5**	**C-PSC4-JET**

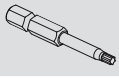




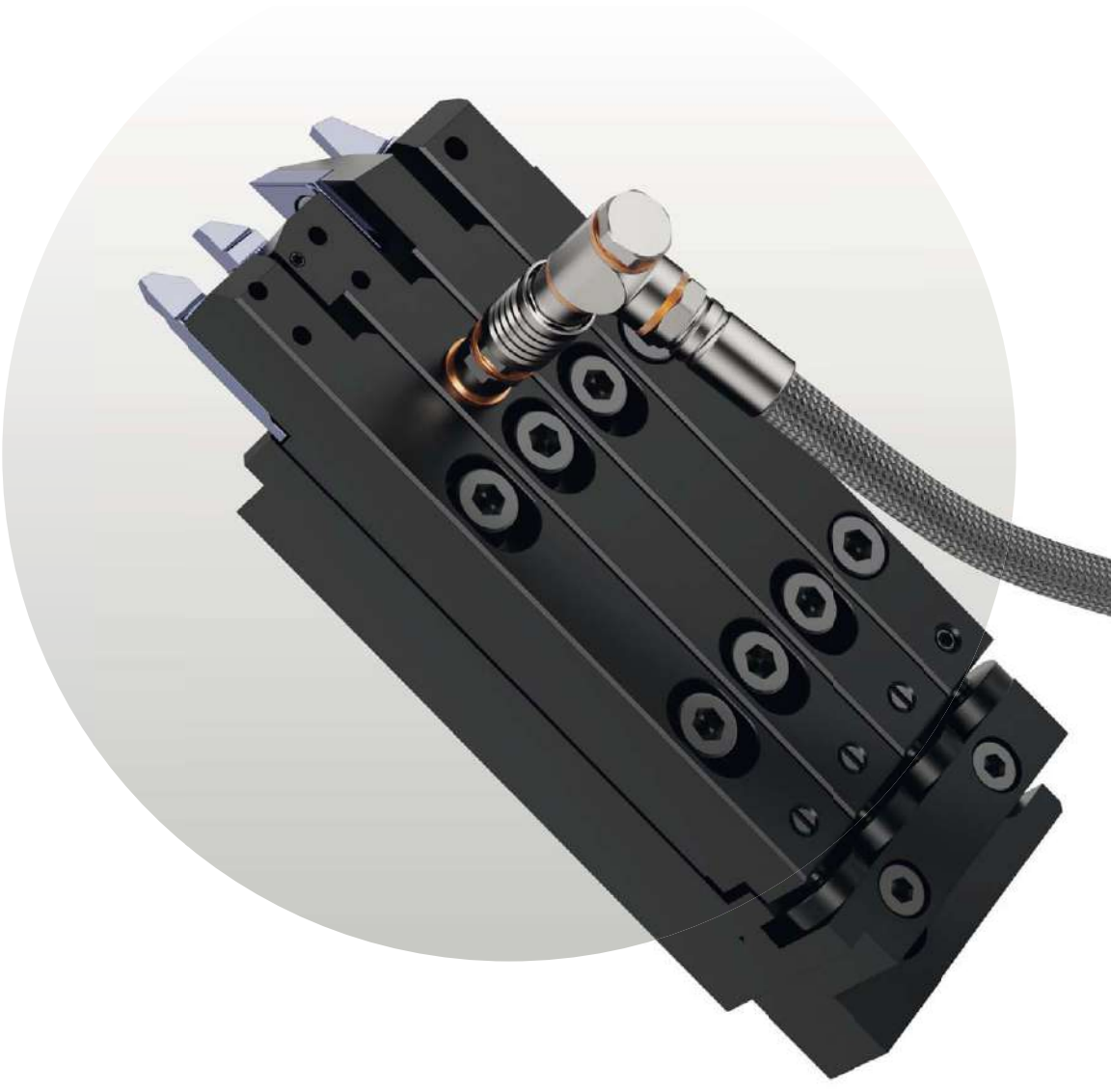




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	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
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	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**	**PSC4-JET-M14X1.5**	**C-PSC4-JET**

MODU-Line



APPLITEC
CUTTING TOOLS

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Infos und Vorteile
Infos and advantages > 14.04

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Grundhalter
Base holders

Adaptations disponibles pour les machines suivantes:
Verfügbare Anpassungen für folgende Maschinen:
Available adapters for the following machines:

Citizen > 14.06
Hanwha > 14.20
Manurhin > 14.24
Metafil > 14.26
Star > 14.28
Tornos > 14.46
Tsugami > 14.66

Porte-outils
Halter
Holders

Porte-outils
Halter
Holders

ML12

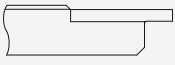


ML16



Infos > 14.74

Right cut



TOP-Line > 14.78
TURN-Line > 14.80
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EVOCUT-Line > 14.83
CUT-Line > 14.84
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Modules d'arrosage et de serrage
Kühlmittelzufuhr- und Spannelemente
Coolant and clamping supply unit



> 14.98

Banc de préréglage
Voreinstellgerät
Presetting device



> 14.100

Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories



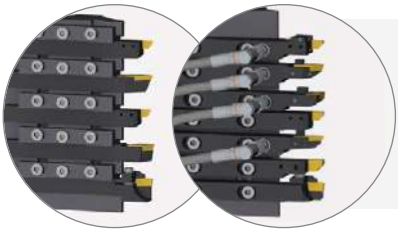
> 14.102

Original system	MODU-Line system
	

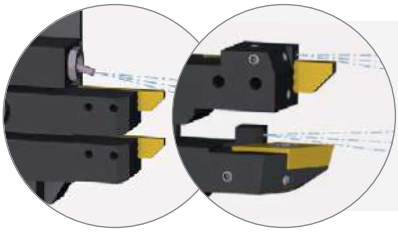
Système d'outils modulaires
pour tours automatiques

Modulares Werkzeugsystem
für Langdrehautomaten

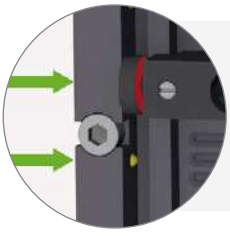
Modular tooling system for
sliding headstock automatic lathes



Plus d'outils disponibles
Mehr verfügbaren Werkzeuge
More available tools



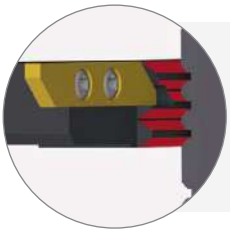
Système d'arrosage efficace
Effizientes Kühlmittelzufuhrsystem
Efficient coolant supply system



Repositionnement précis, poussée axiale automatique
Präzise Nachpositionierung, automatischer Axialschub
Precise repositionning, automatic axial thrust



Possibilité de préréglage et de réglage de la longueur des outils
Voreinstellbar auf feste oder einstellbare Länge
Presetting on fixed or adjustable length



Système de fixation robuste et rigide
Robustes und starres Spannsystem
Strong and stable clamping system



Changement d'outil simple et rapide
Einfacher und schneller Werkzeugwechsel
Easy and quick tool replacement

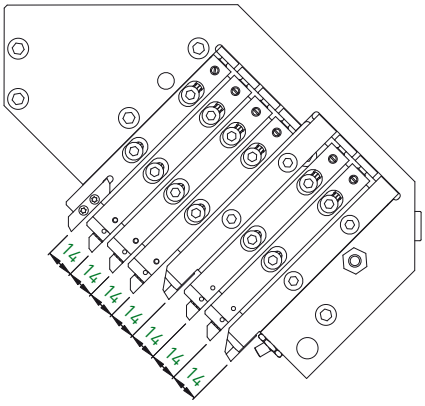
Citizen

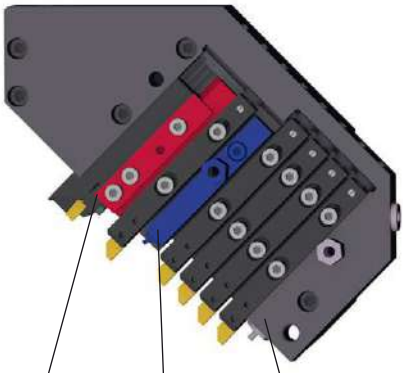
Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
C12/C16	ML12-CITIZEN-C16	ML12	14.07
L12-1M7	ML12-CITIZEN-L12-1M7		14.08
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M16V/VIII	ML12-CITIZEN-M16V/VIII		14.10
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	ML12-CITIZEN-R04-QTF5008-4T		14.11
	ML12-CITIZEN-R04-QTF5108-4T		
R07	ML12-CITIZEN-R07-QTF4008-5T		14.14
	ML12-CITIZEN-R07-QTF4108-6T		
	ML12-CITIZEN-R07-QTF4208-3T		14.15
	ML12-CITIZEN-R07-QTF4608-4T		
K12/K16	ML16-CITIZEN-K16	ML16	14.16
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L20E-1M8/L20X-1M10/ L20-2M8/2M12	ML16-CITIZEN-L20E		14.18
L20E-3M	ML16-L20E-GTF7812		14.19

Citizen C12 / C16

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

ML12

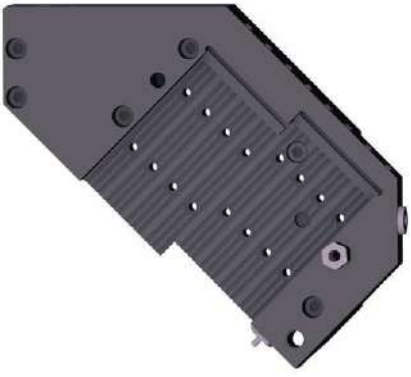




Outil ⍁ 12 mm possible avec module de serrage
Werkzeug ⍁ 12 mm mit Spannelement möglich
Tool ⍁ 12mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

Arrosage intégré
Integrierter Kühlmittel
Integrated coolant

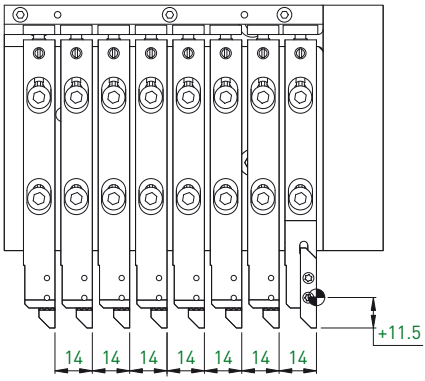


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-C16	ML12	> 14.77	**ML12-FIX-12/14**	**ML12-JET-5/16**	14.98

ML12

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

Citizen L12-1M7





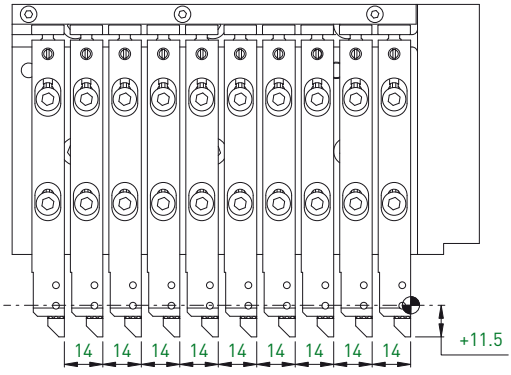


			Accessoires Zubehöre Accessories		
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ML12-CITIZEN-L12-1M7	ML12	> 14.77	–	ML12-JET-5/16	14.98

Citizen L12-2M10

+ 3 outils (max 10)
+ 3 Werkzeuge (max 10)
+ 3 tools (max 10)

ML12





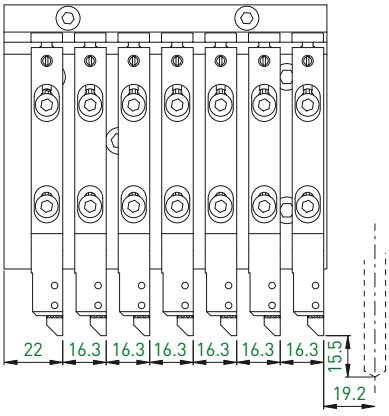


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-L12-2M10	ML12	> 14.77	–	ML12-JET-5/16	14.98

ML12

+ 2 outils (max 7)
+ 2 Werkzeuge (max 7)
+ 2 tools (max 7)

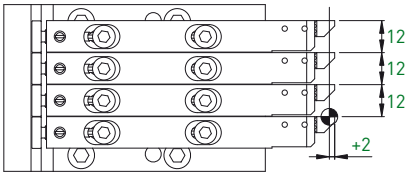
Citizen M16 V/VIII

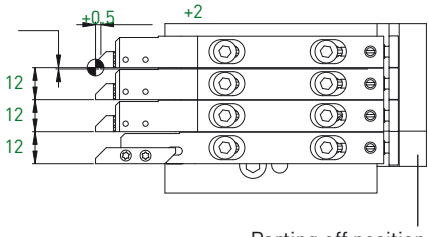






			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-M16V/VIII	ML12	> 14.77	–	ML12-JET-5/16	14.98





Parting off position







ML12-CITIZEN-R04-QTF5008-4T



ML12-CITIZEN-R04-QTF5108-4T

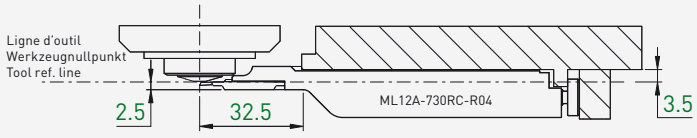
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
4T	**ML12-CITIZEN-R04-QTF5008-4T**	ML12	> 14.77	–	ML12-JET-5/16	14.98
	ML12-CITIZEN-R04-QTF5108-4T					

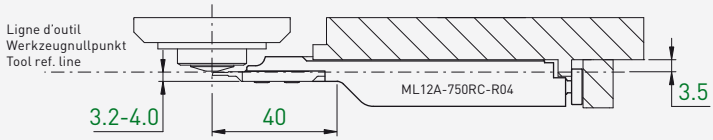
ML12

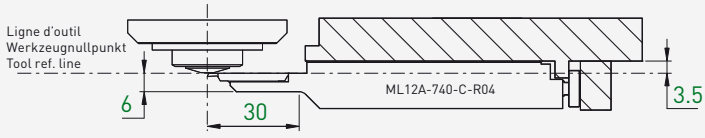
Porte-outils spéciaux de tronçonnage
Spezial Abstechwerkzeughalter
Special parting off tool holders

Citizen R04

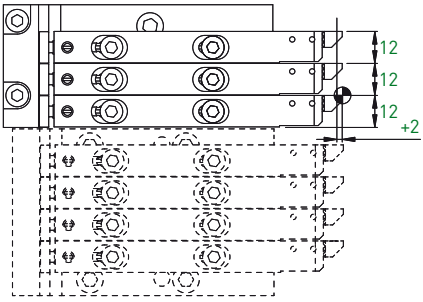
avec canon
mit Führungsbuchse
with guide bush







Type de machine Maschinen-Typ Type of machine	Porte-outils Halter Holders	**Art. N°**	Plaquettes Wendeplatten Inserts	Pages Seiten Pages
Citizen R04	ML12	**ML12A-730RC-R04**	731R... / 731RSF	> TOP-Line TOP-Watch
		ML12A-750RC-R04	751R... / 751RDSF	
		ML12A-740-C-R04	741 / 741SF	





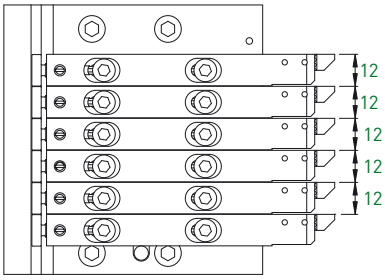


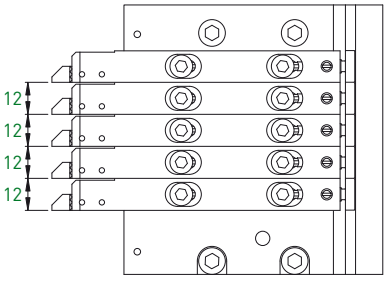
			Accessoires Zubehöre Accessories		
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ML12-CITIZEN-R04-QTF3101-3T	ML12	> 14.77	–	ML12-JET-5/16	14.98

ML12

+ 1 outil (max 11)
+ 1 Werkzeug (max 11)
+ 1 tool (max 11)

Citizen R07









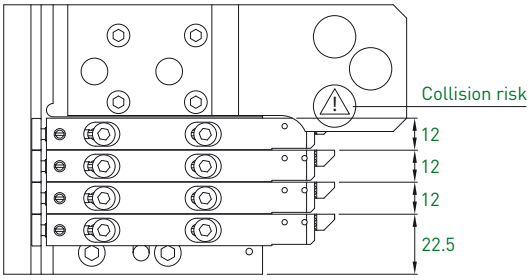


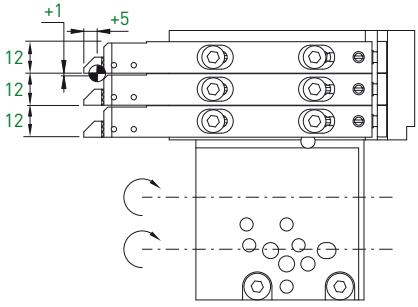


ML12-CITIZEN-R07-QTF4108-6T

ML12-CITIZEN-R07-QTF4008-5T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	**ML12-CITIZEN-R07-QTF4008-5T**	ML12	> 14.77	–	ML12-JET-5/16	14.98
6T	**ML12-CITIZEN-R07-QTF4108-6T**					











ML12-CITIZEN-R07-QTF4608-4T



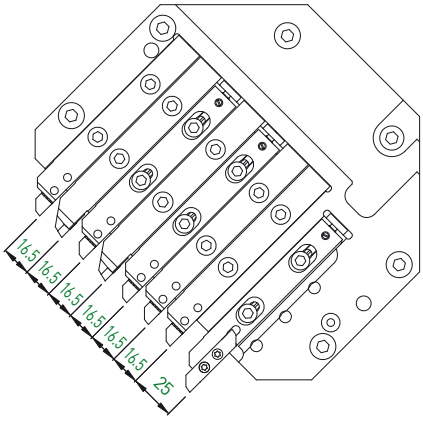
ML12-CITIZEN-R07-QTF4208-3T

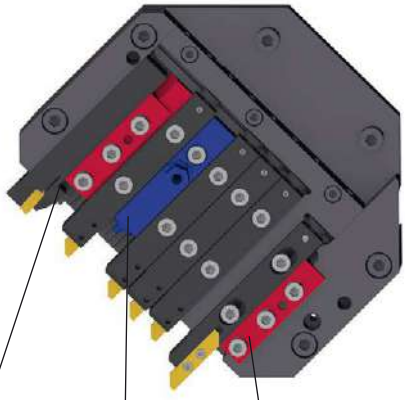
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
3T	**ML12-CITIZEN-R07-QTF4208-3T**	ML12	> 14.77	–	ML12-JET-5/16	14.98
4T	**ML12-CITIZEN-R07-QTF4608-4T**					

ML16

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

Citizen **K12 / K16**
K12E / K16E





Outil ⍁ 16 mm possible avec module de serrage
Werkzeug ⍁ 16 mm mit Spannelement möglich
Tool ⍁ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

1 serrage ML16-FIX-16 pour outil ⍁ 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug ⍁ 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool ⍁ 16 mm included

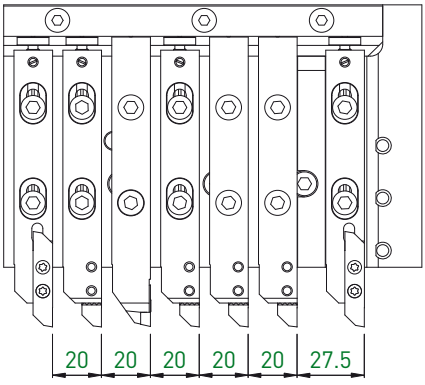


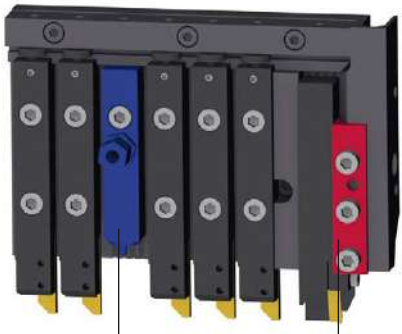
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-CITIZEN-K16	ML16	> 14.77	**ML16-FIX-16/16.5**	**ML16-JET-7/16**	14.98

Citizen L16 / L20-5M1 / 5M7

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

ML16





Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

1 serrage ML16-FIX-16 pour outil ⍁ 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug ⍁ 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool ⍁ 16 mm included

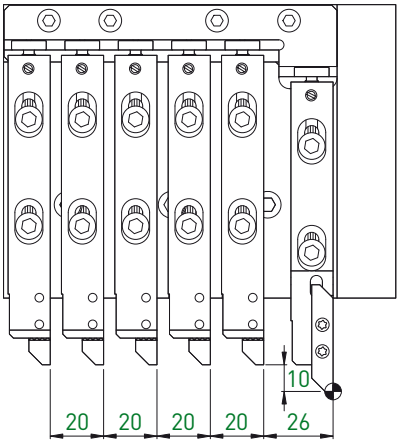


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-CITIZEN-L20	ML16	> 14.77	–	ML16-JET-7/16	14.98

ML16

+ 1 outil (max 6)
+ 1 Werkzeug (max 6)
+ 1 tool (max 6)

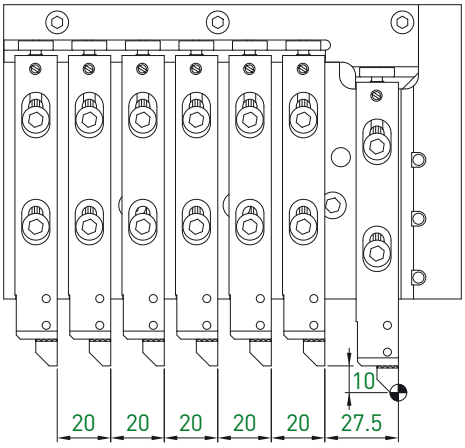
Citizen **L20E-1M8**
L20X-1M10
L20-2M8/2M12

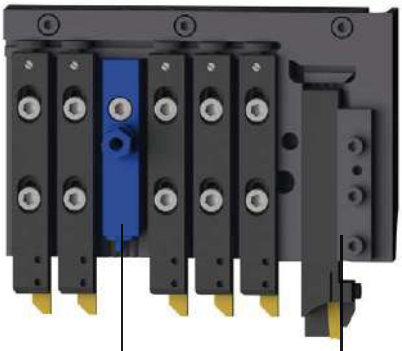






			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-CITIZEN-L20E	ML16	> 14.77	–	ML16-JET-7/16	14.98





Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

1 serrage ML16-FIX-16 pour outil ⍁ 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug ⍁ 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool ⍁ 16 mm included



			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-L20E-GTF7812	ML16	> 14.77	–	ML16-JET-7/16	14.98

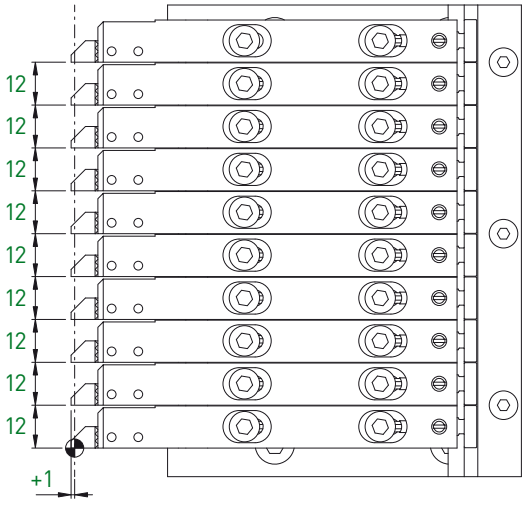
Hanwha

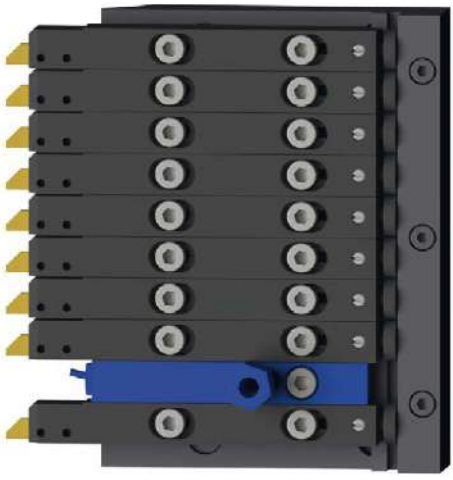
Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
XD10	ML12-HANWHA-XD10	ML12	14.21
XD20M	ML12-HANWHA-XD20M		14.22
SL12/16	ML16-HANWHA-SL12/16	ML16	14.23

Hanwha XD10

+ 4 outils (max 10)
+ 4 Werkzeuge (max 10)
+ 4 tools (max 10)

ML12





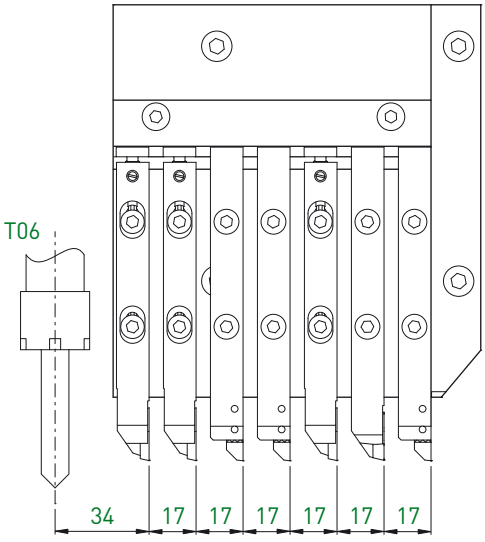


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-HANWHA-XD10	ML12	> 14.77	-	ML12-JET-5/16	14.98

ML12

+ 2 outils (max 7)
+ 2 Werkzeuge (max 7)
+ 2 tools (max 7)

Hanwha XD20M





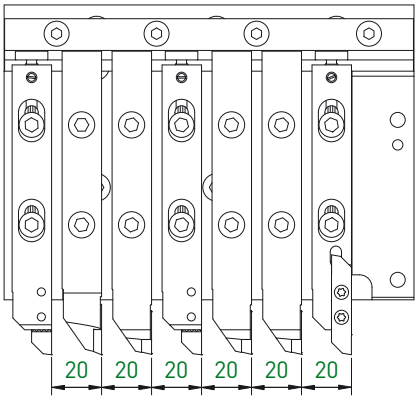


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-HANWHA-XD20M	ML12	> 14.77	-	ML12-JET-5/16	14.98

Hanwha SL12 / 16

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

ML16



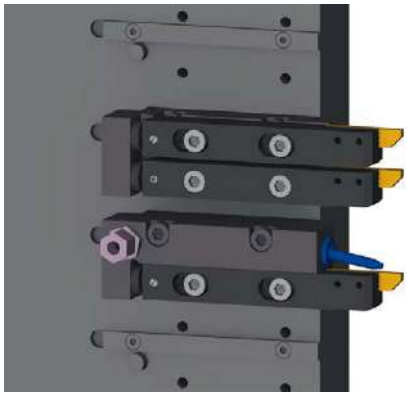




			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-HANWHA-SL12/16	ML16	> 14.77	–	ML16-JET-7/16	14.98

Manurhin

Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
KMX 426/526/626/ Swingg 20-26 MM	ML16-KMX26-JET	ML16	14.25
	ML16-KMX26-DUO		

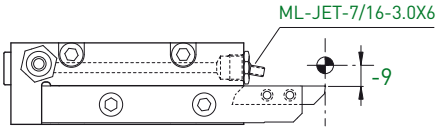


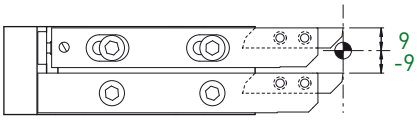
JET



DUO









JET



DUO

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	**ML16-KMX26-JET**	ML16	> 14.77	–	**ML-JET-7/16...**	14.98
DUO	**ML16-KMX26-DUO**				**ML16-JET-7/16**	

Metafil

Adaptations disponibles pour les machines suivantes
Verfügbare Anpassungen für folgende Maschinen
Available adapters for the following machines

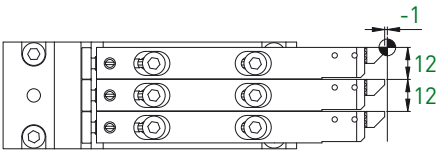
Metafil

Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
D3/D10/D13	ML12-D10-3T	ML12	14.27

D3
Metafil D10
D13

+ 1 outil (max 3)
+ 1 Werkzeug (max 3)
+ 1 tool (max 3)

ML12



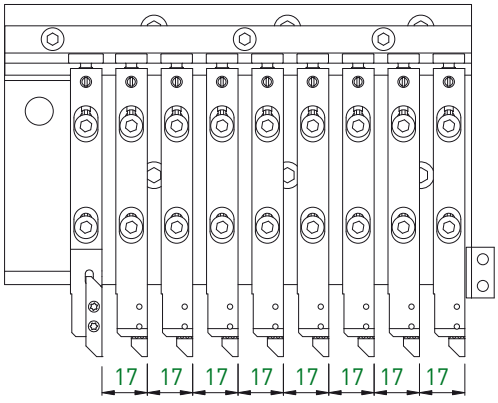




			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-D10-3T	ML12	> 14.77	-	ML12-JET-5/16	14.98

Star

Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
SB-12RG	ML12-STAR-SB-12RG	ML12	14.29
SL7/10	ML12-STAR-SL7/10		14.30
SR-10J	ML12-STAR-SR-10J		14.31
SW-12RII	ML12-STAR-SW-12RII-2T		14.32
	ML12-STAR-SW-12RII-8T		
SA-12/SA-16/SA-16R	ML16-STAR-SA-16	ML16	14.33
SB-16	ML16-STAR-SB-16		14.34
SB-16/20RG	ML16-STAR-SB-16/20RG		14.35
SB-20C/E	ML16-STAR-SB-20C/E		14.36
SR-16R/SR-20R/SR-20RII	ML16-STAR-SR-20R		14.37
SR-20J/SR-20RIII	ML16-STAR-SR-20J		14.38
	ML16-STAR-SR-20RIII		
SR-20JII-A/B	ML16-STAR-SR-20JII-A/B		14.39
SR-20RIV	ML16-STAR-SR-20RIV-2T		14.40
	ML16-STAR-SR-20RIV-6T		
SR-32J	ML16-STAR-SR-32J		14.41
SV-12/20	ML16-STAR-SV-12/20		14.42
SV-20R	ML16-STAR-SV-20R		14.43
SW-20	ML16-STAR-SW-20-2T		14.44
	ML16-STAR-SW-20-6T		





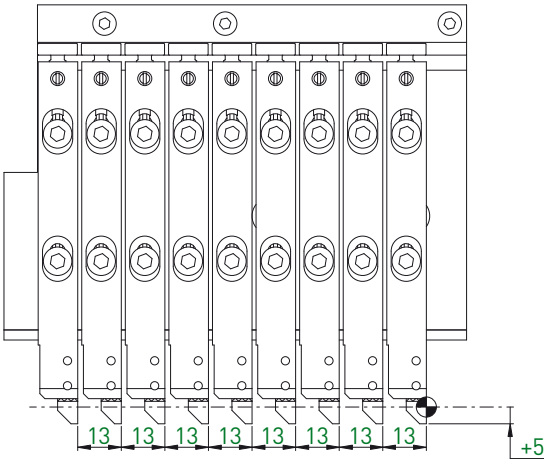


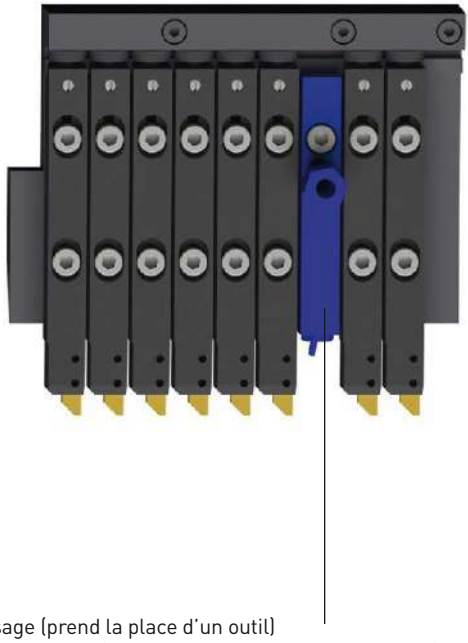
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-STAR-SB-12RG	ML12	> 14.77	–	ML12-JET-5/16	14.98

ML12

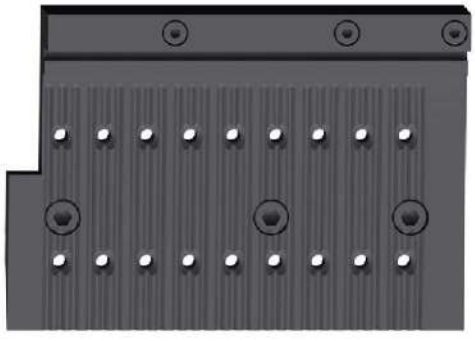
+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

Star SL7/10





Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

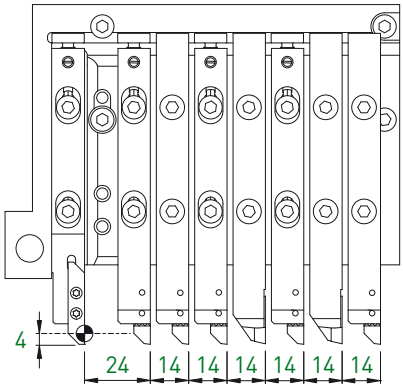


				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
9T	**ML12-STAR-SL7/10**	ML12	> 14.77	–	ML12-JET-5/16	14.98

Star SR-10J

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

ML12





1 serrage ML12-FIX-12 pour outil ⍁ 12 mm inclus
1 Spannung ML12-FIX-12 für Werkzeug ⍁ 12 mm inbegriffen
1 clamping ML12-FIX-12 for tool ⍁ 12 mm included

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

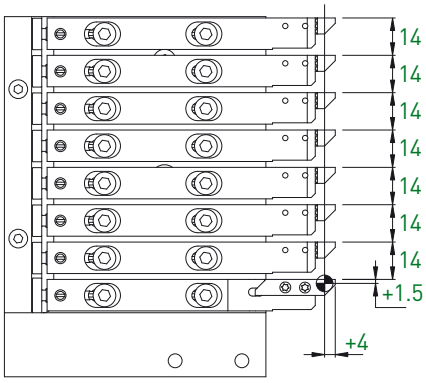


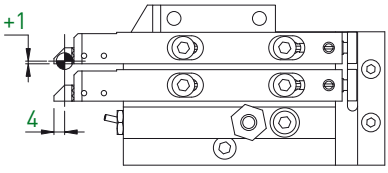
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-STAR-SR-10J	ML12	> 14.77	**ML12-FIX-12/14**	**ML12-JET-5/16**	14.98

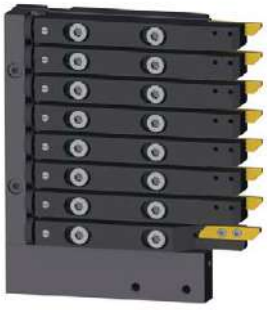
ML12

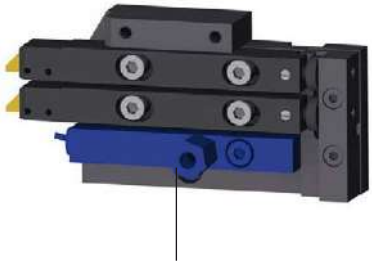
+ 2 outils (max 10)
+ 2 Werkzeuge (max 10)
+ 2 tools (max 10)

Star SW-12RII









Position uniquement utilisable avec module d'arrosage, en option
Position nur mit Kühlmittelzufuhrelement verwendbar, optional
Position only with coolant supply unit usable, optional



ML12-STAR-SW-12RII-8T



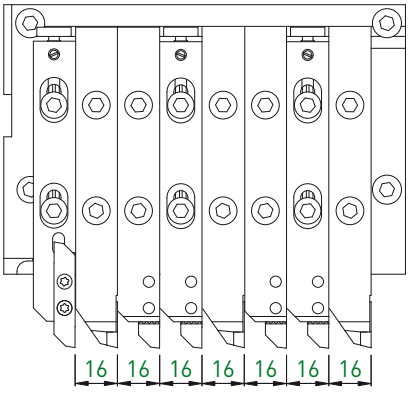
ML12-STAR-SW-12RII-2T

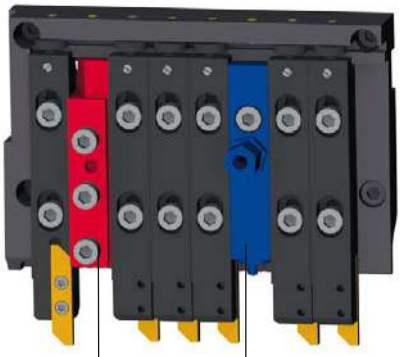
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	**ML12-STAR-SW-12RII-2T**	ML12	> 14.77	–	ML12-JET-5/16	14.98
8T	**ML12-STAR-SW-12RII-8T**					

Star **SA-12** **SA-16** **SA-16R**

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

ML16





Outil ⍁ 16 mm possible avec module de serrage
Werkzeug ⍁ 16 mm mit Spannelement möglich
Tool ⍁ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

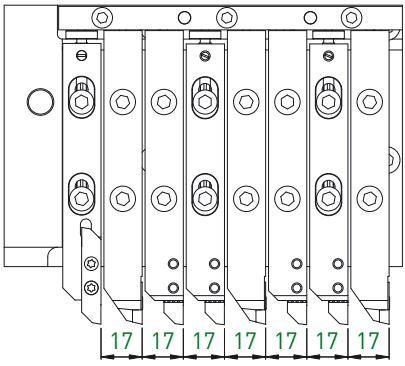


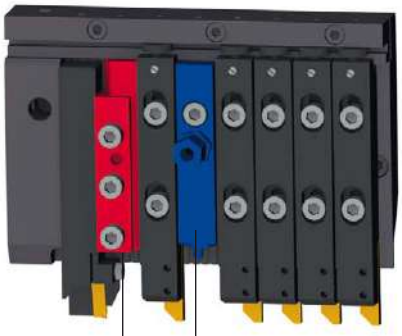
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SA-16	ML16	> 14.77	**ML16-FIX-16/16**	**ML16-JET-7/16**	14.98

ML16

+ 3 outils (max 8)
+ 3 Werkzeuge (max 8)
+ 3 tools (max 8)

Star SB-16





Outil ⍁ 16 mm possible avec module de serrage
Werkzeug ⍁ 16 mm mit Spannelement möglich
Tool ⍁ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

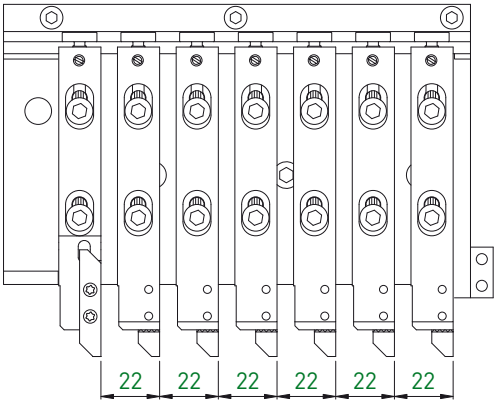


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SB-16	ML16	> 14.77	**ML16-FIX-16/17**	**ML16-JET-7/16**	14.98

Star SB-16/20RG

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

ML16





Outil ⍁ 16 mm possible avec module de serrage
Werkzeug ⍁ 16 mm mit Spannelement möglich
Tool ⍁ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

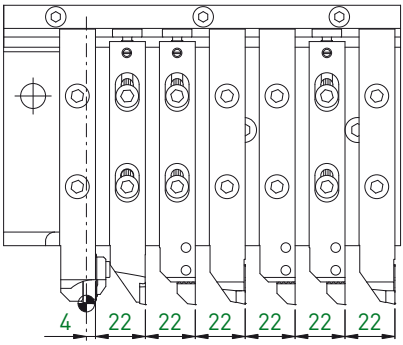


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SB-16/20RG	ML16	> 14.77	**ML16-FIX-16/22**	**ML16-JET-7/16**	14.98

ML16

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

Star SB-20C/E





Outil ⍁ 16 mm possible avec module de serrage
Werkzeug ⍁ 16 mm mit Spannelement möglich
Tool ⍁ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

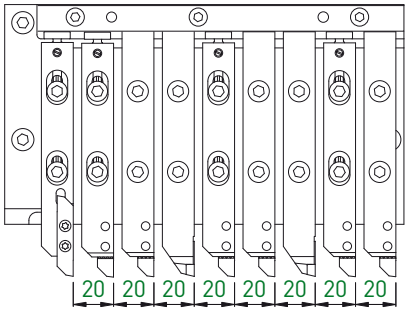


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SB20C/E	ML16	> 14.77	**ML16-FIX-16/22**	**ML16-JET-7/16**	14.98

Star **SR-16R** **SR-20R** **SR-20RII**

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

ML16





Outil ⍁ 16 mm possible avec module de serrage
Werkzeug ⍁ 16 mm mit Spannelement möglich
Tool ⍁ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

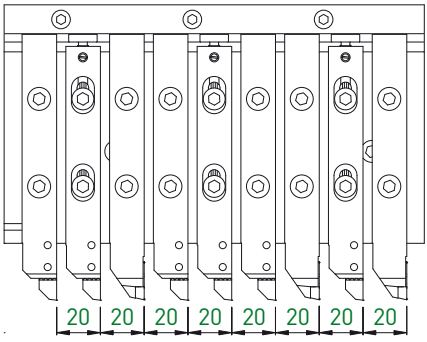


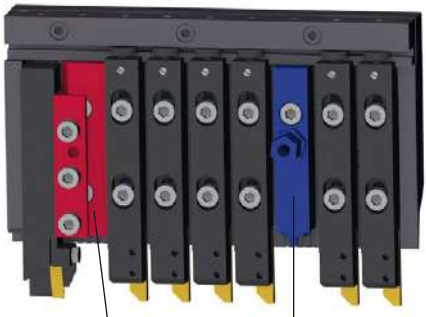
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-20R	ML16	> 14.77	**ML16-FIX-16/20**	**ML16-JET-7/16**	14.98

ML16

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

Star **SR-20RIII**
SR-20J





Outil ⍁ 16 mm possible avec module de serrage
Werkzeug ⍁ 16 mm mit Spannelement möglich
Tool ⍁ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

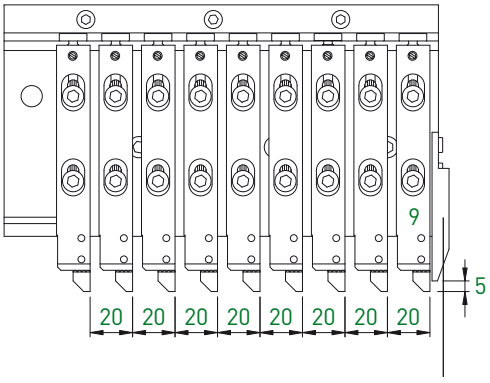


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-20RIII	ML16	> 14.77	**ML16-FIX-16/20**	**ML16-JET-7/16**	14.98
ML16-STAR-SR-20J					

Star SR20JII type A/B

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

ML16



Risque de collision avec outil n° 9
Kollisionsrisiko mit Werkzeug Nr. 9
Collision risk with tool no. 9



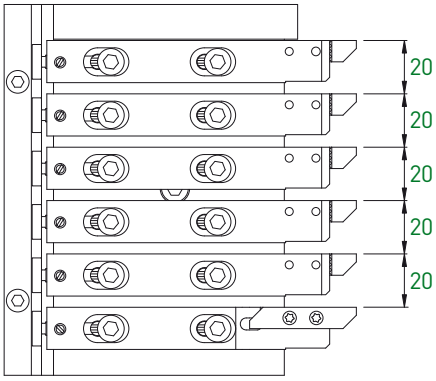


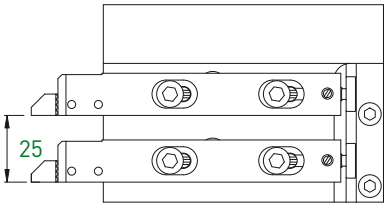
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-20JII-A/B	ML16	> 14.77	**ML16-FIX-16/20**	**ML16-JET-7/16**	14.98

ML16

+ 1 outil (max 8)
+ 1 Werkzeug (max 8)
+ 1 tool (max 8)

Star SR-20RIV











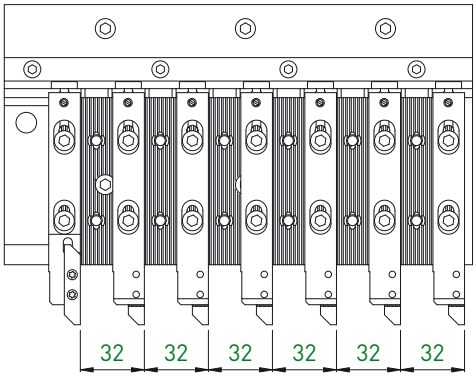


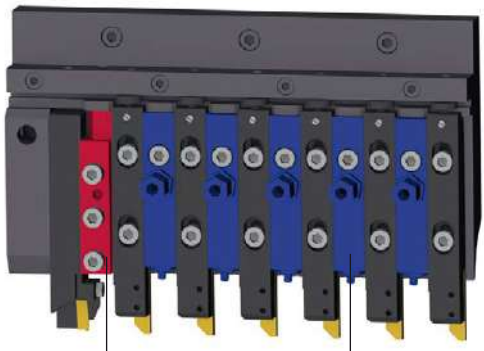
ML16-STAR-SR-20RIV-6T

ML16-STAR-SR-20RIV-2T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	**ML16-STAR-SR-20RIV-2T**	ML16	> 14.77	–	**ML16-JET-7/16**	14.98
6T	**ML16-STAR-SR-20RIV-6T**					

Star SR-32J | **Ø max 32 mm** | **+ 1 outil (max 7)** + 1 Werkzeug (max 7) + 1 tool (max 7) | **Ø max 16 mm** | **+ 7 outils (max 13)** + 7 Werkzeuge (max 13) + 7 tools (max 13) | **ML16**





Outil ⍁ 16 mm possible avec module de serrage
Werkzeug ⍁ 16 mm mit Spannelement möglich
Tool ⍁ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

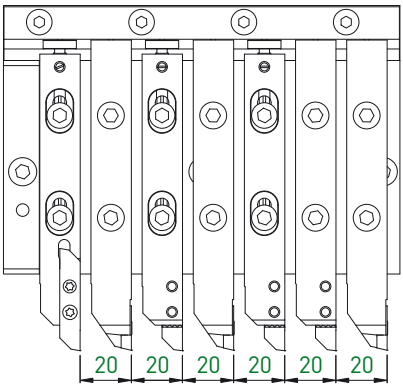


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-32J	ML16	> 14.77	**ML16-FIX-16/16**	**ML16-JET-7/16**	14.98

ML16

+ 2 outils (max 7)
+ 2 Werkzeuge (max 7)
+ 2 tools (max 7

Star SV-12 / 20





Outil ⍁ 16 mm possible avec module de serrage
Werkzeug ⍁ 16 mm mit Spannelement möglich
Tool ⍁ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

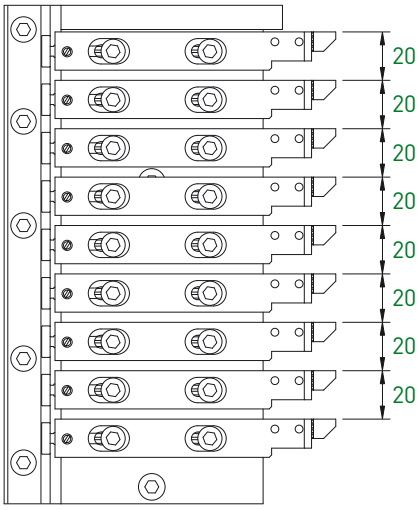


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SV-12/20	ML16	> 14.77	**ML16-FIX-16/20**	**ML16-JET-7/16**	14.98

Star SV-20R

+ 2 outils (max 9)
+ 2 Werkzeuge (max 9)
+ 2 tools (max 9)

ML16





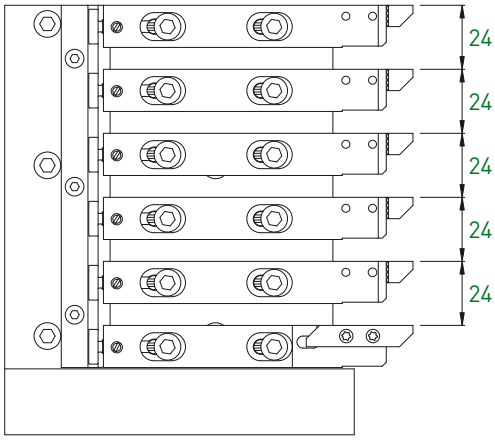


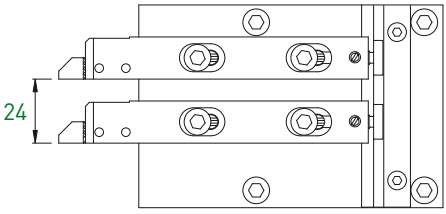
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SV-20R	ML16	> 14.77	**ML16-FIX-16/20**	**ML16-JET-7/16**	14.98

ML16

+ 1 outil (max 8)
+ 1 Werkzeug (max 8)
+ 1 tool (max 8)

Star SW-20







ML16-STAR-SW-20-6T



ML16-STAR-SW-20-2T



ML16-STAR-SW-20-6T



ML16-STAR-SW-20-2T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	**ML16-STAR-SW-20-2T**	ML16	> 62	–	ML16-JET-7/16	14.98
6T	**ML16-STAR-SW-20-6T**			ML16-FIX-16/24		

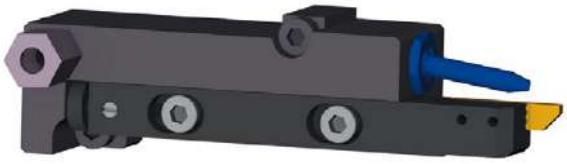
Tornos

Adaptations disponibles pour les machines suivantes
Verfügbare Anpassungen für folgende Maschinen
Available adapters for the following machines

Tornos

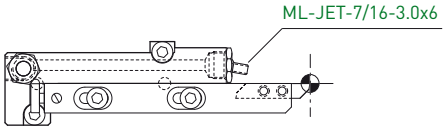
Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
DECO7/10 - EvoDECO 10	ML12-DECO10-DUO	ML12	14.47
	ML12-DECO10-JET		
SWISS-NANO /SWISS-NANO 7	ML12-SWISS-NANO-2T		14.50
	ML12-SWISS-NANO-3T		
	ML12-SWISS-NANO-6T		14.48
SWISS-NANO 7	ML12-SWISS-NANO-7-4T		14.51
DT13	ML-DT13-2052104-9T		14.52
	ML12-DT13-2020206-9T		
CT20	ML12-CT20-2020019-7T		14.53
GT13	ML12-GT13-389104-3T		14.54
	ML12-GT13-390224-5T		
	ML12-GT13-390223-7T		
GT26	ML16-GT26-386210-5T	ML16	14.56
	ML16-GT26-386209-6T		
GT32	ML16-GT32-389210-4T		14.58
	ML16-GT32-389209-5T		
DECO13- EvoDECO16	ML16-DECO13-DUO		14.60
	ML16-DECO13-JET		
DECO20/26 - EvoDECO20/32	ML16-DECO20-DUO		14.61
	ML16-DECO20-JET		
SIGMA20/32	ML16-S20-DUO		14.62
	ML16-S20-JET		
SWISS ST26	ML16-SWISS-ST26-DUO		14.63
	ML16-SWISS-ST26-JET		
DT26	ML16-DT26-2020206-7T		14.64
	ML16-DT26-2052096-5T		14.65

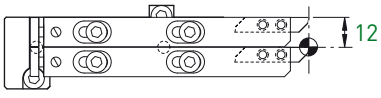
JET



DUO









JET



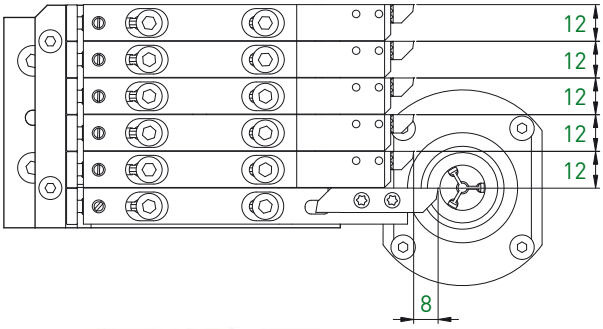
DUO

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	**ML12-DECO10-JET**	ML12	> 14.77	–	**ML-JET-7/16...**	14.98
DUO	**ML12-DECO10-DUO**				**ML12-JET-5/16**	

ML12

+ 2 outils (max 6)
+ 2 Werkzeuge (max 6)
+ 2 tools (max 6)

Tornos **SwissNano**
SwissNano 7





6T

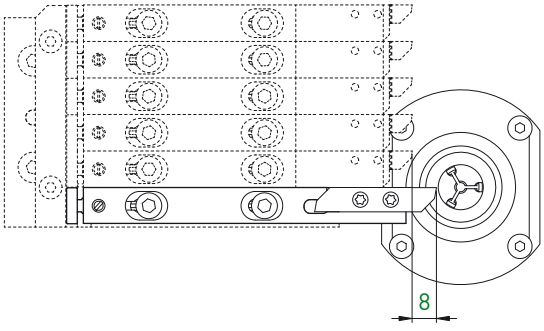


6T

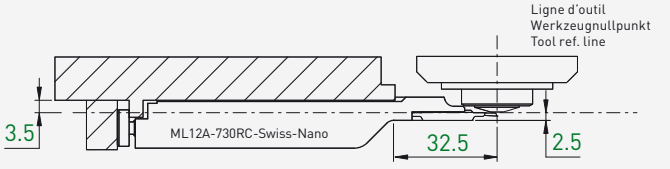
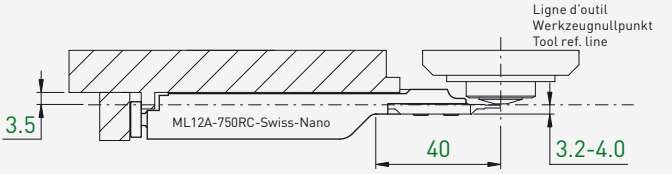
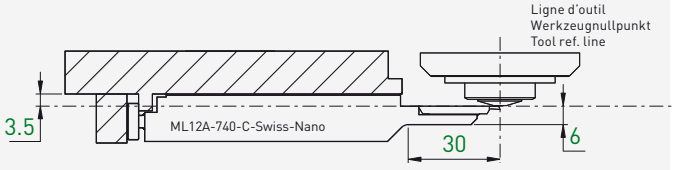
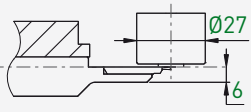
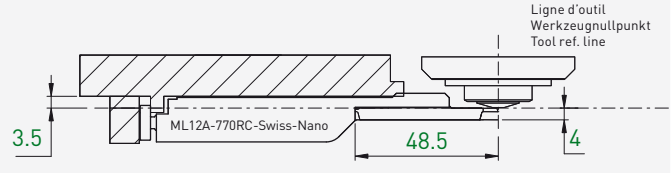
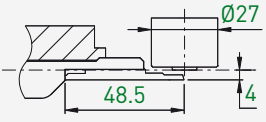
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
6T	**ML12-SWISS-NANO-6T**	ML12	> 14.77	–	ML12-JET-5/16	14.98

ML12

Tornos **SwissNano**
SwissNano 7



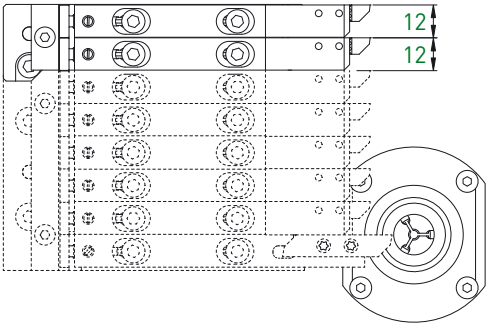


avec canon mit Führungsbuchse with guide bush	avec pince mit Spannzange with collet
	—
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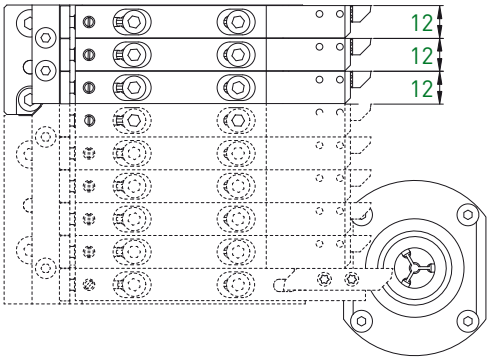
Type de machine Maschinen-Typ Type of machine	Porte-outils Halter Holders	**Art. N°**	Plaquettes Wendeplatten Inserts	Pages Seiten Pages
SwissNano	ML12	**ML12A-730RC-SWISS-NANO**	731R... / 731RSF	> TOP-Line TOP-Watch
		ML12A-750RC-SWISS-NANO	751R... / 751RDSF	
		ML12A-740-C-SWISS-NANO	741... / 741SF	
		ML12A-770RC-SWISS-NANO	771R...	> TOP-Line

ML12

Tornos SwissNano
SwissNano 7









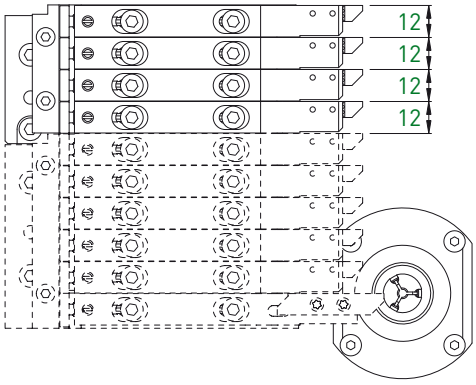


2T



3T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	**ML12-SWISS-NANO-2T**	ML12	> 14.77	–	ML12-JET-5/16	14.98
3T	**ML12-SWISS-NANO-3T**					





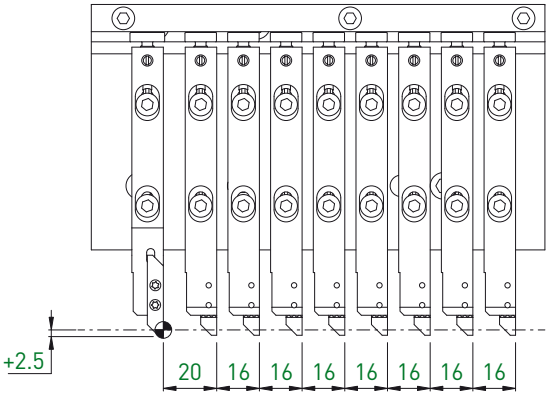


				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
4T	**ML12-SWISS-NANO-7-4T**	ML12	> 14.77	–	ML12-JET-5/16	14.98

ML12

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

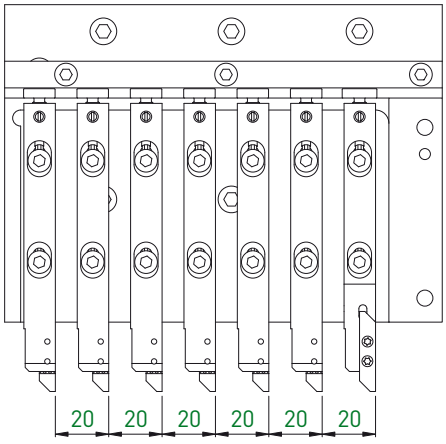
Tornos **DT 13**
DT 13 (S-HP)







				Accessoires Zubehöre Accessories			
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page	Type machine Maschinentyp Machine type
9T	**ML12-DT13-2020206-9T**	ML12	> 14.77	–	ML12-JET-5/16	14.98	DT 13
9T	**ML12-DT13-2052104-9T**	ML12	> 14.77	–	ML12-JET-5/16	14.98	DT 13 (S-HP)





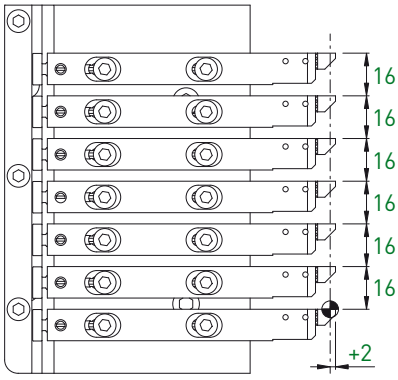


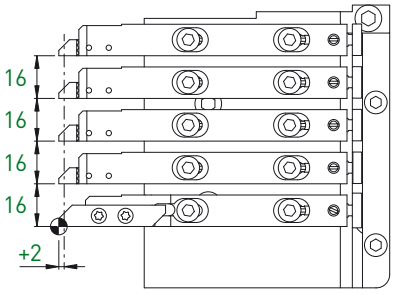
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
7T	**ML12-CT20-2020019-7T**	ML12	> 14.77	–	ML12-JET-5/16	14.98

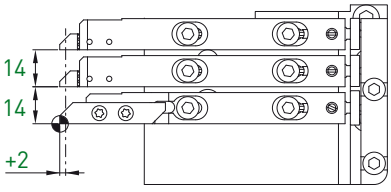
ML12

+ 5 outils (max 12)
+ 5 Werkzeuge (max 12)
+ 5 tools (max 12)

Tornos GT 13











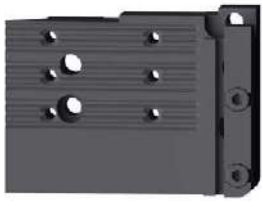




ML12-GT13-390223-7T



ML12-GT13-390224-5T



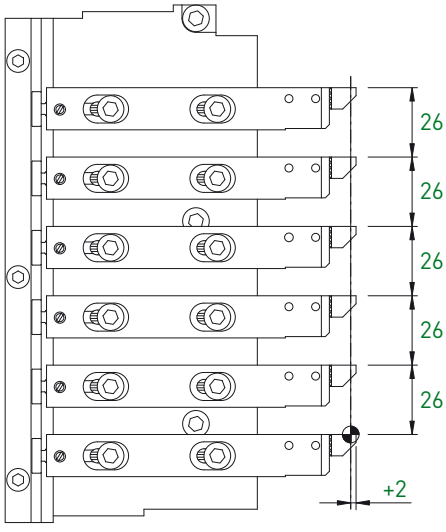
ML12-GT13-389104-3T

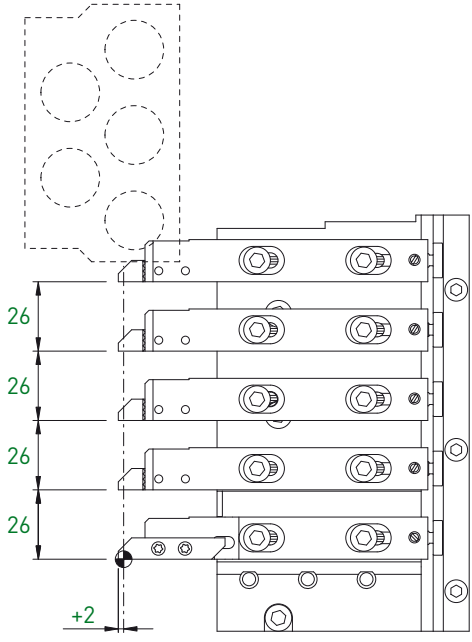
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
3T	**ML12-GT13-389104-3T**	ML12	> 14.77	–	**ML12-JET-5/16**	14.98
5T	**ML12-GT13-390224-5T**					
7T	**ML12-GT13-390223-7T**					

ML16

+ 2 outils (max 11)
+ 2 Werkzeuge (max 11)
+ 2 tools (max 11)

Tornos GT 26







1 serrage ML16-FIX-16 pour outil ⍁ 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug ⍁ 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool ⍁ 16 mm included



ML16-GT26-386209-6T



ML16-GT26-386210-5T

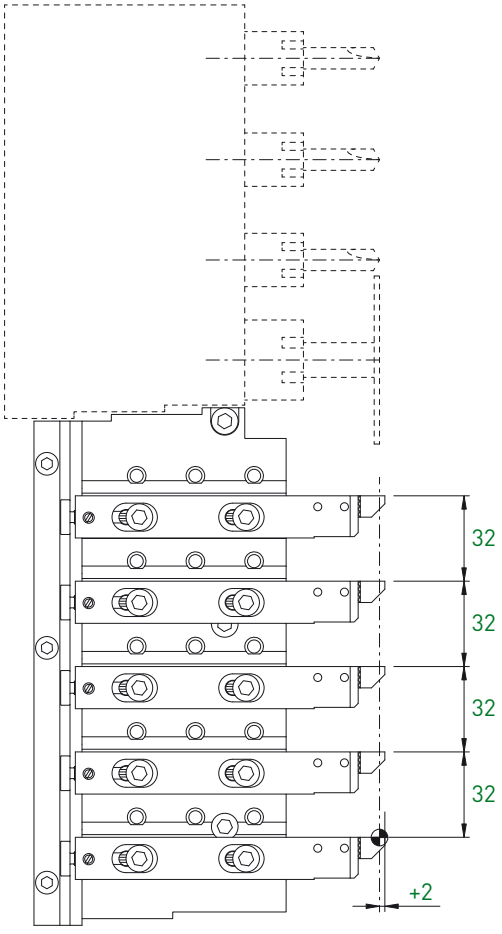
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	**ML16-GT26-386210-5T**	ML16	> 14.77	–	ML16-JET-7/16	14.98
6T	**ML16-GT26-386209-6T**					

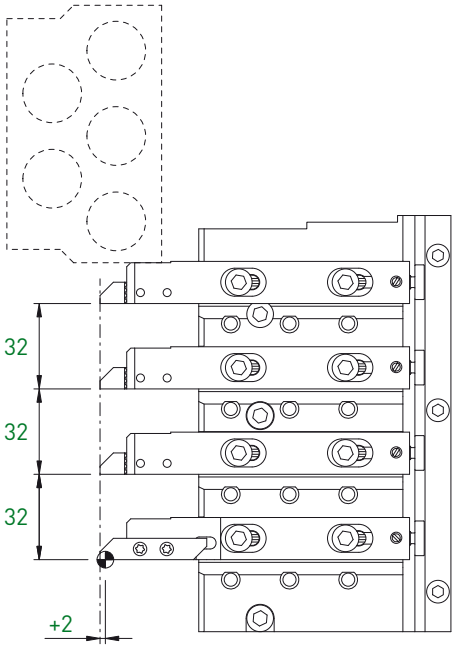
ML16

max

+ 9 outils
+ 9 Werkzeuge
+ 9 tools

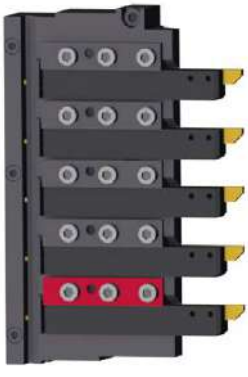
Tornos GT 32







Holder ML16



Holder ⎅16



Holder ML16



Holder ⎅16



ML16-GT32-386209-5T



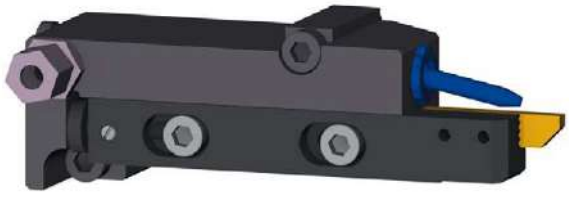
ML16-GT32-386210-4T

				Accessoires Zubehöre Accessories			
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit		Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Pages Seiten Pages
4T	**ML16-GT32-386210-4T**	ML16	> 14.77	**1x inclus 1x inbegriffen 1x included**	**Option ML16-FIX-16**	**ML16-JET-7/16**	14.98
5T	**ML16-GT32-386209-5T**						

ML16

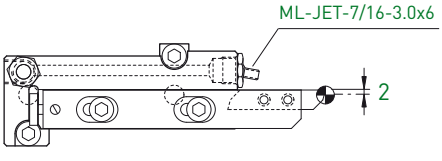
Tornos DECO 13
EvoDECO 16

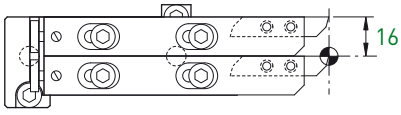
JET



DUO









JET



DUO

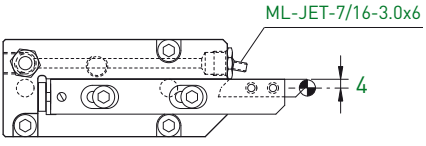
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	**ML16-DECO13-JET**	ML16	> 14.77	–	**ML-JET-7/16...**	14.98
DUO	**ML16-DECO13-DUO**				**ML16-JET-7/16**	14.98

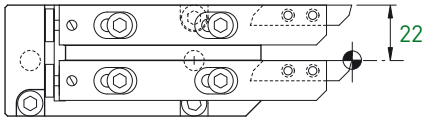
JET



DUO









JET



DUO

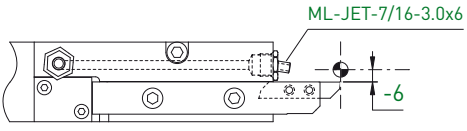
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Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	**ML16-DECO20-JET**	ML16	> 14.77	–	**ML-JET-7/16...**	14.98
DUO	**ML16-DECO20-DUO**				**ML16-JET-7/16**	14.98

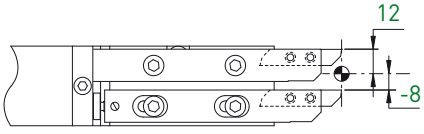
JET



DUO









JET



DUO

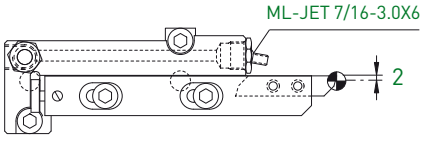
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	**ML16-S20-JET**	ML16	> 14.77	–	**ML-JET-7/16...**	14.98
DUO	**ML16-S20-DUO**				**ML16-JET-7/16**	14.98

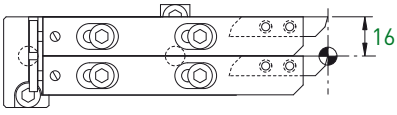
JET



DUO









JET



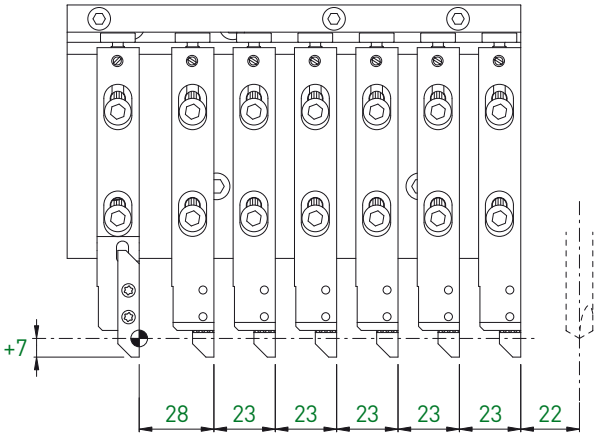
DUO

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	**ML16-SWISS-ST26-JET**	ML16	> 14.77	–	**ML-JET-7/16...**	14.98
DUO	**ML16-SWISS-ST26-DUO**				**ML16-JET-7/16**	14.98

ML16

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

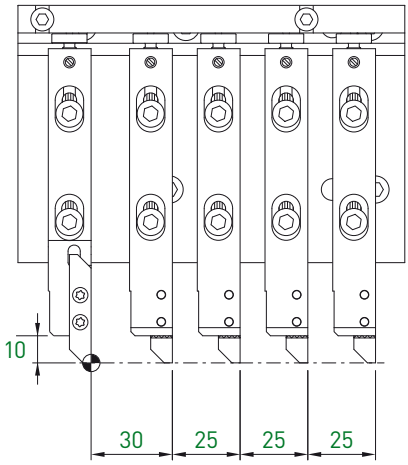
Tornos DT 26







				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
7T	**ML16-DT26-2020206-7T**	ML16	> 14.77	–	ML16-JET-7/16	14.98







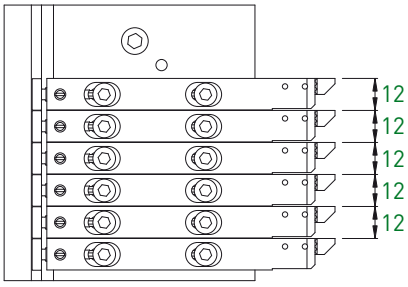
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	**ML16-DT26-2052096-5T**	ML16	> 14.77	–	ML16-JET-7/16	14.98

Tsugami

Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
B074	ML12-B074-1-6T	ML12	14.67
B075	ML12-B075-1-8T		14.68
P034	ML12-P034-1-5T		14.69
	ML12-P034-1-7T		14.70
	ML12-P034-2-4T		14.69
	ML12-P034-2-10T		14.70
P034-P036	0400-ML12-R0000C-3T		14.72
	0400-ML12-R0000C-5T		14.73

Tsugami B074

+ 3 outils (max 6)
+ 3 Werkzeuge (max 6)
+ 3 tools (max 6)





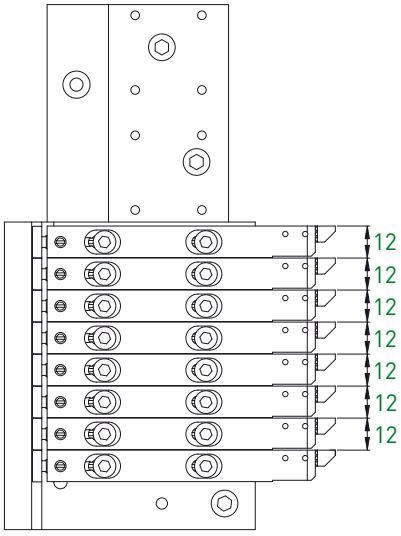


				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
6T	**ML12-B074-1-6T**	ML12	> 14.77	–	ML12-JET-5/16	14.98

ML12

+ 5 outils (max 8)
+ 5 Werkzeuge (max 8)
+ 5 tools (max 8)

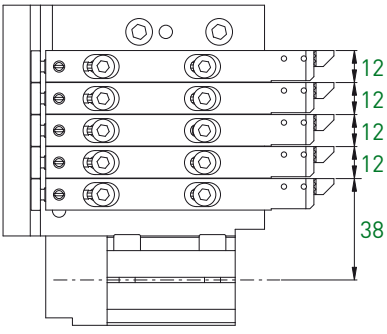
Tsugami B075

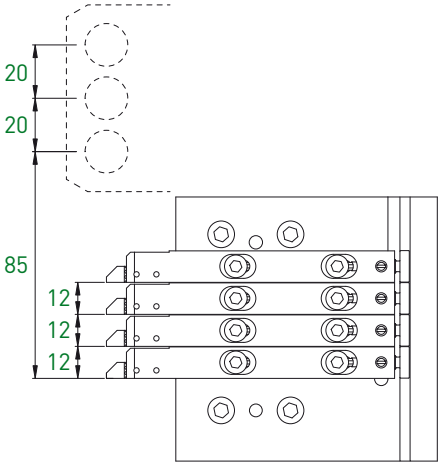






				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
8T	**ML12-B075-1-8T**	ML12	> 14.77	–	ML12-JET-5/16	14.98













ML12-P034-1-5T

ML12-P034-2-4T

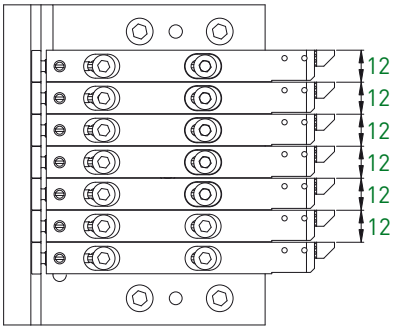
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Accessoires Zubehöre Accessories Module de serrage Spannelement Clamping unit	Accessoires Zubehöre Accessories Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Accessoires Zubehöre Accessories Page Seite Page
4T	**ML12-P034-2-4T**	ML12	> 14.77	–	ML12-JET-5/16	14.98
5T	**ML12-P034-1-5T**					

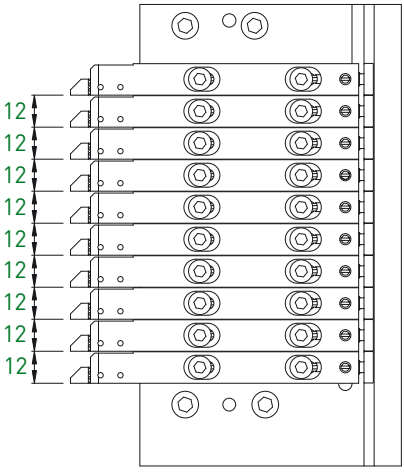
ML12

max

+ 17 outils
+ 17 Werkzeuge
+ 17 tools

Tsugami P034







ML12-P034-1-7T



ML12-P034-2-10T



ML12-P034-1-7T



ML12-P034-2-10T

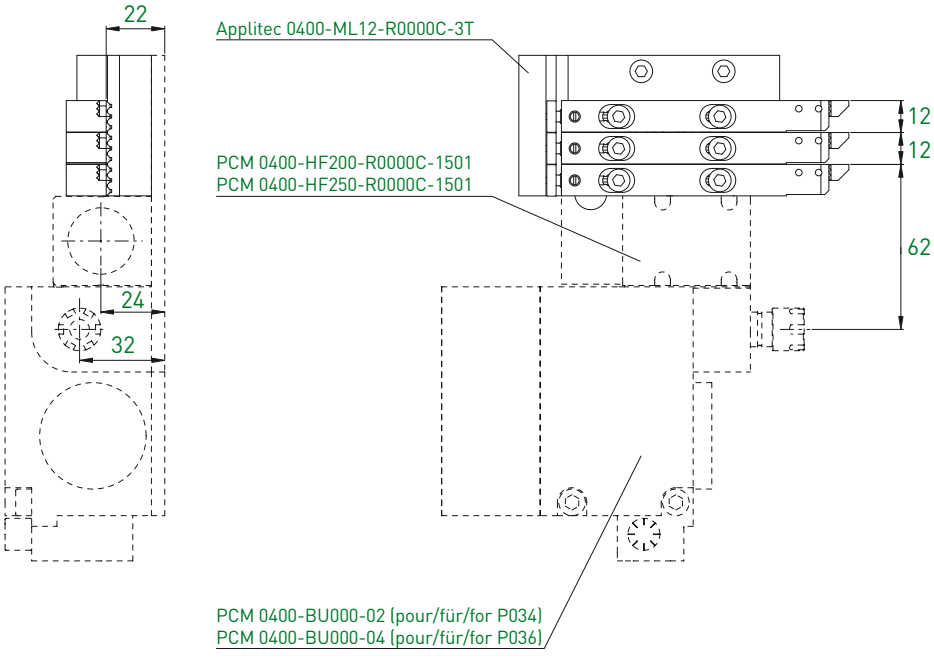
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
7T	**ML12-P034-1-7T**	ML12	> 14.77	–	ML12-JET-5/16	14.98
10T	**ML12-P034-2-10T**					

ML12

Adaptation compatible aux modules PCM
Kompatible Anpassung für die PCM-Module
Compatible adaptation to the PCM modules

+ 1 outil
+ 1 Werkzeug
+ 1 tool

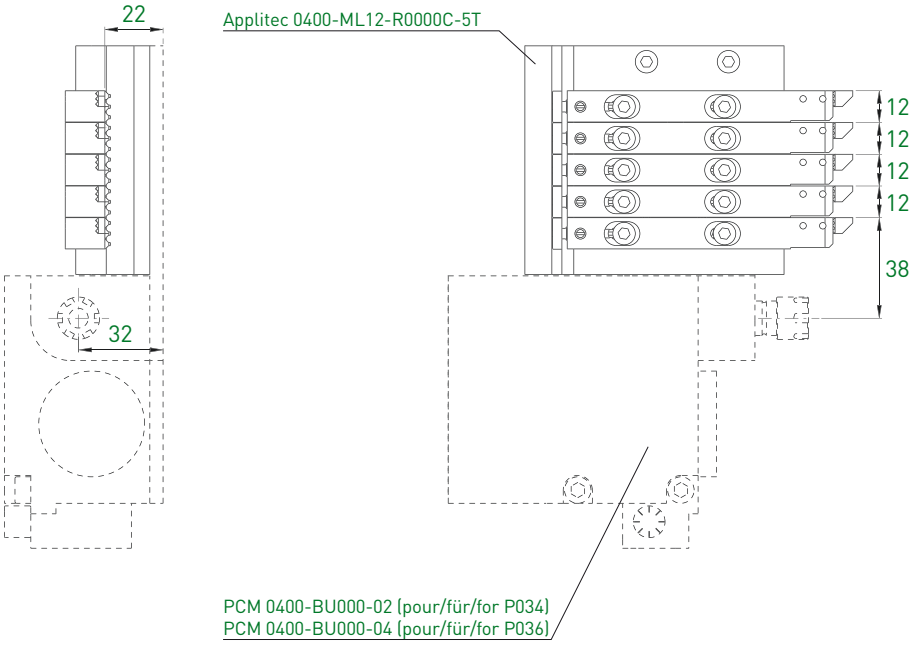
Tsugami P034-P036







Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Accessoires Zubehöre Accessories Module de serrage Spannelement Clamping unit	Accessoires Zubehöre Accessories Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Accessoires Zubehöre Accessories Page Seite Page
3T	**0400-ML12-R0000C-3T**	ML12	> 14.77	–	ML12-JET-5/16	14.98







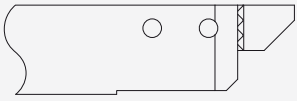
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	**0400-ML12-R0000C-5T**	ML12	> 14.77	–	ML12-JET-5/16	14.98

Les différents types de porte-outils ML12 / ML16
Die verschiedenen Haltertypen ML12 / ML16
The various types of holders ML12 / ML16

Type Standard

ML...A-740

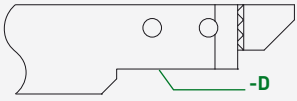




Type -D

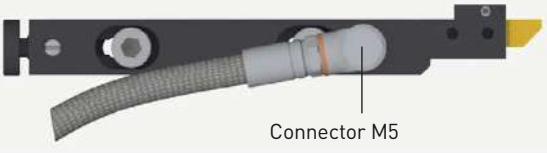
ML...A-740-**D**

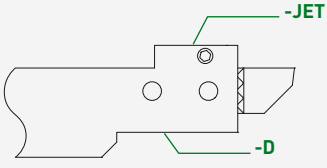




Type -JET-D

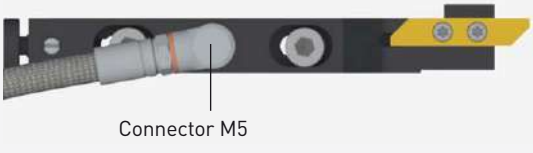
ML...A-740-**JET-D**

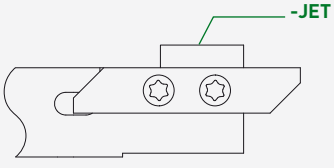




Type -JET

ML...A-740-**JET**

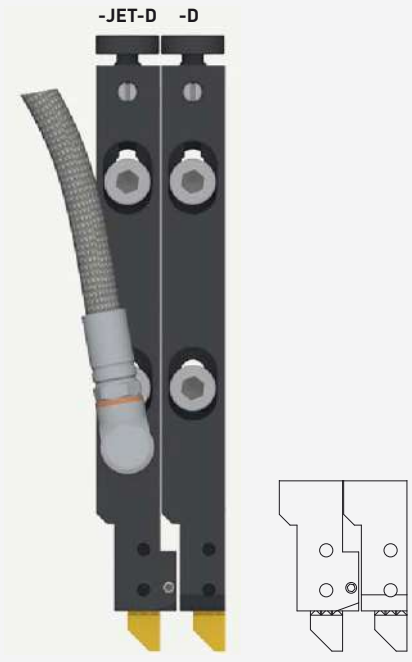




Compatibilité
Kompatibilität
Compatibility

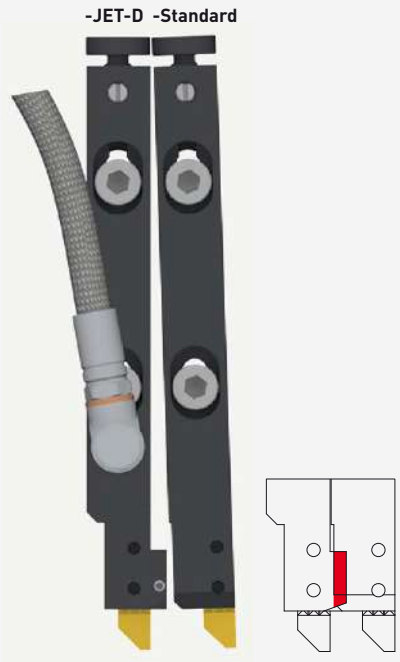
OK

-JET-D -D



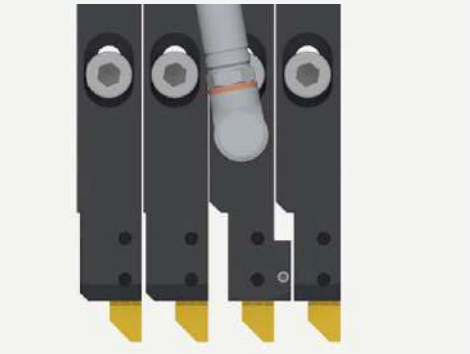
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-JET-D -Standard



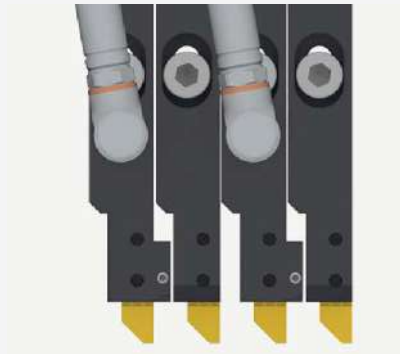
MIX

-Standard -JET-D -D



TYPE D

-JET-D -D -JET-D -D



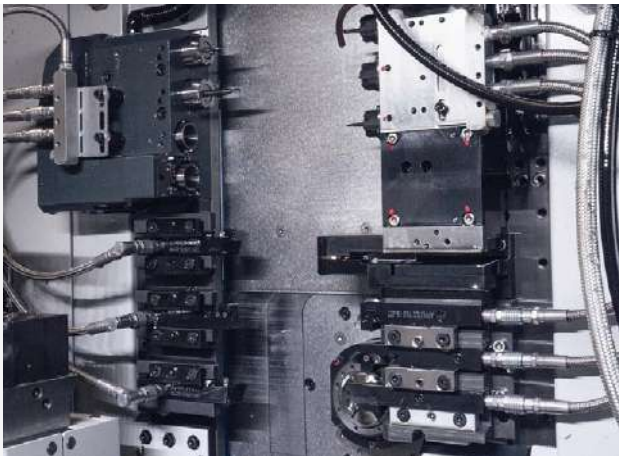
Exceptions
Ausnahmen
Exceptions

Exception ML12	Exception ML16
	
⩾ 15 mm = Total compatibility	⩾ 20 mm = Total compatibility

JET-Line:
Système de distribution du liquide de refroidissement pour haute pression
Voir chapitre JET-Line

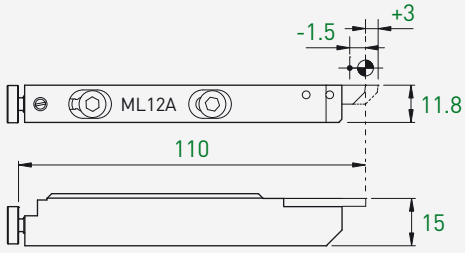
JET-Line:
Kühlmittelverteilungssystem für hohen Druck
Siehe Kapitel JET-Line

JET-Line:
Coolant distribution system for high pressure
See chapter JET-Line

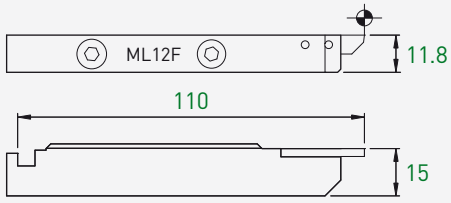


Système de fixation Befestigungssystem Clamping system	
A = réglable einstellbar adjustable	**F** = longueur fixe fixlänge fixed length

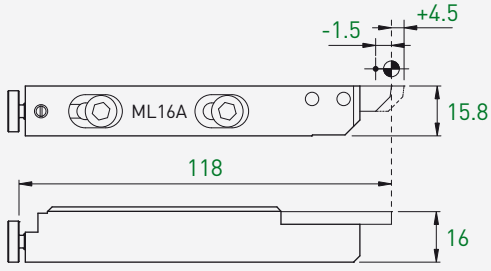
ML12A



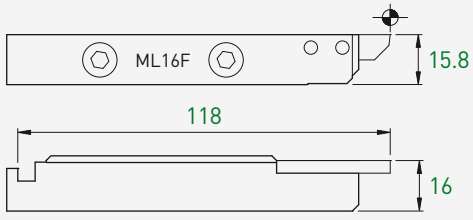
ML12F

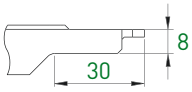


ML16A



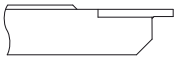
ML16F





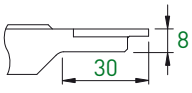
TOP-Line
731-737

	-D	
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
-	**ML12A-730-C-D**	-



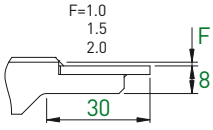
TOP-Line
741-747

Standard	-D	-JET-D
ML12	**ML12**	**ML12**
ML12A-740	**ML12A-740-D**	**ML12A-740-JET-D**
ML12F-740	**ML12F-740-D**	-
ML16	**ML16**	**ML16**
ML16A-740	**ML16A-740-D**	**ML16A-740-JET-D**
ML16F-740	-	-



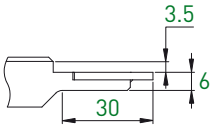
TOP-Line
741-747

ML12	**ML12**	**ML12**
ML12A-740-C	**ML12A-740-C-D**	**ML12A-740-C-JET-D**
ML12F-740-C	**ML12F-740-C-D**	-

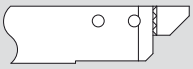
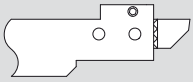


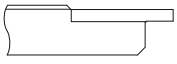
TOP-Line
741-747

ML12	**ML12**	**ML12**
ML12A-740-ZD1.0-C	-	-
ML12A-740-ZD1.5-C	-	-
ML12A-740-ZD2.0-C	-	-



TOP-Line
741

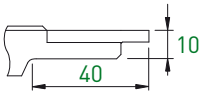
Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-740-C-R04	**-**	**-**
ML12A-740-C-SWISS-NANO	**-**	**-**



TOP-Line
761-767

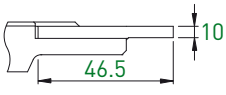
ML12	ML12	ML12
ML12A-760	**ML12A-760-D**	**ML12A-760-JET-D**
ML12F-760	**ML12F-760-D**	**-**

ML16	ML16	ML16
ML16A-760	**ML16A-760-D**	**ML16A-760-JET-D**
ML16F-760	**-**	**-**



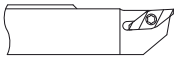
TOP-Line
761-767

ML16	ML16	ML16
ML16A-760-C	**ML16A-760-C-D**	**-**
ML16F-760-C	**-**	**-**

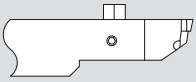


TOP-Line
781

ML16	ML16	ML16
-	**ML16A-780-C-D**	**-**



TURN-Line
347-349

Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-340	**ML12A-340-D**	**ML12A-340-JET-D**
ML12F-340	**ML12F-340-D**	**-**
ML16	**ML16**	**ML16**
ML16A-340	**ML16A-340-D**	**ML16A-340-JET-D**
ML16F-340	**-**	**-**

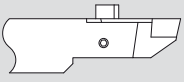
ISO-Line

Porte-plaquettes
WSP-Halter
Insert holders

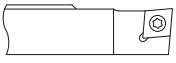
80°



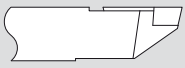
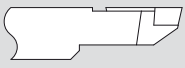
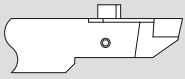
ISO-Line
CC..-0602..

Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-SCLCR06	**ML12A-SCLCR06-D**	**ML12A-SCLCR06-JET-D**
ML12F-SCLCR06	**ML12F-SCLCR06-D**	**-**
ML16	**ML16**	**ML16**
ML16A-SCLCR06	**ML16A-SCLCR06-D**	**ML16A-SCLCR06-JET-D**
ML16F-SCLCR06	**ML16F-SCLCR06-D**	**-**

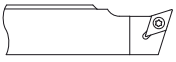
80°



ISO-Line
CC..-09T3..

Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-SCLCR09	**ML12A-SCLCR09-D**	**ML12A-SCLCR09-JET-D**
ML12F-SCLCR09	**ML12F-SCLCR09-D**	**-**
ML16	**ML16**	**ML16**
ML16A-SCLCR09	**ML16A-SCLCR09-D**	**ML16A-SCLCR09-JET-D**
ML16F-SCLCR09	**ML16F-SCLCR09-D**	**-**

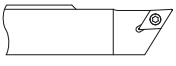
55°



ISO-Line
DC..-0702..

ML16	**ML16**	**ML16**
ML16A-SDHCR07	**-**	**ML16A-SDHCR07-JET-D**

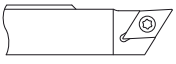
55°



ISO-Line
DC..-0702..

ML12	**ML12**	**ML12**
ML12A-SDJCR07	**ML12A-SDJCR07-D**	**ML12A-SDJCR07-JET-D**
ML12F-SDJCR07	**ML12F-SDJCR07-D**	**-**
ML16	**ML16**	**ML16**
ML16A-SDJCR07	**ML16A-SDJCR07-D**	**ML16A-SDJCR07-JET-D**
ML16F-SDJCR07	**ML16F-SDJCR07-D**	**-**

55°



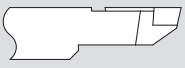
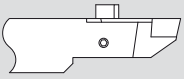
ISO-Line
DC..-11T3..

ML12	**ML12**	**ML12**
ML12A-SDJCR11	**ML12A-SDJCR11-D**	**ML12A-SDJCR11-JET-D**
ML12F-SDJCR11	**ML12F-SDJCR11-D**	**-**
ML16	**ML16**	**ML16**
ML16A-SDJCR11	**ML16A-SDJCR11-D**	**ML16A-SDJCR11-JET-D**
ML16F-SDJCR11	**ML16F-SDJCR11-D**	**-**

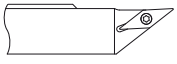
55°



ISO-Line
DC..-11T3..

Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-SDNCN11	**ML12A-SDNCN11-D**	**-**
ML12F-SDNCN11	**ML12F-SDNCN11-D**	**-**
ML16	**ML16**	**ML16**
ML16A-SDNCN11	**ML16A-SDNCN11-D**	**-**
ML16F-SDNCN11	**ML16F-SDNCN11-D**	**-**

35°



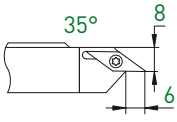
ISO-Line
VC..-1103..

ML12	**ML12**	**ML12**
ML12A-SVJCR11	**ML12A-SVJCR11-D**	**ML12A-SVJCR11-JET-D**
ML12F-SVJCR11	**ML12F-SVJCR11-D**	**-**
ML16	**ML16**	**ML16**
ML16A-SVJCR11	**ML16A-SVJCR11-D**	**ML16A-SVJCR11-JET-D**
ML16F-SVJCR11	**ML16F-SVJCR11-D**	**-**

35°

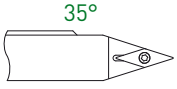
8

6



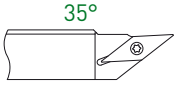
ISO-Line
VC..-1103..

ML12	**ML12**	**ML12**
ML12A-SV-CR11	**ML12A-SV-CR11-D**	**-**
ML16	**ML16**	**ML16**
ML16A-SV-CR11	**ML16A-SV-CR11-D**	**ML16A-SV-CR11-JET-D**



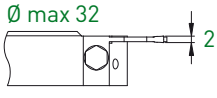
ISO-Line
VC..-1103..

Standard	-D	-JET-D
Art. N°	Art. N°	Art. N°
ML12	**ML12**	**ML12**
ML12A-SVVCN11	ML12A-SVVCN11-D	ML12A-SVVCN11-JET-D
ML12F-SVVCN11	ML12F-SVVCN11-D	-
ML16	**ML16**	**ML16**
ML16A-SVVCN11	ML16A-SVVCN11-D	ML16A-SVVCN11-JET-D
ML16F-SVVCN11	ML16F-SVVCN11-D	-



ISO-Line
VC..-1303..

ML12	**ML12**	**ML12**
-	ML12A-SVJCR13-D	-
ML16	**ML16**	**ML16**
-	ML16A-SVJCR13-D	ML16A-SVJCR13-JET-D

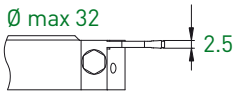


EVOCUT-Line
ET20..

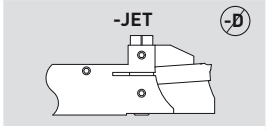
		-JET -Ø
Art. N°	Art. N°	Art. N°
ML16	**ML16**	**ML16**
-	-	ML16A-ET20-JET32

EVOCUT-Line

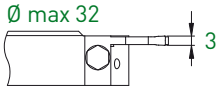
Porte-plaquettes
WSP-Halter
Insert holders



EVOCUT-Line
ET25..



Art. N°	Art. N°	Art. N°
ML16	ML16	ML16
-	-	ML16A-ET25-JET32

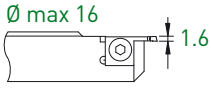


EVOCUT-Line
ET30..

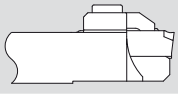
ML16	ML16	ML16
-	-	ML16A-ET30-JET32

CUT-Line

Porte-plaquettes
WSP-Halter
Insert holders

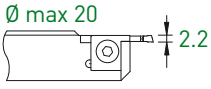


CUT-Line
CUT16..

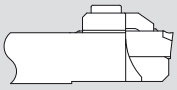


Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-CUT16	-	-
ML12F-CUT16	-	-
ML16	ML16	ML16
ML16A-CUT16	-	-
ML16F-CUT16	-	-

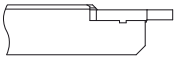
Porte-plaquettes
WSP-Halter
Insert holders



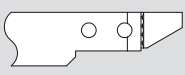
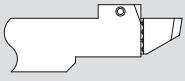
CUT-Line
CUT22..

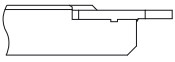
Standard		
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-CUT22	**-**	**-**
ML12F-CUT22	**-**	**-**
ML16	**ML16**	**ML16**
ML16A-CUT22	**-**	**-**
ML16F-CUT22	**-**	**-**

Porte-plaquettes
WSP-Halter
Insert holders

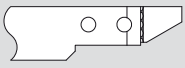
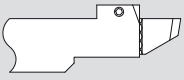


PRO-Line
642-647

	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
-	**ML12A-640-D**	**ML12A-640-JET-D**
ML16	**ML16**	**ML16**
–	**ML16A-640-D**	**ML16A-640-JET-D**

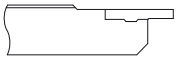


PRO-Line
661

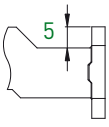
	-D 	-JET-D 
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
-	**ML12A-660-D**	**ML12A-660-JET-D**
ML16	**ML16**	**ML16**
-	**ML16A-660-D**	**ML16A-660-JET-D**

ECO-Line

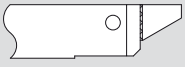
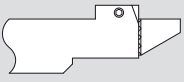
Porte-plaquettes
WSP-Halter
Insert holders

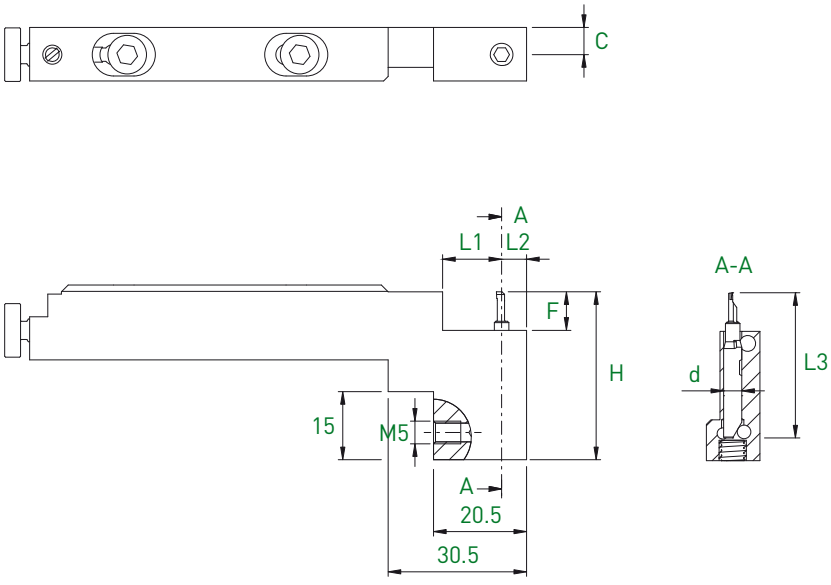


ECO-Line
261-266

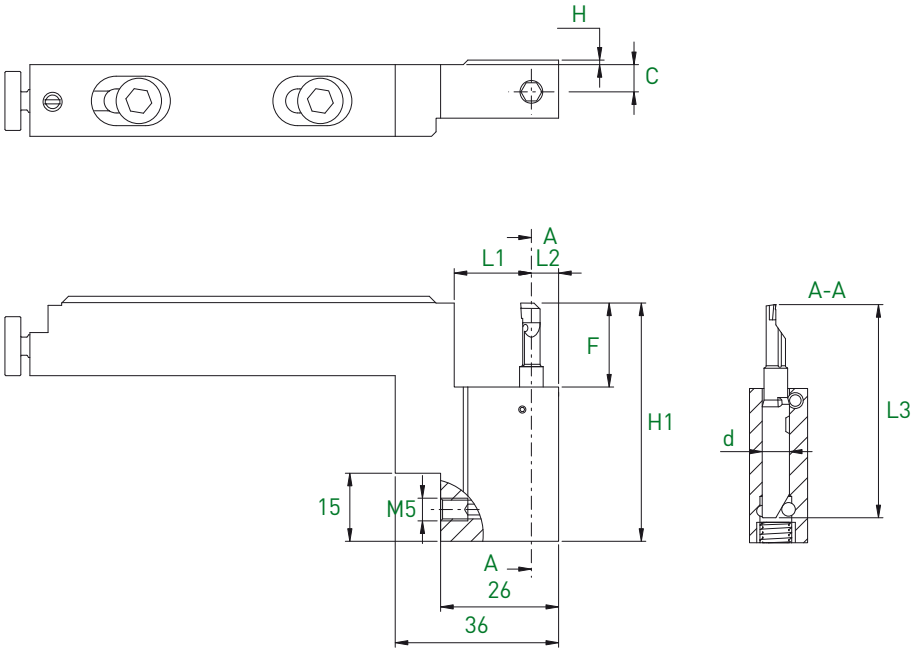


ECO-Line
251RFG

Standard 	-D 	-JET-D 
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-260	**ML12A-260-D**	**ML12A-260-JET-D**
ML12F-260	**ML12F-260-D**	-
ML16	**ML16**	**ML16**
ML16A-260	**ML16A-260-D**	**ML16A-260-JET-D**
ML16F-260	-	-
ML12	**ML12**	**ML12**
ML12A-250RFG	-	-



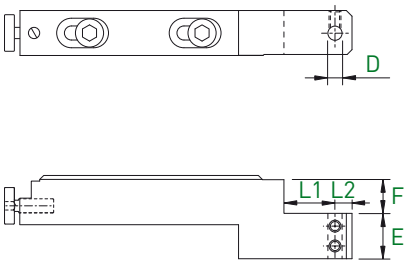
								ML12
d	Compatible bars	L3	F	H	C	L1	L2	**Art. N°**
4	BB4R... BF4R...	32	8.5	37	6	13	5.5	**ML12A-BHK4N-32R-D**
		37	13.5	42	6	13	5.5	**ML12A-BHK4N-37R-D**
		42	18.5	47	6	13	5.5	**ML12A-BHK4N-42R-D**



									ML16
d	Compatible bars	L3	F	H1	C	H	L1	L2	**Art. N°**
4	BB4R... BF4R...	32	8.5	37	6	-	17.5	5.5	**ML16A-BHK4N-32R-D**
		37	13.5	42	6	-	17.5	5.5	**ML16A-BHK4N-37R-D**
		42	18.5	47	6	-	17.5	5.5	**ML16A-BHK4N-42R-D**

									ML16
d	Compatible bars	L3	F	H1	C	H	L1	L2	**Art. N°**
6	BB4R... BF4R...	47	18.5	52.5	6	1	17	6	**ML16A-BHK6N-47R-D**
		57	28.5	62.5	6	1	17	6	**ML16A-BHK6N-57R-D**

Porte-outils
Halter
Holders

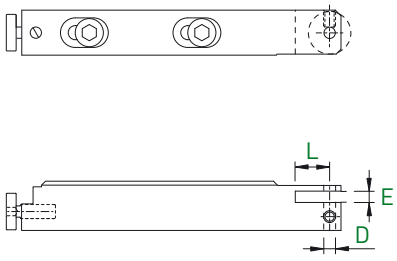


					ML12
F	D	E	L1	L2	Art. N°
8	3	12	13	6	**ML12A-2440-8-3**
8	4	12	13	6	**ML12A-2440-8-4**
8	5	12	13	6	**ML12A-2440-8-5**
12	6	12	13	6	**ML12A-2440-12-6**

					ML16
F	D	E	L1	L2	Art. N°
12	3	16	18	6	**ML16A-2440-12-3**
12	4	16	18	6	**ML16A-2440-12-4**
12	5	16	18	6	**ML16A-2440-12-5**
12	6	16	18	6	**ML16A-2440-12-6**
18	8	16	18	6	**ML16A-2440-18-8**

Porte-molettes
Rändelhalter
Knurl holders

TOOLING-Line



			ML12
E	D	L	Art. N°
4	4	8	**ML12A-2402-44**

			ML16
E	D	L	Art. N°
4	4	11	**ML16A-2402-44**

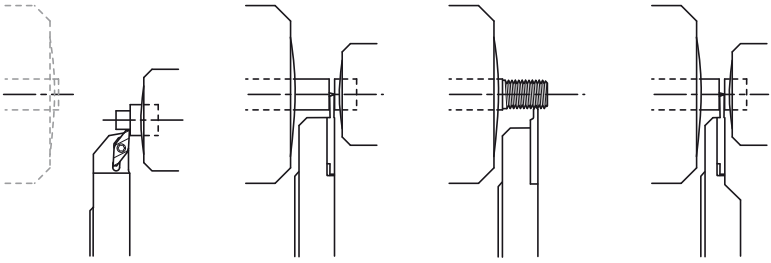
MODU-Line

Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle

Coupe à droite déportée ou usinage à gauche sur contre-broche

Rechtsschneidend versetzt oder linksschneidend auf Gegenspindel

Right hand cut off line or left hand cut on subspindle



TURN-Line
ISO-Line

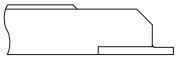
TOP-Line
EVOCUT-Line
CUT-Line
PRO-Line
ECO-Line

TOP-Line
EVOCUT-Line
CUT-Line
PRO-Line
ECO-Line

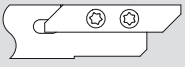
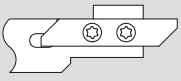
TOP-Line
PRO-Line
ECO-Line

TOP-Line

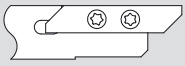
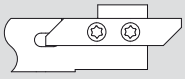
Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle

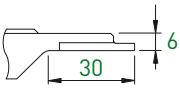


TOP-Line
731-737

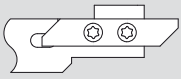
Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-730-V	**ML12A-730-V-D**	**ML12A-730-V-JET-D**
ML16	**ML16**	**ML16**
ML16A-730-V	**ML16A-730-V-D**	**ML16A-730-V-JET-D**

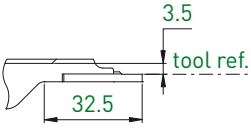
Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle

	Standard	-D	-JET
			
	Art. N°	Art. N°	Art. N°
	ML12	ML12	ML12
	ML12A-730RC	-	ML12A-730RC-JET



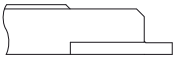
TOP-Line
731R

			-JET-D
			
	ML16	ML16	ML16
	ML16A-730RC	ML16A-730RC-D	ML16A-730RC-JET-D



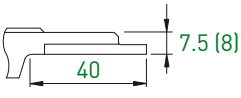
TOP-Line
731R

ML12	ML12	ML12
ML12A-730RC-R04	-	-
ML12A-730RC-SWISS-NANO	-	-



TOP-Line
751-757

ML12	ML12	ML12
ML12A-750-V	ML12A-750-V-D	ML12A-750-V-JET-D
ML16	**ML16**	**ML16**
ML16A-750-V	ML16A-750-V-D	ML16A-750-V-JET-D

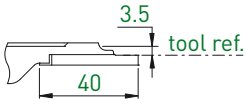


TOP-Line
751R

ML12	ML12	ML12
ML12A-750RC	-	ML12A-750RC-JET
ML16	**ML16**	**ML16**
ML16A-750RC	ML16A-750RC-D	ML16A-750RC-JET-D

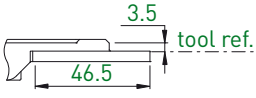
TOP-Line

Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle



TOP-Line
751R

Standard	-D	-JET-D
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-750RC-R04	-	-
ML12A-750RC-SWISS-NANO	-	-



TOP-Line
771R

ML12	ML12	ML12
ML12A-770RC-SWISS-NANO	-	-

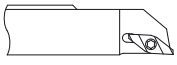


TOP-Line
770

ML16	ML16	ML16
-	-	ML16A-770-V-JET-D

TURN-Line

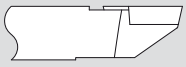
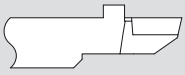
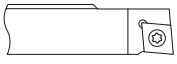
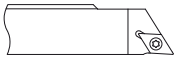
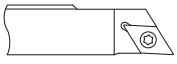
Porte-plaquettes – Contre-opération
WSP-Halter – Gegenspindel
Insert holders – Cut on subspindle



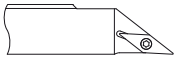
TURN-Line
337-339

Standard	-D	-JET-D
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-330-V	ML12A-330-V-D	ML12A-330-V-JET-D
ML16	ML16	ML16
ML16A-330-V	ML16A-330-V-D	ML16A-330-V-JET-D

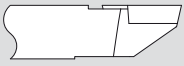
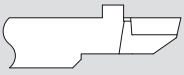
Porte-plaquettes – Contre-opération
WSP-Halter – Gegenspindel
Insert holders – Cut on subspindle

	Standard	-D	-JET-D
			
	Art. N°	**Art. N°**	**Art. N°**
80°  ISO-Line CC..-0602..	**ML12**	**ML12**	**ML12**
	-	**ML12A-SCLCL06-V-D**	**ML12A-SCLCL06-V-JET-D**
	ML16	**ML16**	**ML16**
	-	**ML16A-SCLCL06-V-D**	**ML16A-SCLCL06-V-JET-D**
80°  ISO-Line CC..-9T3..	**ML12**	**ML12**	**ML12**
	-	**ML12A-SCLCL09-V-D**	**ML12A-SCLCL09-V-JET-D**
	ML16	**ML16**	**ML16**
	-	**ML16A-SCLCL09-V-D**	**ML16A-SCLCL09-V-JET-D**
55°  ISO-Line DC..-0702..	**ML12**	**ML12**	**ML12**
	-	**ML12A-SDJCL07-V-D**	**ML12A-SDJCL07-V-JET-D**
	ML16	**ML16**	**ML16**
	-	**ML16A-SDJCL07-V-D**	**ML16A-SDJCL07-V-JET-D**
55°  ISO-Line DC..-11T3..	**ML12**	**ML12**	**ML12**
	ML12A-SDJCL11-V	**ML12A-SDJCL11-V-D**	**ML12A-SDJCL11-V-JET-D**
	ML16	**ML16**	**ML16**
	ML16A-SDJCL11-V	**ML16A-SDJCL11-V-D**	**ML16A-SDJCL11-V-JET-D**

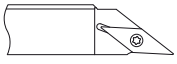
35°



ISO-Line
VC..-1103..

Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-SVJCL11-V	**ML12A-SVJCL11-V-D**	**ML12A-SVJCL11-V-JET-D**
ML16	**ML16**	**ML16**
ML16A-SVJCL11-V	**ML16A-SVJCL11-V-D**	**ML16A-SVJCL11-V-JET-D**

35°



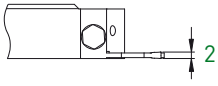
ISO-Line
VC..-1303..

ML12	**ML12**	**ML12**
-	**ML12A-SVJCL13-V-D**	**-**
ML16	**ML16**	**ML16**
-	**ML16A-SVJCL13-V-D**	**ML16A-SVJCL13-V-JET-D**

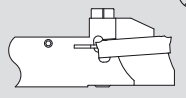
EVOCUT-Line

Porte-plaquettes – Coupe déportée
WSP-Halter – Versetztes Schneiden
Insert holders – Cut off line

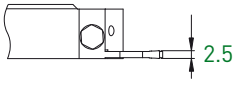
Ø max 32



EVOCUT-Line
ET20

		-JET -Ø
		
Art. N°	**Art. N°**	**Art. N°**
ML16	**ML16**	**ML16**
-	**-**	**ML16A-ET20-V-JET32**

Ø max 32

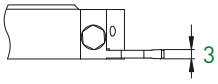


EVOCUT-Line
ET25

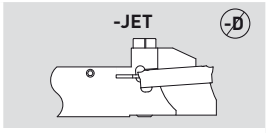
ML16	**ML16**	**ML16**
-	**-**	**ML16A-ET25-V-JET32**

Porte-plaquettes – Coupe déportée
WSP-Halter – Versetztes Schneiden
Insert holders – Cut off line

Ø max 32



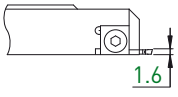
EVOCUT-Line
ET30



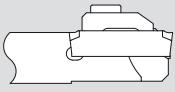
ML16	ML16	ML16
-	-	ML16A-ET30-V-JET32

Porte-plaquettes – Coupe déportée
WSP-Halter – Versetztes Schneiden
Insert holders – Cut off line

Ø max 16

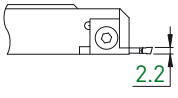


CUT-Line
CUT16



Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-CUT16-V	-	-
ML12F-CUT16-V	-	-
ML16	ML16	ML16
ML16A-CUT16-V	-	-
ML16F-CUT16-V	-	-

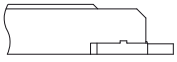
Ø max 20



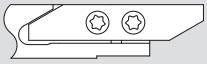
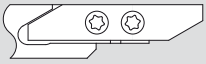
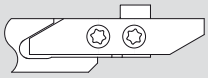
CUT-Line
CUT22

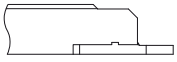
ML12	ML12	ML12
ML12A-CUT22-V	-	-
ML12F-CUT22-V	-	-
ML16	ML16	ML16
ML16A-CUT22-V	-	-
ML16F-CUT22-V	-	-

Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle



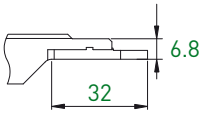
PRO-Line
632-636

Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
-	**ML12A-630-V-D**	**ML12A-630-V-JET-D**
ML16	**ML16**	**ML16**
-	**ML16A-630-V-D**	**ML16A-630-V-JET-D**



PRO-Line
651R

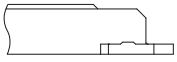
ML12	**ML12**	**ML12**
-	**ML12A-650-V-D**	**ML12A-650-V-JET-D**
ML16	**ML16**	**ML16**
-	**ML16A-650-V-D**	**ML16A-650-V-JET-D**



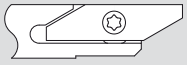
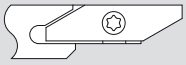
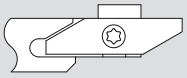
PRO-Line
651R

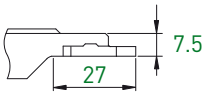
ML12	**ML12**	**ML12**
ML12A-650RC	**ML12A-650RC-D**	-
ML16	**ML16**	**ML16**
-	**ML16A-650RC-D**	**ML16A-650RC-JET-D**

Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle



ECO-Line
251-261

Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-250-V	**ML12A-250-V-D**	**ML12A-250-V-JET-D**
ML16	**ML16**	**ML16**
ML16A-250-V	**ML16A-250-V-D**	**ML16A-250-V-JET-D**



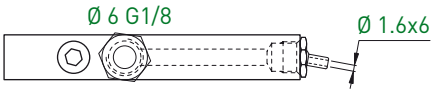
ECO-Line
251R

ML12	**ML12**	**ML12**
-	**ML12A-250RC-D**	-
ML16	**ML16**	**ML16**
-	**ML16A-250RC-D**	-

ML12 / ML16

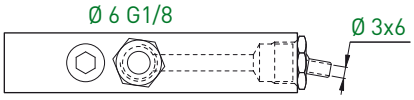
Modules d'arrosage
Kühlmittelzufuhrelemente
Coolant supply units

ML12



Raccord Anschluss Connection	Buses d'arrosage Kühlmitteldüse Coolant nozzles	ML12 Art. N°
Ø 6 G 1/8	5/16"	ML12-JET-5/16

ML16

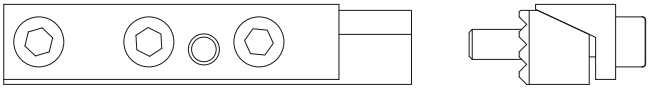


Raccord Anschluss Connection	Buses d'arrosage Kühlmitteldüse Coolant nozzles	ML16 Art. N°
Ø 6 G 1/8	7/16"	ML16-JET-7/16

buses optionnelles voir page 14.99
zusätzliche Düsen siehe Seite 14.99
optional nozzles see page 14.99

ML12 / ML16

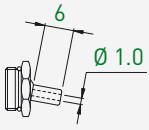
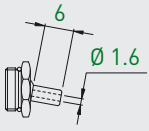
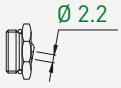
Modules de serrage
Spannelemente
Clamping units

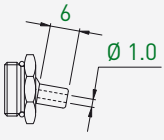
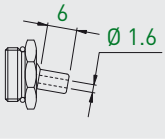
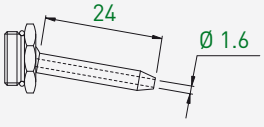
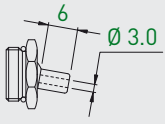


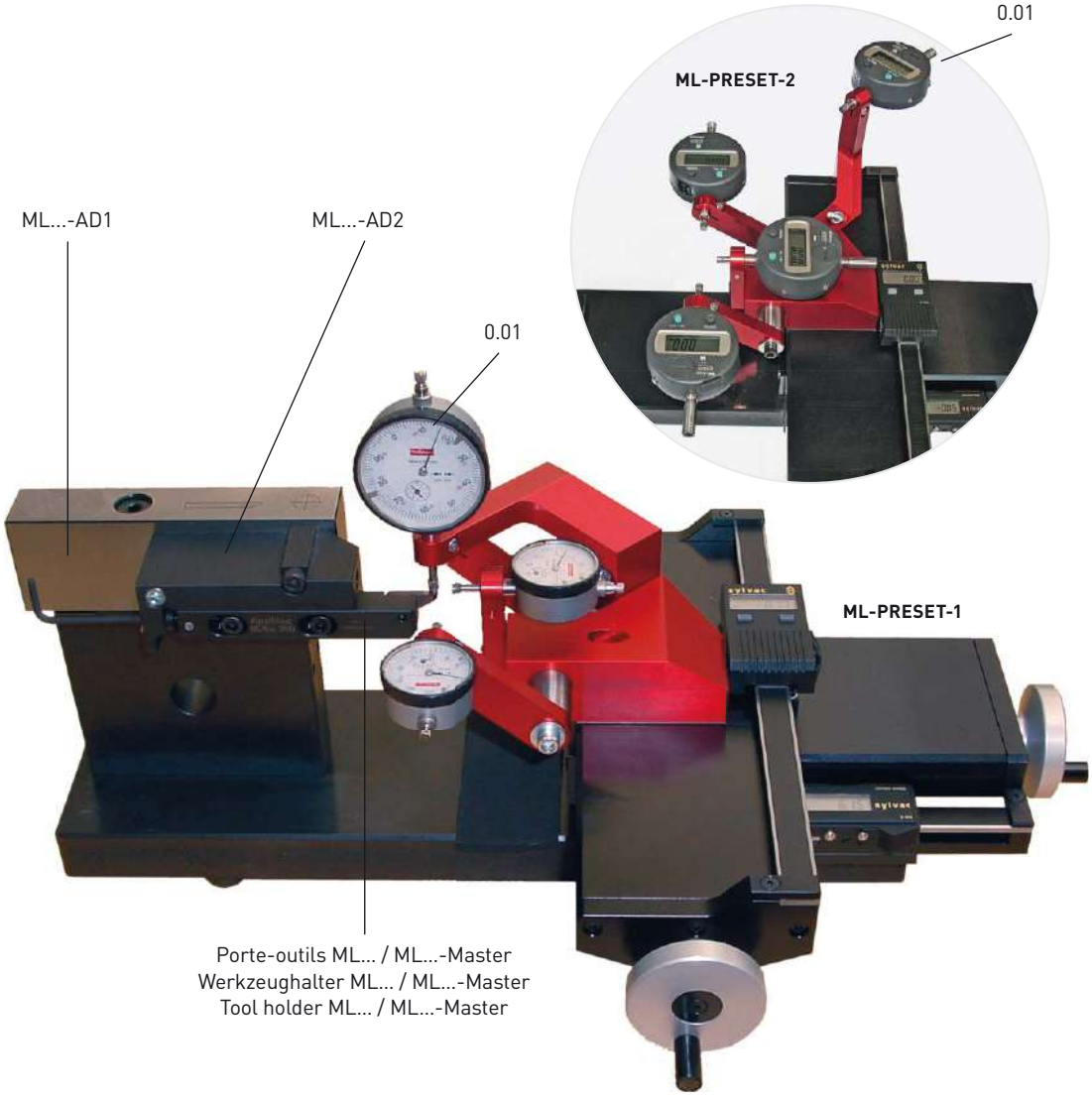
ML12 Art. N°	ML16 Art. N°
ML12-FIX-12/14	ML16-FIX-16/16
–	ML16-FIX-16/16.5
–	ML16-FIX-16/17
–	ML16-FIX-16/20
–	ML16-FIX-16/22
–	ML16-FIX-16/24



ML12 Art. N°	ML16 Art. N°
ML12-FIX-12	ML16-FIX-16

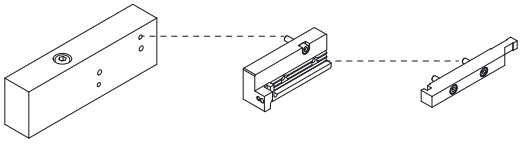
5/16"	Art. N°	Références compatibles Kompatible Artikeln Compatible items
	**ML-JET-5/16-1.0X6**	**ML12-JET-5/1.6** une buse **ML-JET-5/16-1.6x6** est comprise eine Düse **ML-JET-5/16-1.6x6** ist inbegriffen a nozzle **ML-JET-5/16-1.6x6** is included
	**ML-JET-5/16-1.6X6**	
	**ML-JET-5/16-2.2X0**	

7/16"	Art. N°	Références compatibles Kompatible Artikeln Compatible items
	**ML-JET-7/16-1.0X6**	**ML16-KMX26-JET** **ML16-JET-7/16** **ML12-DECO10-JET** **ML16-DECO13-JET** **ML16-DECO20-JET** **ML16-S20-JET** **ML16-SWISS-ST26-JET** une buse **ML-JET-7/16-3.0x6** est comprise avec chaque article ci-dessus eine Düse **ML-JET-7/16-3.0x6** ist mit jedem vorstehenden Artikel inbegriffen a nozzle **ML-JET-7/16-3.0x6** is included with each above item
	**ML-JET-7/16-1.6X6**	
	**ML-JET-7/16-1.6X24**	
	**ML-JET-7/16-3.0X6**	

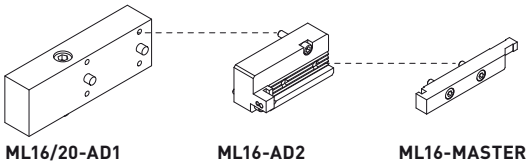


Art. N°
ML-PRESET-1
ML-PRESET-2

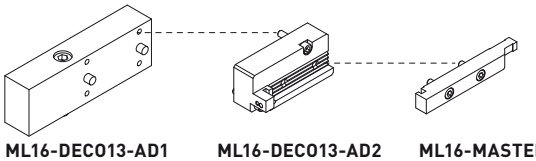
Type Typ Type	Fabricant Hersteller Manufacturer	Machines Maschinen Machines	Adaptateurs et jauges d'étalonnage Adapter und Einstellehre Adaptators and master gauges
ML12	CITIZEN	C12/C16	
		L12-1M7	
		L12-2M10	
		M16 V/VIII	
		R04	
		R07	
	HANWHA	XD10	
		XD20M	
	METAFIL	D3/D10/D13	
	STAR	SB-12RG	
		SL-7/10	
		SR10-J	
		SW-12RII	
	TORNOS	DECO7/10 - EvoDECO 10	
		SwissNano/SwissNano 7	
		DT13	
		CT20	
		GT13	
	TSUGAMI	B074	
		B075	
		P034	
		P034-P036	
ML16	CITIZEN	K12/K16/K12E/K16E	
		L20E-1M8/L20X-1M10/L20-2M8/2M12	
		L20E-3M	
	HANWHA	SL12/16	
	MANUHRIN	KMX 426/526/626/Swing 20-26 MM	
	STAR	SA-12/SA-16/SA-16R	
		SB-16	
		SB-16/20RG	
		SB-20C/E	
		SR-16R/SR-20R/SR-20RII	
		SR-20J/SR-20RIII	
		SR-20JII-A/B	
		SR-20RIII/SR-20J	
		SR-20RIV	
		SR-32J	
		SV-12/20/ SV-20R	
		SW-20	
	TORNOS	DECO20/26 - EvoDECO20/32	
		SIGMA20/32	
		DT26	
		GT26	
		GT32	
ML16	TORNOS	DECO13-EvoDECO16	
		Swiss ST26	



ML12-AD1 **ML12-AD2** **ML12-MASTER**

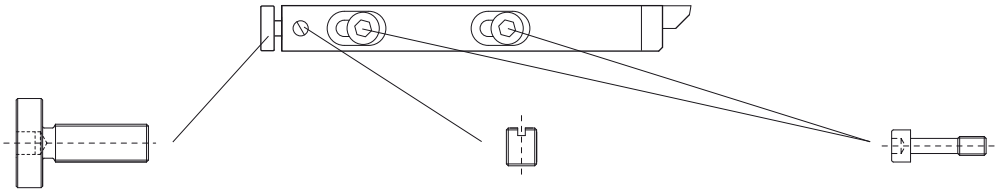


ML16/20-AD1 **ML16-AD2** **ML16-MASTER**



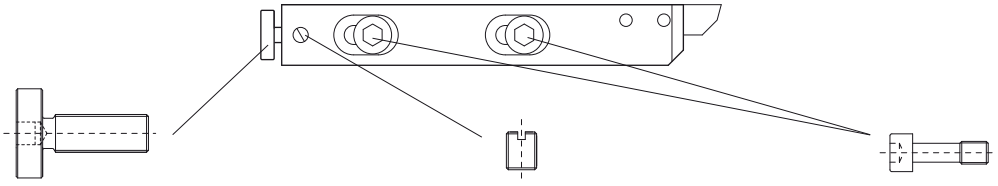
ML16-DECO13-AD1 **ML16-DECO13-AD2** **ML16-MASTER**

ML12



Vis de réglage Einstellungsschraube Setting screw	Vis de blocage Blockierschraube Locking screw	Vis de fixation Befestigungsschraube Fixing screw
Art. N°	**Art. N°**	**Art. N°**
ML12A-M5X0.5	**ML-M4X4-T**	**ML12-M5XL20**

ML16

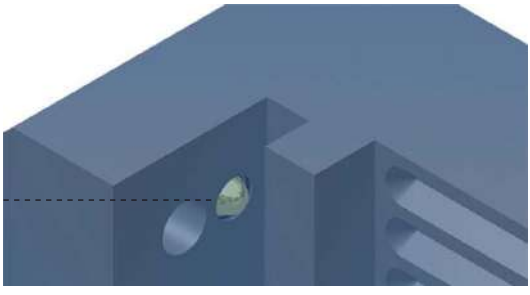


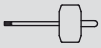
Vis de réglage Einstellungsschraube Setting screw	Vis de blocage Blockierschraube Locking screw	Vis de fixation Befestigungsschraube Fixing screw
Art. N°	**Art. N°**	**Art. N°**
ML16A-M5X0.5	**ML-M4X4-T**	**ML16/20-M6XL20**

Art. N°
ML-205004



Butée à ressort
Federnde Schraube
Spring bumper



Porte-outils Halter Holders					Options 	
ML...250	**V-M4X9-T15**	-	-	-	-	**C-T15**
ML...260						
ML...330	**V-M2.5X7.8-T8**	-	-	-	-	**C-T8**
ML...340						
ML...630	**V-M4X9-T15**	-	-	-	-	**C-T15**
ML...640						
ML...650						
ML...650RC	**V-M4X6.5-T15**					
ML...660	**V-M4X9-T15**					
ML...730	**V-M3X7-T8**	-	-	-	-	**C-T8**
ML...730RC	**V-M3X5.5-T8**					
ML...730RC-R04	**V-M3X4.5-T8** **V-M3X7-T8**					
ML...730RC-SWISS-NANO	**V-M3X4.5-T8** **V-M3X7-T8**					
ML...740	**V-M3X7-T8**					
ML...750	**V-M4X9-T15**	-	-	-	-	**C-T15**
ML...750RC	**V-M4X7.3-T15**					
ML...750RC-R04	**V-M4X5.6-T15** **V-M4X7.3-T15**					
ML...750RC-SWISS-NANO	**V-M4X5.6-T15** **V-M4X7.3-T15**					
ML...760	**V-M4X9-T15**					
ML...770RC-SWISS-NANO	**V-M4X7.3-T15**					
ML...780	**V-M4X9-T15**					
ML...SC...06	**V-M2.5X5.8-T8**	-	-	-	-	**C-T8**
ML...SC...09	**V-M4X7-T15-ISO**	-	-	-	-	**C-T15**
ML...-SD...07	**V-M2.5X7.8-T8**	-	-	-	-	**C-T8**
ML...-SD...07-D	**V-M2.5X5.8-T8**					
ML12...-SDJ...11	**V-M4X7-T15-ISO**	-	-	-	-	**C-T15**
ML12...-SDN...11	**V-M4X9-T15-ISO**					
ML16...-SD...11						
ML...-SV...11	**V-M2.5X7.8-T8**	-	-	-	-	**C-T8**
ML...-SV...13	**V-M3X7.3-T8-ISO**					
ML...-CUT16	-	-	**CUT16RS-SET**	-	-	-
ML...-CUT16-V	-	-	**CUT16LS-SET**	-	-	-
ML...-CUT22	-	-	**CUT22RS-SET**	-	-	-
ML...-CUT16-V	-	-	**CUT22LS-SET**	-	-	-
ML16...-ET... JET32	-	-	-	-	-	-
ML16...-ET... V-JET32	-	-	-	**V-M5X21-6P7-J**	**C-6PEX-7.0**	-
ML...-BHK	**V-BHK-M4X0.5-T8**		-			-
ML12A-2440-8-3	-	**V-M3X4-BN24**	-	-	-	-
ML12A-2440-8-4		**V-M4X5-BN24**				
ML12A-2440-8-5		**V-M4X5-BN25**				
ML12A-2440-12-6		**V-M4X5-BN24**				
ML16A-2440-12-3		**V-M3X5-BN24**				
ML16A-2440-12-4		**V-M4X6-BN24**				
ML16A-2440-12-5		**V-M4X5-BN24**				
ML16A-2440-12-6		**V-M4X5-BN24**				
ML16A-2440-18-8		**V-M4X5-BN25**				

TOOLING-Line



APPLITEC
CUTTING TOOLS

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Molettes en métal dur Vollhartmetall Rändelrädchen Solid carbide knurling wheels	1107		> 15.25

Outils et porte-outils traditionnels pour le décolletage et la mécanique de précision

- Porte-outils
- Forets à centrer
- Burins intérieurs
- Porte-molettes
- Molettes en métal dur

Übliche Werkzeuge und Halter für Decolletage und Präzisionsmechanik

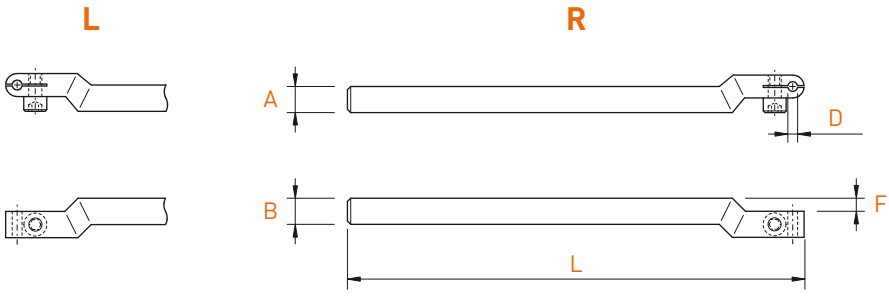
- Werkzeughalter
- Zentrierbohrer
- Innendrehwerkzeuge
- Rändelhalter
- Vollhartmetall Rändelrädchen

Usual tools and tool holders for automatic lathes and precision mecanics

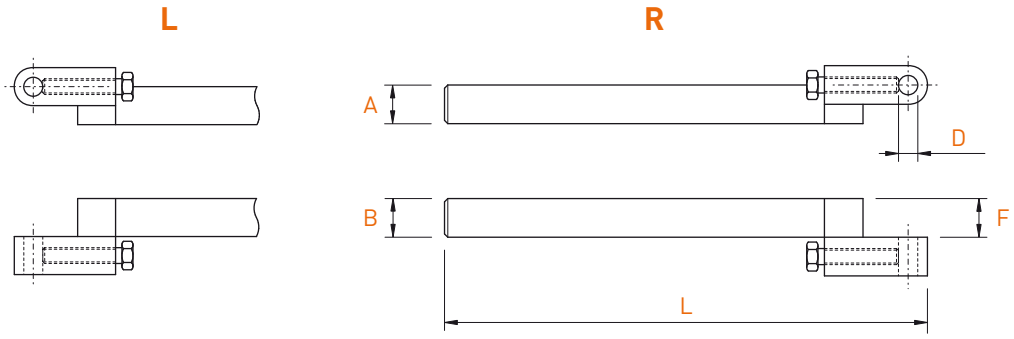
- Tool holders
- Centring drills
- Internal turning tools
- Knurl holders
- Solid carbide knurling wheels



1400-J / 2400-J



A x B	L	F	D	L Art. N°	R Art. N°	Pièces de rechange Ersatzteile Spare parts * Art. N°
6 x 6	132	3	1.5	**1400-J-615**	**2400-J-615**	
6 x 6	132	3	2.0	**1400-J-620**	**2400-J-620**	**V-M3X5-BN7**
6 x 6	132	3	3.0	**1400-J-630**	**2400-J-630**	
7 x 7	140	3	1.5	**1400-J-715**	**2400-J-715**	
7 x 7	140	3	2.0	**1400-J-720**	**2400-J-720**	
7 x 7	140	3	3.0	**1400-J-730**	**2400-J-730**	**V-M4X6-BN7**
8 x 8	140	4	1.5	**1400-J-815**	**2400-J-815**	
8 x 8	140	4	2.0	**1400-J-820**	**2400-J-820**	
8 x 8	140	4	3.0	**1400-J-830**	**2400-J-830**	

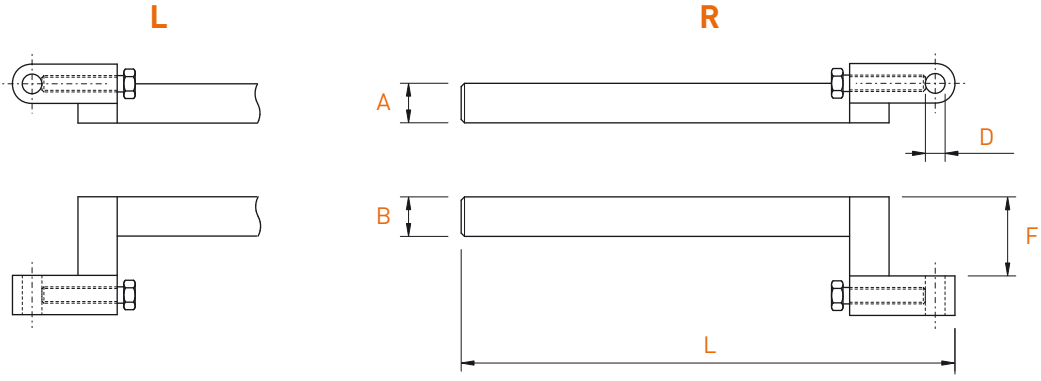


A x B	L	F	D	L Art. N°	R Art. N°	Pièces de rechange Ersatzteile Spare parts * Art. N°
7 x 7	146	7	2.0	**1401-K-720**	**-**	
7 x 7	146	7	3.0	**1401-K-730**	**2401-K-730**	
7 x 7	146	7	4.0	**1401-K-740**	**2401-K-740**	
8 x 8	146	8	2.0	**1401-K-820**	**-**	**V-M4X20-HEX7**
8 x 8	146	8	3.0	**1401-K-830**	**2401-K-830**	
8 x 8	146	8	4.0	**1401-K-840**	**2401-K-840**	
8 x 8	146	8	5.0	**1401-K-850**	**2401-K-850**	
8 x 8	146	8	6.0	**1401-K-860**	**2401-K-860**	
10 x 10	150	10	3.0	**-**	**2401-K-1030**	
10 x 10	150	10	4.0	**1401-K-1040**	**2401-K-1040**	
10 x 10	150	10	5.0	**1401-K-1050**	**2401-K-1050**	
10 x 10	150	10	6.0	**1401-K-1060**	**2401-K-1060**	**V-M4X25-HEX7**
10 x 10	150	10	7.0	**1401-K-1070**	**2401-K-1070**	
12 x 12	150	12	3.0	**-**	**2401-K-1230**	
12 x 12	150	12	4.0	**1401-K-1240**	**2401-K-1240**	
12 x 12	150	12	5.0	**1401-K-1250**	**2401-K-1250**	
12 x 12	150	12	6.0	**1401-K-1260**	**2401-K-1260**	
12 x 12	150	12	8.0	**1401-K-1280**	**2401-K-1280**	
14 x 14	150	14	4.0	**1401-K-1440**	**2401-K-1440**	**V-M4X30-HEX7**
14 x 14	150	14	6.0	**1401-K-1460**	**2401-K-1460**	
14 x 14	150	14	8.0	**1401-K-1480**	**2401-K-1480**	

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

1420 / 2420

Porte-outils
Werkzeughalter
Tool holders

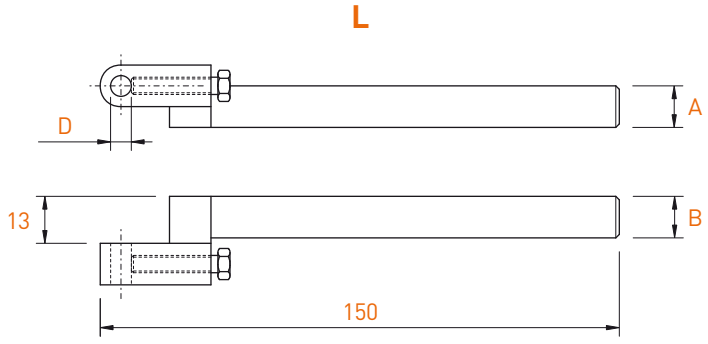


A x B	L	F	D	L Art. N°	R Art. N°	Pièces de rechange Ersatzteile Spare parts * Art. N°
7 x 7	146	12	4.0	**1420-7124**	**2420-7124**	
8 x 8	146	12	4.0	**1420-8124**	**2420-8124**	
8 x 8	146	14	3.0	**1420-8143**	**2420-8143**	**V-M4X20-HEX7**
8 x 8	146	15	5.0	**1420-8155**	**2420-8155**	
8 x 8	146	20	5.0	**1420-8205**	**2420-8205**	
10 x 10	150	20	6.0	**1420-10206**	**2420-10206**	
12 x 12	150	18	6.0	**1420-12186**	**2420-12186**	
12 x 12	150	18	8.0	**1420-12188**	**-**	**V-M5X25-HEX8**
12 x 12	150	24	8.0	**1420-12248**	**2420-12248**	
14 x 14	150	20	8.0	**1420-14208**	**2420-14208**	
14 x 14	150	24	8.0	**1420-14248**	**2420-14248**	

Porte-outils
Werkzeughalter
Tool holders

⍁ 12 x 12

1460



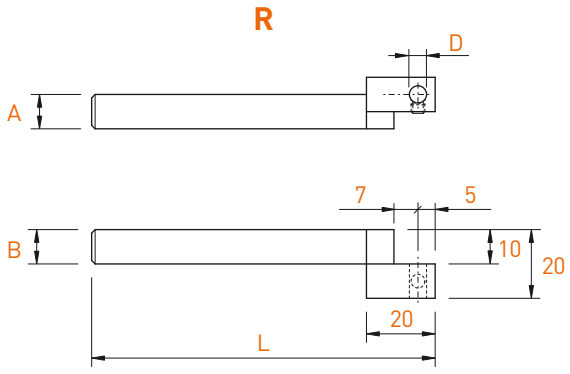
A x B	D	L **Art. N°**	Pièces de rechange Ersatzteile Spare parts * **Art. N°**
12 x 12	4.0	**1460-4**	**V-M5X25-HEX8**
12 x 12	5.0	**1460-5**	
12 x 12	6.0	**1460-6**	
12 x 12	8.0	**1460-8**	

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

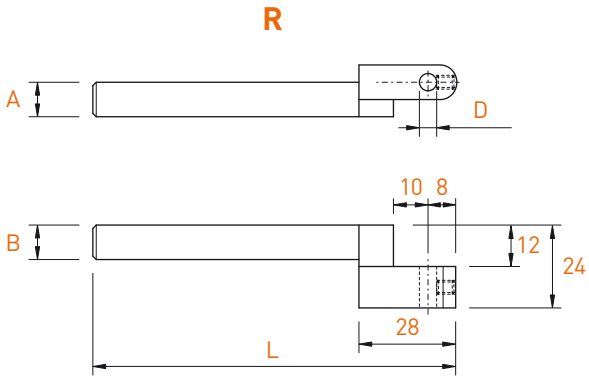
2450-SP

☐ 10 x 10

Porte-outils
Werkzeughalter
Tool holders



A x B	L	D	R Art. N°	Pièces de rechange Ersatzteile Spare parts *
				Art. N°
10 x 10	100	3.0	**2450-SP-3**	**V-M4X4-BN24**
10 x 10	100	4.0	**2450-SP-4**	**V-M4X3-BN24**
10 x 10	100	5.0	**2450-SP-5**	**V-M4X4-BN24**
10 x 10	100	6.0	**2450-SP-6**	**V-M4X3-BN24**
10 x 10	120	3.0	**2450-SP-3-120**	
10 x 10	120	4.0	**2450-SP-4-120**	**V-M4X4-BN24**
10 x 10	120	5.0	**2450-SP-5-120**	
10 x 10	120	6.0	**2450-SP-6-120**	**V-M4X3-BN24**



A x B	L	D	R Art. N°
10 x 10	105	3.0	**2470-3**
10 x 10	105	4.0	**2470-4**
10 x 10	105	5.0	**2470-5**
10 x 10	105	6.0	**2470-6**
10 x 10	105	7.0	**2470-7**

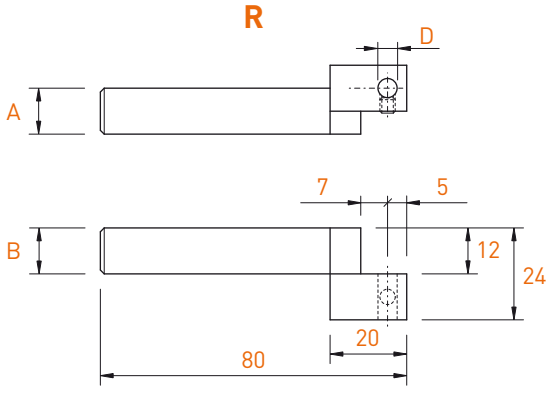
Pièces de rechange Ersatzteile Spare parts *
V-M4X5-BN24

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

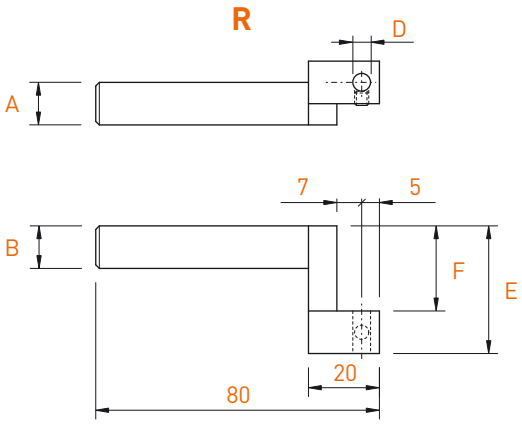
2450

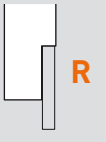
☐ 12 x 12

Porte-outils
Werkzeughalter
Tool holders



A x B	D	R Art. N°	Pièces de rechange Ersatzteile Spare parts * Art. N°
12 x 12	3.0	**2450-3**	**V-M3X4-BN24**
12 x 12	4.0	**2450-4**	
12 x 12	5.0	**2450-5**	**V-M4X3-BN24**
12 x 12	6.0	**2450-6**	
12 x 12	8.0	**2450-8**	



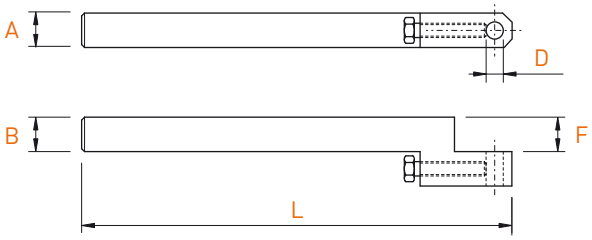


Pièces de rechange
Ersatzteile
Spare parts

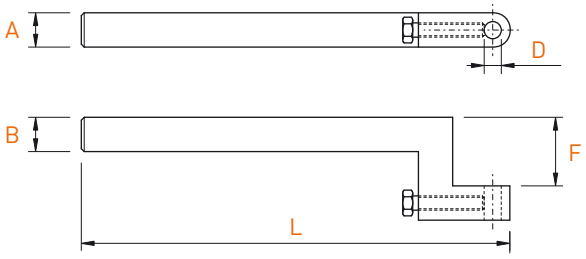

*

A x B	F	E	D	Art. N°	Art. N°
12 x 12	16	28	4.0	**2460-284**	**V-M3X4-BN24**
12 x 12	16	28	6.0	**2460-286**	**V-M4X3-BN24**
12 x 12	16	28	8.0	**2460-288**	
12 x 12	20	32	4.0	**2460-324**	**V-M3X4-BN24**
12 x 12	20	32	6.0	**2460-326**	**V-M4X3-BN24**
12 x 12	20	32	8.0	**2460-328**	
12 x 12	24	36	4.0	**2460-364**	**V-M3X4-BN24**
12 x 12	24	36	6.0	**2460-366**	**V-M4X3-BN24**
12 x 12	24	36	8.0	**2460-368**	

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder



A x B	L	F	D	Art. N°	Pièces de rechange Ersatzteile Spare parts * Art. N°
8 x 8	120	8	3.0	**2405-K-830**	
8 x 8	120	8	4.0	**2405-K-840**	**V-M4X25-HEX7**
8 x 8	120	8	5.0	**2405-K-850**	
8 x 8	120	8	6.0	**2405-K-860**	
10 x 10	100	10	4.0	**2405-K-1040**	
10 x 10	100	10	5.0	**2405-K-1050**	**V-M5X25-HEX8**
10 x 10	100	10	6.0	**2405-K-1060**	
12 x 12	150	12	4.0	**2405-K-1240**	
12 x 12	150	12	6.0	**2405-K-1260**	**V-M5X30-HEX8**
12 x 12	150	12	8.0	**2405-K-1280**	



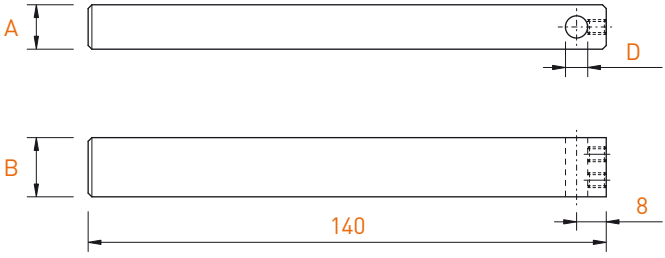
A x B	L	F	D	Art. N°	Pièces de rechange Ersatzteile Spare parts *
8 x 8	120	12	4.0	**2425-8124**	**M4X25-HEX7**
8 x 8	120	15	5.0	**2425-8155**	
8 x 8	120	20	5.0	**2425-8205**	
10 x 10	100	15	6.0	**2425-10156**	**M5X25-HEX8**
10 x 10	100	20	6.0	**2425-10206**	
12 x 12	150	18	6.0	**2425-12186**	**M5X30-HEX8**
12 x 12	150	24	8.0	**2425-12248**	**M5X25-HEX8**

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

2441

☐ 12 x 16

Porte-outils
Werkzeughalter
Tool holders



A x B	D	Art. N°
12 x 16	3.0	**2441-0-3**
12 x 16	4.0	**2441-0-4**
12 x 16	5.0	**2441-0-5**
12 x 16	6.0	**2441-0-6**

Pièces de rechange
Ersatzteile
Spare parts



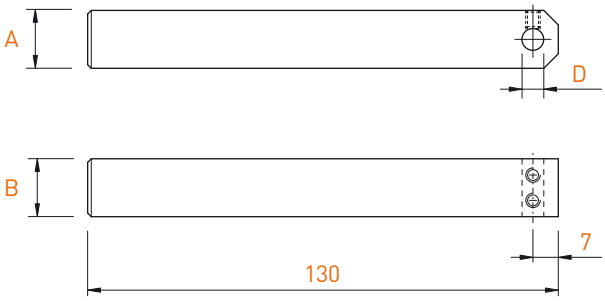
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Art. N°
V-M4X4-BN24

Porte-outils
Werkzeughalter
Tool holders

☐ 16 x 16

2440-0



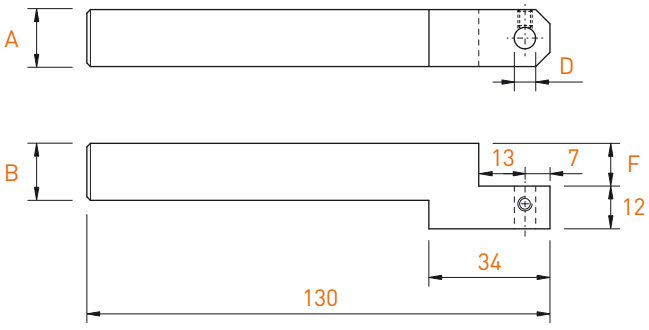
A x B	D	Art. N°	Pièces de rechange Ersatzteile Spare parts * Art. N°
16 x 16	3.0	**2440-0-3**	**V-M4X4-BN24**
16 x 16	4.0	**2440-0-4**	
16 x 16	5.0	**2440-0-5**	
16 x 16	6.0	**2440-0-6**	

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

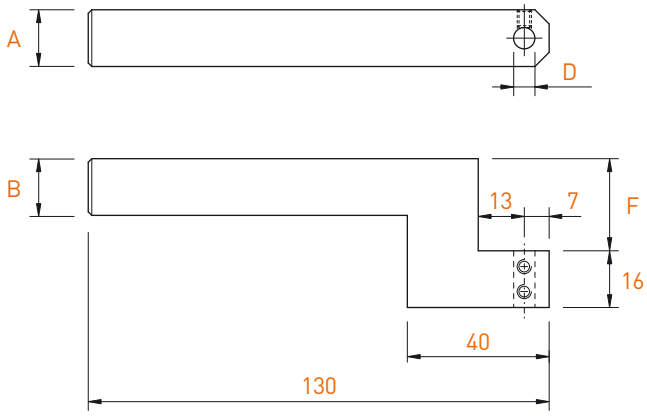
2440-8 / 2440-12

☐ 16 x 16

Porte-outils
Werkzeughalter
Tool holders



A x B	F	D	Art. N°	Pièces de rechange Ersatzteile Spare parts * Art. N°
16 x 16	8	3.0	**2440-8-3**	**V-M4X6-BN24**
16 x 16	8	4.0	**2440-8-4**	
16 x 16	8	5.0	**2440-8-5**	
16 x 16	8	6.0	**2440-8-6**	
16 x 16	8	8.0	**2440-8-8**	
16 x 16	12	3.0	**2440-12-3**	
16 x 16	12	4.0	**2440-12-4**	
16 x 16	12	5.0	**2440-12-5**	
16 x 16	12	6.0	**2440-12-6**	
16 x 16	12	8.0	**2440-12-8**	



A x B	F	D	Art. N°
16 x 16	18	4.0	**2440-18-4**
16 x 16	18	5.0	**2440-18-5**
16 x 16	18	6.0	**2440-18-6**
16 x 16	18	8.0	**2440-18-8**
16 x 16	26	4.0	**2440-26-4**
16 x 16	26	5.0	**2440-26-5**
16 x 16	26	6.0	**2440-26-6**
16 x 16	26	8.0	**2440-26-8**

Pièces de rechange
Ersatzteile
Spare parts



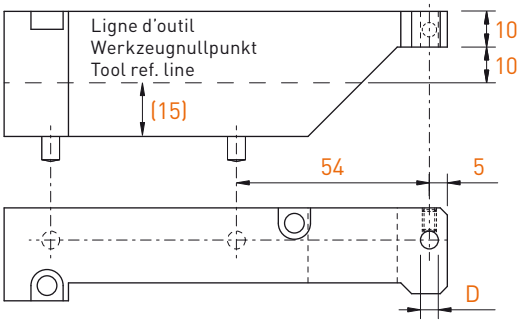
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Art. N°
V-M4X6-BN24

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

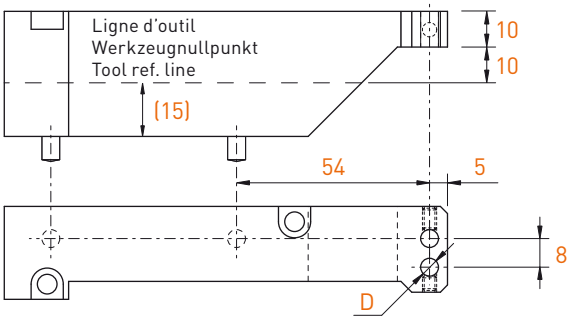
2435 / 2435-T

Porte-outils pour machines Tornos DECO 7/10 / EvoDECO 10
Werkzeughalter für Tornos DECO 7/10 / EvoDECO 10 Maschinen
Tool holders for Tornos DECO 7/10 / EvoDECO 10 machines



D	Art. N°	Pièces de rechange Ersatzteile Spare parts Art. N°
3.0	**2435-3**	**V-M4X6-BN24**
4.0	**2435-4**	
5.0	**2435-5**	
6.0	**2435-5**	


*

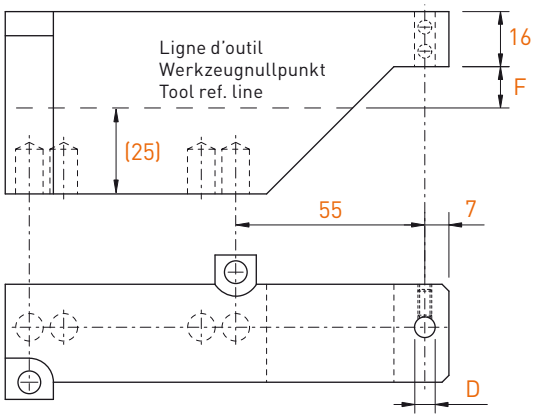


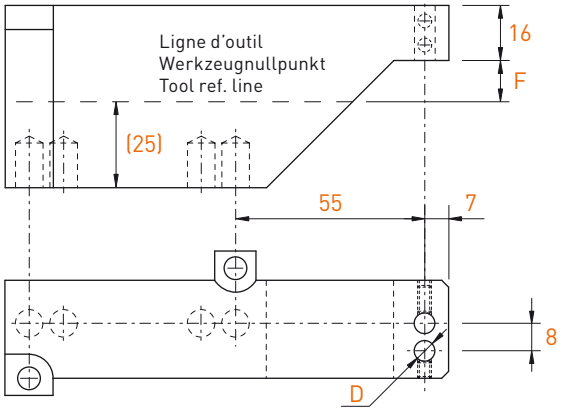
D	Art. N°	Art. N°
3.0	**2435-3-T**	**V-M4X6-BN24**
4.0	**2435-4-T**	
5.0	**2435-5-T**	
6.0	**2435-6-T**	

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

Porte-outils pour machines Tornos DECO 13 / EvoDECO 16
Werkzeughalter für Tornos DECO 13 / EvoDECO 16 Maschinen
Tool holders for Tornos DECO 13 / EvoDECO 16 machines

2436 / 2436T



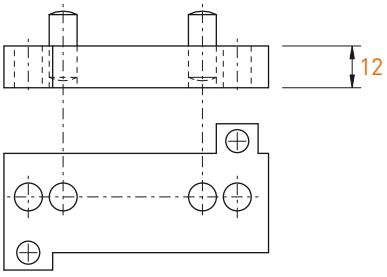


F	D	Art. N°	Pièces de rechange Ersatzteile Spare parts *
12	3.0	**2436-12-3**	**V-M4X10-BN24**
12	4.0	**2436-12-4**	
12	5.0	**2436-12-5**	
12	6.0	**2436-12-6**	
12	8.0	**2436-12-8**	
18	3.0	**2436-18-3**	
18	4.0	**2436-18-4**	
18	5.0	**2436-18-5**	
18	6.0	**2436-18-6**	
18	8.0	**2436-18-8**	

F	D	Art. N°	Art. N°
12	3.0	**2436T-12-3**	**V-M4X5-BN24**
12	4.0	**2436T-12-4**	
12	5.0	**2436T-12-5**	
12	6.0	**2436T-12-6**	
18	3.0	**2436T-18-3**	
18	4.0	**2436T-18-4**	
18	5.0	**2436T-18-5**	
18	6.0	**2436T-18-6**	

Entretoise
Erhöhungsplatte
Spacer

2436-S12

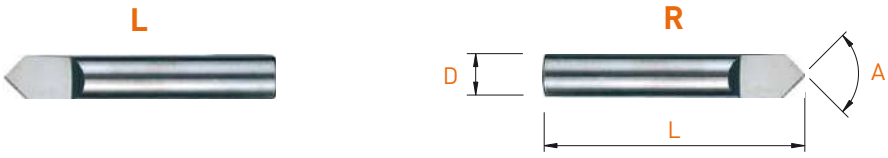


Art. N°
2436-S12

1200 / 2200

90°

Forets à centrer plats
Zentrierflachbohrer
Centering flat drills



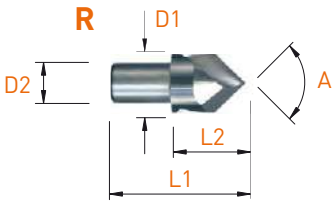
MD VHM HM			L	R
A	D	L	Art. N°	Art. N°
90°	3	17	**1200-317**	**2200-317**
90°	3	38	**1200-338**	**2200-338**
90°	4	40	**1200-440**	**2200-440**
90°	5	50	**1200-550**	**2200-550**
90°	6	50	**1200-650**	**2200-650**
90°	8	58	**1200-858**	**2200-858**
90°	10	66	**1200-1066**	**2200-1066**
90°	12	73	**1200-1273**	**2200-1273**

Forets à centrer hélicoïdaux
Zentrierspiralbohrer
Centering twist drills

90°

1500 / 2520





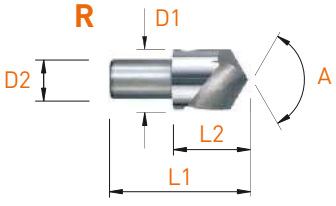
					HSS		MD / VHM / HM	
					L	R	L	R
A	D1	D2	L1	L2	Art. N°	Art. N°	Art. N°	Art. N°
90°	5	4	17	8	**1500-5-HSS**	**2520-5-HSS**	**1500-5**	**2520-5**
90°	7	5	17	8	**1500-7-HSS**	**2520-7-HSS**	**1500-7**	**2520-7**
90°	10	6	22	10	**1500-10-HSS**	**2520-10-HSS**	**1500-10**	**2520-10**
90°	12	8	26	12	**1500-12-HSS**	**2520-12-HSS**	**1500-12**	**2520-12**

Forets à centrer hélicoïdaux
Zentrierspiralbohrer
Centering twist drills

120°

1510 / 2530

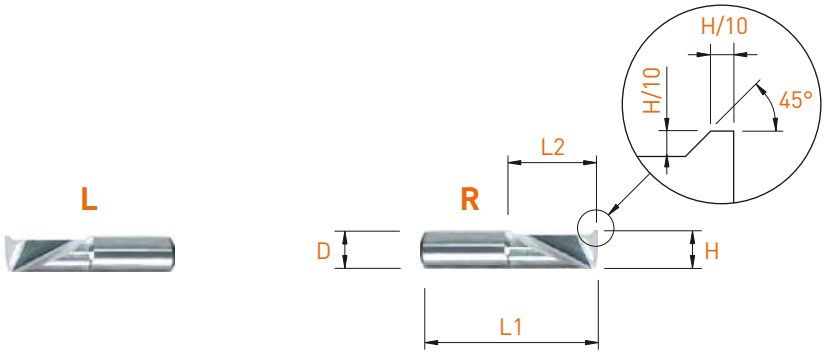




MD VHM HM					L	R
A	D1	D2	L1	L2	Art. N°	Art. N°
120°	5	4	17	8	**1510-5**	**2530-5**
120°	7	5	17	8	**1510-7**	**2530-7**
120°	10	6	22	10	**1510-10**	**2530-10**
120°	12	8	26	12	**1510-12**	**2530-12**

1600 / 2620

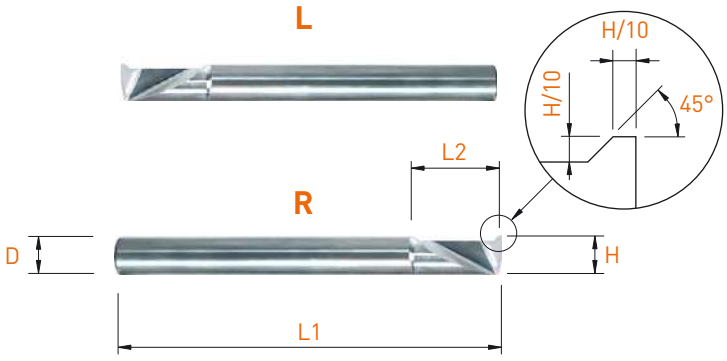
Burins intérieurs en métal dur
Vollhartmetall Innendrehwerkzeuge
Solid carbide internal turning tools



MD VHM HM				L	R
H 0/-0.05	D	L1	L2	Art. N°	Art. N°
2	3	13	4	**1600-2-4**	**2620-2-4**
3	3	15	6	**1600-3-6**	**2620-3-6**
4	4	17	8	**1600-4-8**	**2620-4-8**
4	4	21	12	**1600-4-12**	**2620-4-12**
5	5	21	10	**1600-5-10**	**2620-5-10**
5	5	26	15	**1600-5-15**	**2620-5-15**
6	6	25	12	**1600-6-12**	**2620-6-12**
6	6	31	18	**1600-6-18**	**2620-6-18**
8	8	32	16	**1600-8-16**	**2620-8-16**
8	8	40	24	**1600-8-24**	**2620-8-24**

Burins intérieurs en métal dur
Vollhartmetall Innendrehwerkzeuge
Solid carbide internal turning tools

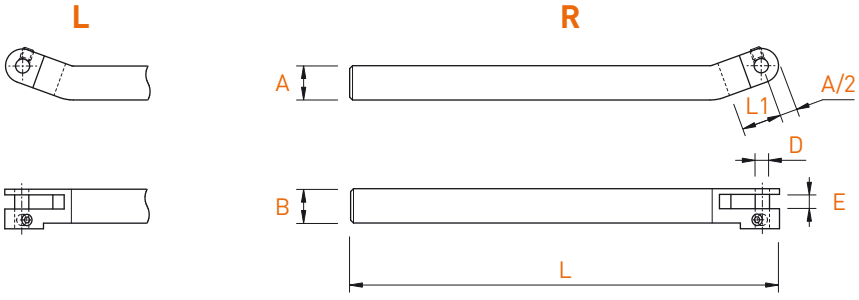
1610 / 2630

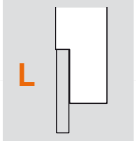


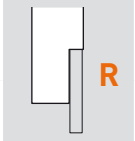
MD VHM HM				L	R
H 0/-0.05	D	L1	L2	Art. N°	Art. N°
2	3	38	4	**1610-2-4**	**2630-2-4**
3	3	38	6	**1610-3-6**	**2630-3-6**
4	4	40	8	**1610-4-8**	**2630-4-8**
4	4	40	12	**1610-4-12**	**2630-4-12**
5	5	50	10	**1610-5-10**	**2630-5-10**
5	5	54	15	**1610-5-15**	**2630-5-15**
6	6	50	12	**1610-6-12**	**2630-6-12**
6	6	57	18	**1610-6-18**	**2630-6-18**
8	8	58	16	**1610-8-16**	**2630-8-16**
8	8	63	24	**1610-8-24**	**2630-8-24**
10	10	72	30	-	**2630-10-30**
12	12	83	36	-	**2630-12-36**

1402 / 2402

Porte-molettes
Rändelhalter
Knurl holders







Pièces de rechange
Ersatzteile
Spare parts

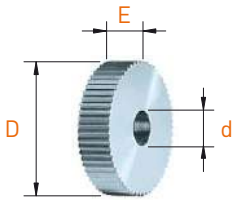


A x B	L	E	D	L1	A/2	Art. N°	Art. N°	Art. N°
6 x 6	132	2	3	10	3	**1402-623**	**2402-623**	**GP-3X10-A6H2.5**
6 x 6	132	3	3	10	3	**1402-633**	**2402-633**	**GP-3X10-A6H2.5**
7 x 7	140	2	3	10	3.5	**1402-723**	**2402-723**	**GP-3X12-A6H2.5**
7 x 7	140	3	3	10	3.5	**1402-733**	**2402-733**	**GP-3X12-A6H2.5**
7 x 7	140	4	3	10	3.5	**1402-743**	**2402-743**	**GP-3X12-A6H2.5**
7 x 7	140	2	4	10	3.5	**1402-724**	**2402-724**	**GP-4X12-A6H3.5**
7 x 7	140	3	4	10	3.5	**1402-734**	**2402-734**	**GP-4X12-A6H3.5**
7 x 7	140	4	4	10	3.5	**1402-744**	**2402-744**	**GP-4X12-A6H3.5**
8 x 8	140	2	3	10	4	**1402-823**	**2402-823**	**GP-3X12-A6H2.5**
8 x 8	140	3	3	10	4	**1402-833**	**2402-833**	**GP-3X12-A6H2.5**
8 x 8	140	4	3	10	4	**1402-843**	**2402-843**	**GP-3X12-A6H2.5**
8 x 8	140	2	4	10	4	**1402-824**	**2402-824**	**GP-4X12-A6H3.5**
8 x 8	140	3	4	10	4	**1402-834**	**2402-834**	**GP-4X12-A6H3.5**
8 x 8	140	4	4	10	4	**1402-844**	**2402-844**	**GP-4X12-A6H3.5**
10 x 10	150	3	3	10	5	**1402-1033**	**2402-1033**	**GP-3X14-A8H2.5**
10 x 10	150	4	3	10	5	**1402-1043**	**2402-1043**	**GP-3X14-A8H2.5**
10 x 10	150	3	4	10	5	**1402-1034**	**2402-1034**	**GP-4X14-A8H3.5**
10 x 10	150	4	4	10	5	**1402-1044**	**2402-1044**	**GP-4X14-A8H3.5**
10 x 10	150	5	4	10	5	**1402-1054**	**-**	**GP-4X14-A8H3.5**
12 x 12	150	4	4	12	6	**1402-1244**	**2402-1244**	**GP-4X14-A8H3.5**
12 x 12	150	5	4	12	6	**1402-1254**	**2402-1254**	**GP-4X14-A8H3.5**
12 x 12	150	4	5	12	6	**1402-1245**	**2402-1245**	**GP-5X14-A8H4.5**
12 x 12	150	5	5	12	6	**1402-1255**	**2402-1255**	**GP-5X14-A8H4.5**
16 x 16	150	4	4	12	8	**1402-1644**	**2402-1644**	**GP-4X16-A8H3.5**
16 x 16	150	4	5	12	8	**-**	**2402-1645**	**GP-5X16-A9H4.5**
16 x 16	150	5	5	12	8	**-**	**2402-1655**	**GP-5X16-A9H4.5**
16 x 16	150	6	4	12	8	**-**	**2402-1664**	**GP-4X16-A8H3.5**
16 x 16	150	6	6	12	8	**-**	**2402-1666**	**GP-6X16-A9H5.5**
16 x 16	150	8	6	12	8	**-**	**2402-1686**	**GP-6X16-A9H5.5**

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

Molettes en métal dur
Vollhartmetall Rändelrädchen
Solid carbide knurling wheels

1107





AA



BL



BR



GE

Art. N° ex :
10X2X3-0.2-AA

D	E	d	Pas (tous les 0.1 mm) Teilung (alle 0.1 mm) Pitch (every 0.1 mm)	Molettes standards Standard Rändelrädchen Standard knurls
8	2	3	0.2 - 0.6	AA (0°) BL 15° / BR 15° BL 30° / BR 30° BL 45° / BR 45° GE 30° GE 45°
8	2	4	0.2 - 0.6	
8	3	3	0.2 - 0.6	
8	3	4	0.2 - 0.6	
8	4	3	0.2 - 0.6	
8	4	4	0.2 - 0.6	
10	2	3	0.2 - 0.8	
10	2	4	0.2 - 0.8	
10	3	3	0.2 - 0.8	
10	3	4	0.2 - 0.8	
10	4	3	0.2 - 0.8	
10	4	4	0.2 - 0.8	
12	4	4	0.3 - 1.0	
15	4	4	0.4 - 1.0	
15	4	5	0.4 - 1.0	
15	5	4	0.4 - 1.0	
15	5	5	0.4 - 1.0	
20	4	5	0.5 - 1.2	
20	5	5	0.5 - 1.2	
20	6	6	0.5 - 1.2	
20	8	6	0.5 - 1.2	

Art. N° ex :
8.9X2.5X4-0.2-AA-Q

D	E	d	Pas (tous les 0.1 mm) Teilung (alle 0.1 mm) Pitch (every 0.1 mm)	Molettes "Quick" "Quick"-Rändelrädchen "Quick"-knurling wheels
8.9	2.5	4	0.2 - 0.8	AA (0°) BL 15° / BR 15° BL 30° / BR 30°
14.5	3	5	0.4 - 1.0	
21.5	5	8	0.5 - 1.2	

Exécutions spéciales sur demande / Sonderausführungen auf Anfrage / Special executions on request

MICRO-Line



APPLITEC
CUTTING TOOLS

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TiAlN



Revêtement PVD à couche mince
Dünnschicht PVD Beschichtung
Thin PVD coating

TF **F** M E

P ★★★★★
M ★★★★☆
N ★★★☆☆
S ★★★★☆

- revêtement de dernière génération couche mince et lisse
- idéal pour tous les aciers et aciers inoxydables
- bonne condition pour les grades de titane et les alliages de nickel
- excellente variante universelle pour un fraisage en finition ou ébauche
- très bonne résistance à la température

- neuesten Generation Beschichtung, dünne und glatte Schicht
- hervorragend für alle Stähle und rostfreie Stähle
- guter Zustand für Titan- und Nickellegierungssorten
- ausgezeichnete Universalsorte zum Schlicht- oder Schruppfräsen
- sehr gute Temperaturbeständigkeit

- latest generation coating thin and smooth layer
- specially adapted for our tools Ideal for all basic steels and stainless steels
- good condition for titanium grades and nickel alloys
- excellent universal variant for finishing or rough milling
- very good temperature resistance

STF



Revêtement PVD à couche mince
Dünnschicht PVD Beschichtung
Thin PVD coating

TF F M E

P ★★★★☆
M ★★★★★
N ★★★★☆
S ★★★★★

- revêtement de haute performance
- 1er choix pour les alliages de chrome/nickel, inox, titane, zirconium
- spécialement adapté aux matières extrêmes en général

- hochleistungsbeschichtung
- erste Wahl für Chrom/Nickel, rostfreiem Stahl, Titan, Zirkoniumlegierungen
- speziell angepasst für extreme Materialien im Allgemeinen

- high performance coating
- first choice for chrome/nickel, stainless steel, titanium, zirconium alloys
- specially adapted to extreme materials in general

TiCN



Revêtement PVD à couche mince
Dünnschicht PVD Beschichtung
Thin PVD coating

TF **F** M E

P ★★★★★
M ★★★★☆
N ★★★☆☆
S ★★★★☆

- revêtement de dernière génération offrant une excellente adhérence, avec une couche mince et lisse
- idéal pour le fraisage en finition de tous les aciers et aciers inoxydables
- excellente nuance pour les outils de petits diamètres (0.02-0.90 mm)

- Beschichtung der neuesten Generation mit ausgezeichneter Haftung, dünner und glatter Schicht
- hervorragend für Schlichtfräsen aller Stähle und rostfreien Stähle
- ausgezeichnete Sorte für Werkzeuge mit kleinem Durchmesser (0.02-0.90 mm)

- latest generation coating with excellent adhesion, thin and smooth layer
- ideal for finish milling for all steels and stainless steels
- specially adapted for small diameters (0.02-0.90 mm)

DLC



Revêtement DLC à couche mince
Dünnschicht DLC Beschichtung
Thin DLC coating

TF F M E

P ☆☆☆☆☆
M ☆☆☆☆☆
N ★★★★★
S ★★☆☆☆

- revêtement de très haute performance et à couche extra-mince
- très faible coefficient de frottement
- 1er choix pour toutes les matières précieuses, non ferreuses et abrasives, telles que l'or, l'argent, le laiton sans plomb, le cuivre, l'aluminium, la fibre de carbone, la nacre et divers polymères...
- angles de coupe à finition poli miroir, offrant une excellente acuité d'arête
- durée de vie de l'outil considérablement prolongée

- hochleistungsbeschichtung mit extra-feiner Schicht
- sehr geringer Reibwert
- erste Wahl für alle edlen, nicht eisenhaltig und abrasiven Materialien wie Gold, Silber, bleifreies Messing, Kupfer, Aluminium, Kohlefaser, Perlmutt und diverse Polymere...
- Schneidkanten mit hochglanzpolierte Oberfläche, die eine hervorragende Schneidkantenschärfe bieten
- deutlich verlängerte Lebensdauer des Werkzeugs

- very high-performance coating with extra-thin layer
- very low friction ratio
- first choice for all precious, non-ferrous and abrasive materials, such as gold, silver, lead-free brass, copper, aluminum, carbon fiber, mother-of-pearl and various polymers...
- cutting edges with mirror-polished finish, offering excellent edge sharpness
- significantly extended tool life

N



Non revêtu
Unbeschichtet
Uncoated

P ★★☆☆☆
M ★★☆☆☆
N ★★★★☆
S ★★☆☆☆

- carbures de haute qualité, adaptés aux différents groupes de produits
- tous les carbures ont une excellente dureté et une bonne résistance à la déformation
- acuité d'arête maximale grâce à une finition super polie
- idéal pour l'usinage en super finition de matières non ferreuses ou faiblement alliées

- hochwertige und spezifische Hartmetalle gemäss den Produktgruppen
- alle Hartmetalle haben eine ausgezeichnete Härte und eine gute Verformungsbeständigkeit
- maximale Kantenschärfe durch hochpoliertes Finish
- ideal für superfinish Bearbeitung von Nichteisen- oder niedriglegierten Materialien

- high-quality and specific carbides according to the product groups in our catalog
- all carbides have excellent hardness and good resistance to deformation
- maximum edge sharpness thanks to a super polished tool finish
- ideal for super-finish machining of non-ferrous or low-alloy materials

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

> 16.07

Z	λ	L2	D1	D2	Type	Corner	page
Z=1	0°	2x D1	Ø0.20 - 3.00	Ø3 h4 / Ø4 h5	**3170-2**	Sharp Corner	> 16.08
		2x D1	Ø0.20 - 3.00	Ø3 h4 / Ø4 h5	**3170R-2**		> 16.09
		3x D1	Ø0.20 - 3.00	Ø3 h4 / Ø4 h5	**3170R-3**		> 16.10
		4x D1	Ø0.30 - 3.00	Ø3 h4 / Ø4 h5	**3170R-4**		> 16.11
Z=2	30°	0.75x D1	Ø0.20 - 2.00	Ø3 h4	**3271-0.75**	Sharp Corner	> 16.12
		1x D1	Ø0.30 - 2.50	Ø3 h4	**3271-1**		> 16.13
		1.5x D1	Ø0.10 - 2.00	Ø3 h4	**3271-1.5**		> 16.14
		2x D1	Ø0.10 - 2.00	Ø3 h4	**3271-2**		> 16.15
		3x D1	Ø0.10 - 2.90	Ø3 h4	**3271-3**		> 16.16
		5x D1	Ø0.30 - 2.50	Ø3 h4	**3271-5**		> 16.17
		8x D1	Ø0.40 - 2.50	Ø3 h4 / Ø4 h5	**3271-8**		> 16.18
		2x D1	Ø0.20 - 3.00	Ø3 h4 / Ø6 h5	**3270S-3X**		> 16.19
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	**3270S-6X**		> 16.20
		2x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	**3270S-9X**		> 16.21
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	**3279T-3X**	Radius Corner	> 16.22
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	**3279T-6X**		> 16.23
		2x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	**3279T-9X**		> 16.24
Z=3	30°	1.3x D1	Ø0.30 - 2.90	Ø3 h4	**3371-1.3**	Sharp Corner	> 16.25
		2x D1	Ø0.30 - 2.90	Ø3 h4	**3371-2**		> 16.26
		3x D1	Ø0.30 - 2.90	Ø3 h4	**3371-3**		> 16.27
		4x D1	Ø0.30 - 2.90	Ø3 h4	**3371-4**		> 16.28
		5x D1	Ø0.50 - 2.50	Ø3 h4	**3371-5**		> 16.29
		8x D1	Ø0.50 - 2.50	Ø3 h4 / Ø4 h5	**3371-8**		> 16.30
	45°	2.5x D1	Ø0.30 - 2.90	Ø3 h4	**3375-2.5**		> 16.31
	36°-38°-40°	1.5x D1	Ø0.30 - 2.50	Ø3 h4	**DHD3371-1.5**		> 16.32
		3x D1	Ø0.30 - 2.50	Ø3 h4	**DHD3371-3**		> 16.33
	30°	2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	**3370S-3X**		> 16.34
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	**3370S-6X**		> 16.35
		2x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	**3370S-9X**		> 16.36
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	**3379T-3X**	Radius Corner	> 16.37
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	**3379T-6X**		> 16.38
		2x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	**3379T-9X**		> 16.39
Z=4	30°	1.5x D1	Ø0.30 - 2.90	Ø3 h4	**3471-1.5**	Sharp Corner	> 16.40
		3x D1	Ø0.30 - 2.90	Ø3 h4	**3471-3**		> 16.41
	40°	2x D1	Ø0.30 - 2.90	Ø3 h4	**3472-2**		> 16.42
		4x D1	Ø0.40 - 2.90	Ø3 h4	**3472-4**		> 16.43
	35°-38°	3x D1	Ø0.50 - 2.50	Ø3 h4	**DHP3471-3**		> 16.44
Z=2	30°	0.75x D1	Ø0.20 - 2.50	Ø3 h4	**3278-0.75**	U	> 16.45
		1x D1	Ø0.20 - 2.90	Ø3 h4	**3278-1**		> 16.46
		1.5x D1	Ø0.20 - 2.90	Ø3 h4	**3278-1.5**		> 16.47
		3x D1	Ø0.20 - 2.90	Ø3 h4	**3278-3**		> 16.48
		1.5x D1	Ø0.20 - 3.00	Ø3 h4 / Ø6 h5	**3278H-3X**		> 16.49
		1.5x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	**3278H-6X**		> 16.50
		1.5x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	**3278H-9X**		> 16.51

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

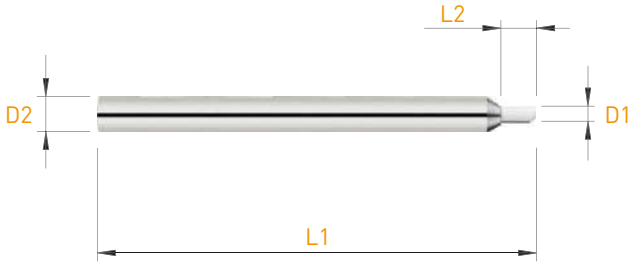
Matière Werkstoff Material	VC (m/min)	0.10 - 0.50 fz (mm)	0.60 - 1.50 fz (mm)	1.60 - 2.90 fz (mm)	N	TiAlN	STF	TiCN	DLC
Acier de décolletage Automatenstahl Free-cutting steel (P)	80 - 130	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Acier Stahl < 600 N/mm² (P) Steel	70 - 100	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Acier Stahl < 800 N/mm² (P) Steel	70 - 100	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Acier Stahl > 800 N/mm² (P) Steel	50 - 80	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Acier trempé Gehärteter Stahl -55HRC (H) Hardened steel	60 - 90	0.001 - 0.002	0.003 - 0.005	0.007 - 0.010	-	★★★	★★★	★	-
Acier trempé Gehärteter Stahl +55HRC (H) Hardened steel	40 - 70	0.001 - 0.002	0.003 - 0.005	0.007 - 0.010	-	★★★	★★★	★	-
Inox Rostfreistahl (M) Stainless steel	40 - 80	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Aluminium (N)	200 - 300	0.002 - 0.005	0.005 - 0.010	0.010 - 0.030	★★★	-	-	★★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze (N) Copper, brass, bronze	100 - 200	0.001 - 0.005	0.006 - 0.010	0.010 - 0.015	★★★	★★	★★	★★	★★★
Matière synthétique Synthetisches Material (N) Synthetic material	200 - 700	0.002 - 0.004	0.006 - 0.015	0.015 - 0.050	★★★	★★	★★	★★	★★★
Métaux précieux Edelmetalle (N) Precious metals	90 - 140	0.002 - 0.003	0.004 - 0.012	0.012 - 0.025	★★★	★★	★★	★	★★★
Titane Titan (S) Titanium	25 - 70	0.001 - 0.003	0.004 - 0.010	0.006 - 0.015	-	★★★	★★★	★★	-
Alliage de nickel Nickel-Legierung (S) Nickel alloy	40 - 70	0.001 - 0.003	0.004 - 0.008	0.008 - 0.012	-	★★★	★★★	★★	-
Matière exotique Exotisches material (O) Exotic material	15 - 25	0.001 - 0.002	0.003 - 0.005	0.006 - 0.010	-	★★★	★★★	★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

★ Bien / Gut / Good
★★ Très bien / Sehr gut / Very good
★★★ Excellent / Ausgezeichnet / Excellent

3170-2

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 0°

Sharp Corner

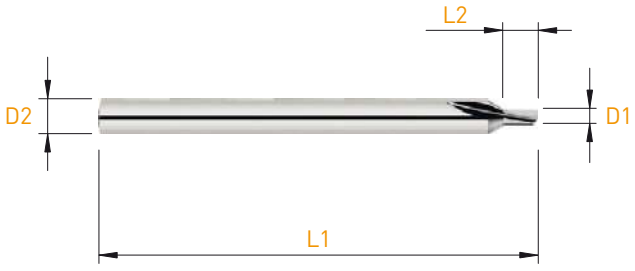
2xD1

Z=1

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.40	3.00	39	**3170-2-0.20**	●				
0.30	0.60	3.00	39	**3170-2-0.30**	●	●	●	●	●
0.40	0.80	3.00	39	**3170-2-0.40**	●	●	●	●	●
0.50	1.00	3.00	39	**3170-2-0.50**	●	●	●	●	●
0.60	1.20	3.00	39	**3170-2-0.60**	●	●	●	●	●
0.70	1.40	3.00	39	**3170-2-0.70**	●	●	●	●	●
0.80	1.60	3.00	39	**3170-2-0.80**	●	●	●	●	●
0.90	1.80	3.00	39	**3170-2-0.90**	●	●	●	●	●
1.00	2.00	3.00	39	**3170-2-1.00**	●	●	●	●	●
1.10	2.20	3.00	39	**3170-2-1.10**	●	●	●	●	●
1.20	2.40	3.00	39	**3170-2-1.20**	●	●	●	●	●
1.30	2.60	3.00	39	**3170-2-1.30**	●	●	●	●	●
1.40	2.80	3.00	39	**3170-2-1.40**	●	●	●	●	●
1.50	3.00	3.00	39	**3170-2-1.50**	●	●	●	●	●
1.60	3.20	3.00	39	**3170-2-1.60**	●	●	●	●	●
1.70	3.40	3.00	39	**3170-2-1.70**	●	●	●	●	●
1.80	3.60	3.00	39	**3170-2-1.80**	●	●	●	●	●
1.90	3.80	3.00	39	**3170-2-1.90**	●	●	●	●	●
2.00	4.00	3.00	39	**3170-2-2.00**	●	●	●	●	●
2.10	4.20	3.00	39	**3170-2-2.10**	●	●	●	●	●
2.20	4.40	3.00	39	**3170-2-2.20**	●	●	●	●	●
2.30	4.60	3.00	39	**3170-2-2.30**	●	●	●	●	●
2.40	4.80	3.00	39	**3170-2-2.40**	●	●	●	●	●
2.50	5.00	3.00	39	**3170-2-2.50**	●	●	●	●	●
2.60	5.20	3.00	39	**3170-2-2.60**	●	●	●	●	●
2.70	5.40	3.00	39	**3170-2-2.70**	●	●	●	●	●
2.80	5.60	3.00	39	**3170-2-2.80**	●	●	●	●	●
2.90	5.80	3.00	39	**3170-2-2.90**	●	●	●	●	●
3.00	6.00	4.00	40	**3170-2-3.00**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3170R-2



MD
VHM
HM

λ 0°

Sharp Corner

2xD1

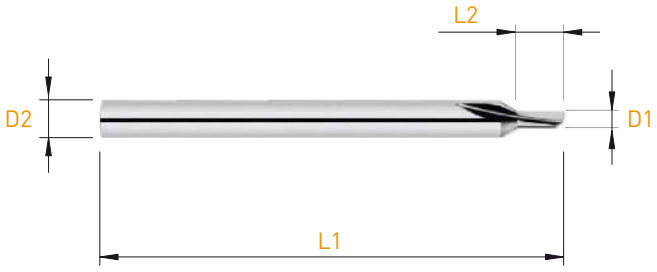
Z=1

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.40	3.00	39	**3170R-2-0.20**	●				
0.30	0.60	3.00	39	**3170R-2-0.30**	●	●	●	●	●
0.40	0.80	3.00	39	**3170R-2-0.40**	●	●	●	●	●
0.50	1.00	3.00	39	**3170R-2-0.50**	●	●	●	●	●
0.60	1.20	3.00	39	**3170R-2-0.60**	●	●	●	●	●
0.70	1.40	3.00	39	**3170R-2-0.70**	●	●	●	●	●
0.80	1.60	3.00	39	**3170R-2-0.80**	●	●	●	●	●
0.90	1.80	3.00	39	**3170R-2-0.90**	●	●	●	●	●
1.00	2.00	3.00	39	**3170R-2-1.00**	●	●	●	●	●
1.10	2.20	3.00	39	**3170R-2-1.10**	●	●	●	●	●
1.20	2.40	3.00	39	**3170R-2-1.20**	●	●	●	●	●
1.30	2.60	3.00	39	**3170R-2-1.30**	●	●	●	●	●
1.40	2.80	3.00	39	**3170R-2-1.40**	●	●	●	●	●
1.50	3.00	3.00	39	**3170R-2-1.50**	●	●	●	●	●
1.60	3.20	3.00	39	**3170R-2-1.60**	●	●	●	●	●
1.70	3.40	3.00	39	**3170R-2-1.70**	●	●	●	●	●
1.80	3.60	3.00	39	**3170R-2-1.80**	●	●	●	●	●
1.90	3.80	3.00	39	**3170R-2-1.90**	●	●	●	●	●
2.00	4.00	3.00	39	**3170R-2-2.00**	●	●	●	●	●
2.10	4.10	3.00	39	**3170R-2-2.10**	●	●	●	●	●
2.20	4.40	3.00	39	**3170R-2-2.20**	●	●	●	●	●
2.30	4.60	3.00	39	**3170R-2-2.30**	●	●	●	●	●
2.40	4.80	3.00	39	**3170R-2-2.40**	●	●	●	●	●
2.50	5.00	3.00	39	**3170R-2-2.50**	●	●	●	●	●
2.60	5.20	3.00	39	**3170R-2-2.60**	●	●	●	●	●
2.70	5.40	3.00	39	**3170R-2-2.70**	●	●	●	●	●
2.80	5.60	3.00	39	**3170R-2-2.80**	●	●	●	●	●
2.90	5.80	3.00	39	**3170R-2-2.90**	●	●	●	●	●
3.00	6.00	4.00	40	**3170R-2-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3170R-3

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 0°

Sharp Corner

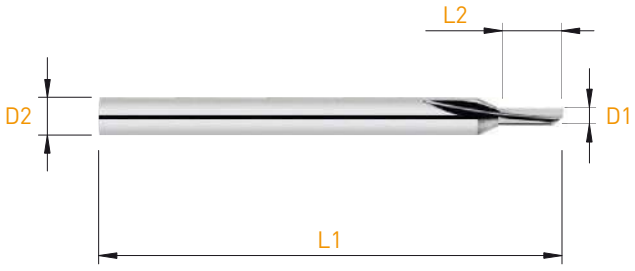
3xD1

Z=1

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.60	3.00	39	**3170R-3-0.20**	●				
0.30	0.90	3.00	39	**3170R-3-0.30**	●	●	●	●	●
0.40	1.20	3.00	39	**3170R-3-0.40**	●	●	●	●	●
0.50	1.50	3.00	39	**3170R-3-0.50**	●	●	●	●	●
0.60	1.80	3.00	39	**3170R-3-0.60**	●	●	●	●	●
0.70	2.10	3.00	39	**3170R-3-0.70**	●	●	●	●	●
0.80	2.40	3.00	39	**3170R-3-0.80**	●	●	●	●	●
0.90	2.70	3.00	39	**3170R-3-0.90**	●	●	●	●	●
1.00	3.00	3.00	39	**3170R-3-1.00**	●	●	●	●	●
1.10	3.30	3.00	39	**3170R-3-1.10**	●	●	●	●	●
1.20	3.60	3.00	39	**3170R-3-1.20**	●	●	●	●	●
1.30	3.90	3.00	39	**3170R-3-1.30**	●	●	●	●	●
1.40	4.20	3.00	39	**3170R-3-1.40**	●	●	●	●	●
1.50	4.50	3.00	39	**3170R-3-1.50**	●	●	●	●	●
2.00	6.00	3.00	39	**3170R-3-2.00**	●	●	●	●	●
2.50	7.50	3.00	39	**3170R-3-2.50**	●	●	●	●	●
3.00	9.00	4.00	40	**3170R-3-3.00**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3170R-4



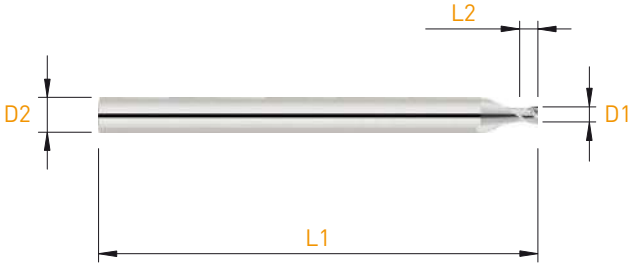
MD VHM HM | λ 0° | Sharp Corner | 4xD1 | Z=1

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	1.20	3.00	39	**3170R-4-0.30**	●	●	●	●	●
0.40	1.60	3.00	39	**3170R-4-0.40**	●	●	●	●	●
0.50	2.00	3.00	39	**3170R-4-0.50**	●	●	●	●	●
0.60	2.40	3.00	39	**3170R-4-0.60**	●	●	●	●	●
0.70	2.80	3.00	39	**3170R-4-0.70**	●	●	●	●	●
0.80	3.20	3.00	39	**3170R-4-0.80**	●	●	●	●	●
0.90	3.60	3.00	39	**3170R-4-0.90**	●	●	●	●	●
1.00	4.00	3.00	39	**3170R-4-1.00**	●	●	●	●	●
1.10	4.40	3.00	39	**3170R-4-1.10**	●	●	●	●	●
1.20	4.80	3.00	39	**3170R-4-1.20**	●	●	●	●	●
1.30	5.20	3.00	39	**3170R-4-1.30**	●	●	●	●	●
1.40	5.60	3.00	39	**3170R-4-1.40**	●	●	●	●	●
1.50	6.00	3.00	39	**3170R-4-1.50**	●	●	●	●	●
2.00	8.00	3.00	39	**3170R-4-2.00**	●	●	●	●	●
2.50	10.00	3.00	39	**3170R-4-2.50**	●	●	●	●	●
3.00	12.00	4.00	40	**3170R-4-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3271-0.75

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

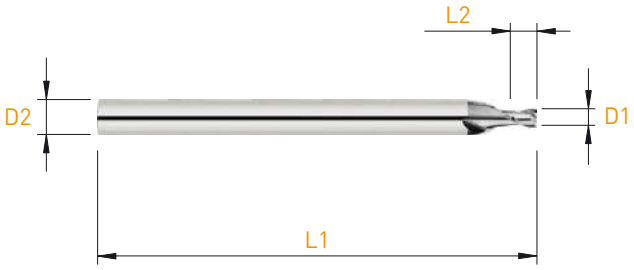
λ 30°

Sharp Corner

0.75xD1

Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.15	3.00	39	**3271-0.75-0.20**	●				
0.30	0.25	3.00	39	**3271-0.75-0.30**	●	●	●	●	●
0.40	0.30	3.00	39	**3271-0.75-0.40**	●	●	●	●	●
0.50	0.37	3.00	39	**3271-0.75-0.50**	●	●	●	●	●
0.60	0.45	3.00	39	**3271-0.75-0.60**	●	●	●	●	●
0.70	0.53	3.00	39	**3271-0.75-0.70**	●	●	●	●	●
0.80	0.60	3.00	39	**3271-0.75-0.80**	●	●	●	●	●
0.90	0.70	3.00	39	**3271-0.75-0.90**	●	●	●	●	●
1.00	0.75	3.00	39	**3271-0.75-1.00**	●	●	●	●	●
1.10	0.90	3.00	39	**3271-0.75-1.10**	●	●	●	●	●
1.20	0.90	3.00	39	**3271-0.75-1.20**	●	●	●	●	●
1.30	1.00	3.00	39	**3271-0.75-1.30**	●	●	●	●	●
1.40	1.10	3.00	39	**3271-0.75-1.40**	●	●	●	●	●
1.50	1.15	3.00	39	**3271-0.75-1.50**	●	●	●	●	●
1.60	1.20	3.00	39	**3271-0.75-1.60**	●	●	●	●	●
1.70	1.30	3.00	39	**3271-0.75-1.70**	●	●	●	●	●
1.80	1.40	3.00	39	**3271-0.75-1.80**	●	●	●	●	●
1.90	1.45	3.00	39	**3271-0.75-1.90**	●	●	●	●	●
2.00	1.50	3.00	39	**3271-0.75-2.00**	●	●	●	●	●



MD
VHM
HM

λ 30°

Sharp Corner

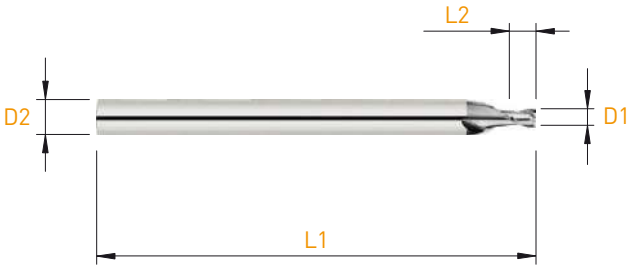
1xD1

Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.30	3.00	39	**3271-1-0.30**	●	●	●	●	●
0.40	0.40	3.00	39	**3271-1-0.40**	●	●	●	●	●
0.50	0.50	3.00	39	**3271-1-0.50**	●	●	●	●	●
0.60	0.60	3.00	39	**3271-1-0.60**	●	●	●	●	●
0.70	0.70	3.00	39	**3271-1-0.70**	●	●	●	●	●
0.80	0.80	3.00	39	**3271-1-0.80**	●	●	●	●	●
0.90	0.90	3.00	39	**3271-1-0.90**	●	●	●	●	●
1.00	1.00	3.00	39	**3271-1-1.00**	●	●	●	●	●
1.10	1.10	3.00	39	**3271-1-1.10**	●	●	●	●	●
1.20	1.20	3.00	39	**3271-1-1.20**	●	●	●	●	●
1.30	1.30	3.00	39	**3271-1-1.30**	●	●	●	●	●
1.40	1.40	3.00	39	**3271-1-1.40**	●	●	●	●	●
1.50	1.50	3.00	39	**3271-1-1.50**	●	●	●	●	●
1.60	1.60	3.00	39	**3271-1-1.60**	●	●	●	●	●
1.70	1.70	3.00	39	**3271-1-1.70**	●	●	●	●	●
1.80	1.80	3.00	39	**3271-1-1.80**	●	●	●	●	●
1.90	1.90	3.00	39	**3271-1-1.90**	●	●	●	●	●
2.00	2.00	3.00	39	**3271-1-2.00**	●	●	●	●	●
2.50	2.50	3.00	39	**3271-1-2.50**	●	●	●	●	●

3271-1.5

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

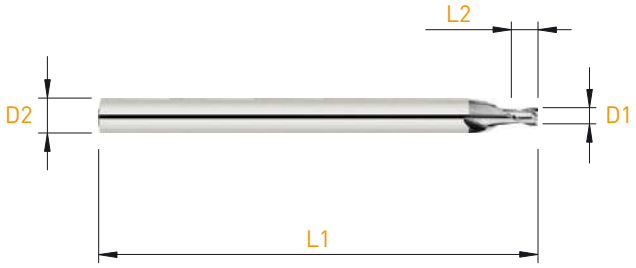
λ 30°

Sharp Corner

1.5xD1

Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.10	0.15	3.00	39	**3271-1.5-0.10**	●				
0.15	0.20	3.00	39	**3271-1.5-0.15**	●				
0.20	0.30	3.00	39	**3271-1.5-0.20**	●				
0.25	0.35	3.00	39	**3271-1.5-0.25**	●				
0.30	0.45	3.00	39	**3271-1.5-0.30**	●	●	●	●	●
0.40	0.60	3.00	39	**3271-1.5-0.40**	●	●	●	●	●
0.45	0.70	3.00	39	**3271-1.5-0.45**	●	●	●	●	●
0.50	0.75	3.00	39	**3271-1.5-0.50**	●	●	●	●	●
0.60	0.90	3.00	39	**3271-1.5-0.60**	●	●	●	●	●
0.70	1.05	3.00	39	**3271-1.5-0.70**	●	●	●	●	●
0.80	1.20	3.00	39	**3271-1.5-0.80**	●	●	●	●	●
0.90	1.35	3.00	39	**3271-1.5-0.90**	●	●	●	●	●
1.00	1.50	3.00	39	**3271-1.5-1.00**	●	●	●	●	●
1.10	1.65	3.00	39	**3271-1.5-1.10**	●	●	●	●	●
1.20	1.80	3.00	39	**3271-1.5-1.20**	●	●	●	●	●
1.30	1.95	3.00	39	**3271-1.5-1.30**	●	●	●	●	●
1.40	2.10	3.00	39	**3271-1.5-1.40**	●	●	●	●	●
1.50	2.25	3.00	39	**3271-1.5-1.50**	●	●	●	●	●
1.60	2.40	3.00	39	**3271-1.5-1.60**	●	●	●	●	●
1.70	2.55	3.00	39	**3271-1.5-1.70**	●	●	●	●	●
1.80	2.70	3.00	39	**3271-1.5-1.80**	●	●	●	●	●
1.90	2.85	3.00	39	**3271-1.5-1.90**	●	●	●	●	●
2.00	3.00	3.00	39	**3271-1.5-2.00**	●	●	●	●	●



MD
VHM
HM

λ 30°

Sharp Corner

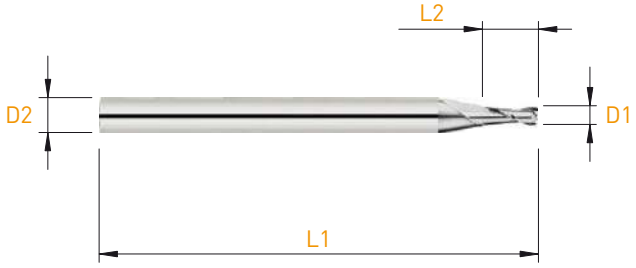
2xD1

Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.10	0.20	3.00	39	**3271-2-0.10**	●				
0.15	0.30	3.00	39	**3271-2-0.15**	●				
0.20	0.40	3.00	39	**3271-2-0.20**	●				
0.25	0.50	3.00	39	**3271-2-0.25**	●				
0.30	0.60	3.00	39	**3271-2-0.30**	●	●	●	●	●
0.40	0.80	3.00	39	**3271-2-0.40**	●	●	●	●	●
0.50	1.00	3.00	39	**3271-2-0.50**	●	●	●	●	●
0.60	1.20	3.00	39	**3271-2-0.60**	●	●	●	●	●
0.70	1.40	3.00	39	**3271-2-0.70**	●	●	●	●	●
0.80	1.60	3.00	39	**3271-2-0.80**	●	●	●	●	●
0.90	1.80	3.00	39	**3271-2-0.90**	●	●	●	●	●
1.00	2.00	3.00	39	**3271-2-1.00**	●	●	●	●	●
1.10	2.20	3.00	39	**3271-2-1.10**	●	●	●	●	●
1.20	2.40	3.00	39	**3271-2-1.20**	●	●	●	●	●
1.30	2.60	3.00	39	**3271-2-1.30**	●	●	●	●	●
1.40	2.80	3.00	39	**3271-2-1.40**	●	●	●	●	●
1.50	3.00	3.00	39	**3271-2-1.50**	●	●	●	●	●
1.60	3.20	3.00	39	**3271-2-1.60**	●	●	●	●	●
1.70	3.40	3.00	39	**3271-2-1.70**	●	●	●	●	●
1.80	3.60	3.00	39	**3271-2-1.80**	●	●	●	●	●
1.90	3.80	3.00	39	**3271-2-1.90**	●	●	●	●	●
2.00	4.00	3.00	39	**3271-2-2.00**	●	●	●	●	●

3271-3

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

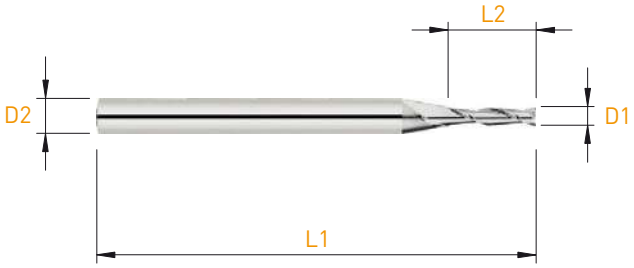
Sharp Corner

3xD1

Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.10	0.25	3.00	39	**3271-3-0.10**	●				
0.15	0.45	3.00	39	**3271-3-0.15**	●				
0.20	0.50	3.00	39	**3271-3-0.20**	●				
0.25	0.75	3.00	39	**3271-3-0.25**	●				
0.30	1.00	3.00	39	**3271-3-0.30**	●	●	●	●	●
0.35	1.10	3.00	39	**3271-3-0.35**	●	●	●	●	●
0.40	1.20	3.00	39	**3271-3-0.40**	●	●	●	●	●
0.50	1.50	3.00	39	**3271-3-0.50**	●	●	●	●	●
0.60	2.00	3.00	39	**3271-3-0.60**	●	●	●	●	●
0.65	2.00	3.00	39	**3271-3-0.65**	●	●	●	●	●
0.70	2.00	3.00	39	**3271-3-0.70**	●	●	●	●	●
0.75	2.00	3.00	39	**3271-3-0.75**	●	●	●	●	●
0.80	2.50	3.00	39	**3271-3-0.80**	●	●	●	●	●
0.90	2.50	3.00	39	**3271-3-0.90**	●	●	●	●	●
0.95	3.00	3.00	39	**3271-3-0.95**	●	●	●	●	●
1.00	3.00	3.00	39	**3271-3-1.00**	●	●	●	●	●
1.05	3.00	3.00	39	**3271-3-1.05**	●	●	●	●	●
1.10	3.00	3.00	39	**3271-3-1.10**	●	●	●	●	●
1.15	3.50	3.00	39	**3271-3-1.15**	●	●	●	●	●
1.20	4.00	3.00	39	**3271-3-1.20**	●	●	●	●	●
1.30	4.00	3.00	39	**3271-3-1.30**	●	●	●	●	●
1.35	4.00	3.00	39	**3271-3-1.35**	●	●	●	●	●
1.40	4.00	3.00	39	**3271-3-1.40**	●	●	●	●	●
1.45	4.40	3.00	39	**3271-3-1.45**	●	●	●	●	●
1.50	4.50	3.00	39	**3271-3-1.50**	●	●	●	●	●
1.55	4.50	3.00	39	**3271-3-1.55**	●	●	●	●	●
1.60	4.50	3.00	39	**3271-3-1.60**	●	●	●	●	●
1.65	5.00	3.00	39	**3271-3-1.65**	●	●	●	●	●
1.70	5.00	3.00	39	**3271-3-1.70**	●	●	●	●	●
1.75	5.30	3.00	39	**3271-3-1.75**	●	●	●	●	●

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
1.80	6.00	3.00	39	**3271-3-1.80**	●	●	●	●	●
1.85	6.00	3.00	39	**3271-3-1.85**	●	●	●	●	●
1.90	6.00	3.00	39	**3271-3-1.90**	●	●	●	●	●
1.95	6.00	3.00	39	**3271-3-1.95**	●	●	●	●	●
2.00	6.00	3.00	39	**3271-3-2.00**	●	●	●	●	●
2.10	6.00	3.00	39	**3271-3-2.10**	●	●	●	●	●
2.20	6.50	3.00	39	**3271-3-2.20**	●	●	●	●	●
2.30	7.00	3.00	39	**3271-3-2.30**	●	●	●	●	●
2.40	7.00	3.00	39	**3271-3-2.40**	●	●	●	●	●
2.50	7.50	3.00	39	**3271-3-2.50**	●	●	●	●	●
2.60	7.50	3.00	39	**3271-3-2.60**	●	●	●	●	●
2.70	8.00	3.00	39	**3271-3-2.70**	●	●	●	●	●
2.80	8.00	3.00	39	**3271-3-2.80**	●	●	●	●	●
2.90	8.00	3.00	39	**3271-3-2.90**	●	●	●	●	●



MD
VHM
HM

λ 30°

Sharp Corner

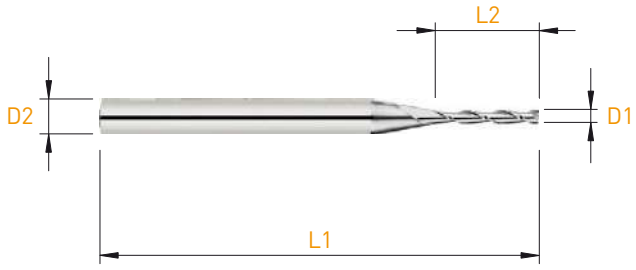
5xD1

Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	1.50	3.00	39	**3271-5-0.30**	●	●	●	●	●
0.35	1.80	3.00	39	**3271-5-0.35**	●	●	●	●	●
0.40	2.00	3.00	39	**3271-5-0.40**	●	●	●	●	●
0.50	2.50	3.00	39	**3271-5-0.50**	●	●	●	●	●
0.55	2.80	3.00	39	**3271-5-0.55**	●	●	●	●	●
0.60	3.00	3.00	39	**3271-5-0.60**	●	●	●	●	●
0.65	3.30	3.00	39	**3271-5-0.65**	●	●	●	●	●
0.70	3.50	3.00	39	**3271-5-0.70**	●	●	●	●	●
0.75	3.80	3.00	39	**3271-5-0.75**	●	●	●	●	●
0.80	4.00	3.00	39	**3271-5-0.80**	●	●	●	●	●
0.85	4.30	3.00	39	**3271-5-0.85**	●	●	●	●	●
0.90	4.50	3.00	39	**3271-5-0.90**	●	●	●	●	●
0.95	4.80	3.00	39	**3271-5-0.95**	●	●	●	●	●
1.00	5.00	3.00	39	**3271-5-1.00**	●	●	●	●	●
1.10	5.50	3.00	39	**3271-5-1.10**	●	●	●	●	●
1.20	6.00	3.00	39	**3271-5-1.20**	●	●	●	●	●
1.50	7.50	3.00	39	**3271-5-1.50**	●	●	●	●	●
2.00	10.00	3.00	39	**3271-5-2.00**	●	●	●	●	●
2.50	12.50	3.00	39	**3271-5-2.50**	●	●	●	●	●

3271-8

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Sharp Corner

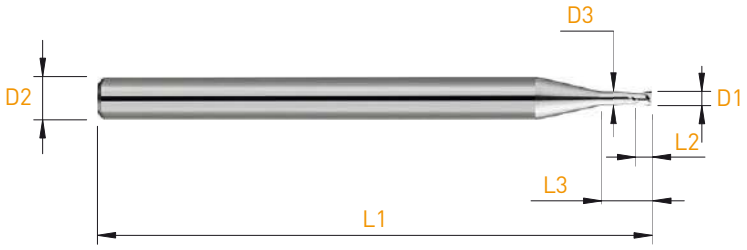
8xD1

Z=2

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	3.20	3.00	39	**3271-8-0.40**	●	●	●	●	●
0.50	4.00	3.00	39	**3271-8-0.50**	●	●	●	●	●
0.60	5.00	3.00	39	**3271-8-0.60**	●	●	●	●	●
0.70	5.60	3.00	39	**3271-8-0.70**	●	●	●	●	●
0.80	6.00	3.00	39	**3271-8-0.80**	●	●	●	●	●
0.90	7.20	3.00	39	**3271-8-0.90**	●	●	●	●	●
1.00	8.00	3.00	39	**3271-8-1.00**	●	●	●	●	●
1.20	9.00	3.00	39	**3271-8-1.20**	●	●	●	●	●
1.50	12.00	4.00	50	**3271-8-1.50**	●	●	●	●	●
2.00	16.00	4.00	50	**3271-8-2.00**	●	●	●	●	●
2.50	20.00	4.00	50	**3271-8-2.50**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3270S-3X



MD
VHM
HM

λ 30°

Sharp Corner

L3
3xD1

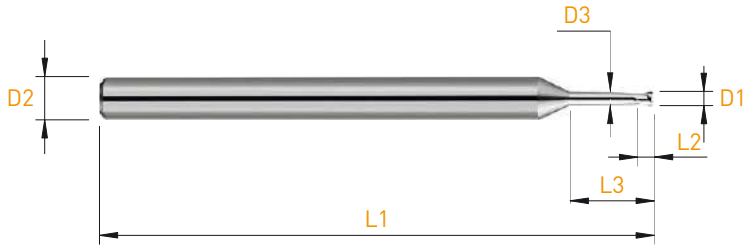
Z=2

D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.40	0.60	0.17	3.00	39	**3270S-3X-0.20**	●				
0.30	0.60	0.90	0.27	3.00	39	**3270S-3X-0.30**	●	●	●	●	●
0.40	0.80	1.20	0.37	3.00	39	**3270S-3X-0.40**	●	●	●	●	●
0.50	1.00	1.50	0.45	3.00	39	**3270S-3X-0.50**	●	●	●	●	●
0.60	1.20	1.80	0.55	3.00	39	**3270S-3X-0.60**	●	●	●	●	●
0.70	1.40	2.10	0.65	3.00	39	**3270S-3X-0.70**	●	●	●	●	●
0.80	1.60	2.40	0.75	3.00	39	**3270S-3X-0.80**	●	●	●	●	●
0.90	1.80	2.70	0.85	3.00	39	**3270S-3X-0.90**	●	●	●	●	●
1.00	2.00	3.00	0.95	3.00	39	**3270S-3X-1.00**	●	●	●	●	●
1.10	2.20	3.30	1.05	3.00	39	**3270S-3X-1.10**	●	●	●	●	●
1.20	2.40	3.60	1.15	3.00	39	**3270S-3X-1.20**	●	●	●	●	●
1.30	2.60	3.90	1.25	3.00	39	**3270S-3X-1.30**	●	●	●	●	●
1.40	2.80	4.20	1.35	3.00	39	**3270S-3X-1.40**	●	●	●	●	●
1.50	3.00	4.50	1.45	3.00	39	**3270S-3X-1.50**	●	●	●	●	●
1.60	3.20	4.80	1.55	3.00	39	**3270S-3X-1.60**	●	●	●	●	●
1.70	3.40	5.10	1.65	3.00	39	**3270S-3X-1.70**	●	●	●	●	●
1.80	3.60	5.40	1.75	3.00	39	**3270S-3X-1.80**	●	●	●	●	●
1.90	3.80	5.70	1.85	3.00	39	**3270S-3X-1.90**	●	●	●	●	●
2.00	4.00	6.00	1.95	6.00	50	**3270S-3X-2.00**	●	●	●	●	●
2.10	4.20	6.30	2.05	6.00	50	**3270S-3X-2.10**	●	●	●	●	●
2.20	4.40	6.60	2.15	6.00	50	**3270S-3X-2.20**	●	●	●	●	●
2.30	4.60	6.90	2.25	6.00	50	**3270S-3X-2.30**	●	●	●	●	●
2.40	4.80	7.20	2.35	6.00	50	**3270S-3X-2.40**	●	●	●	●	●
2.50	5.00	7.50	2.45	6.00	50	**3270S-3X-2.50**	●	●	●	●	●
3.00	6.00	9.00	2.95	6.00	50	**3270S-3X-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3270S-6X

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Sharp Corner

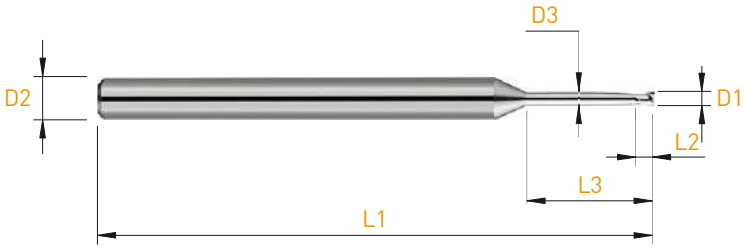
L3
6xD1

Z=2

D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	1.80	0.27	3.00	39	**3270S-6X-0.30**	●	●	●	●	●
0.40	0.80	2.40	0.37	3.00	39	**3270S-6X-0.40**	●	●	●	●	●
0.50	1.00	3.00	0.45	3.00	39	**3270S-6X-0.50**	●	●	●	●	●
0.60	1.20	3.60	0.55	3.00	39	**3270S-6X-0.60**	●	●	●	●	●
0.70	1.40	4.20	0.65	3.00	39	**3270S-6X-0.70**	●	●	●	●	●
0.80	1.60	4.80	0.75	3.00	39	**3270S-6X-0.80**	●	●	●	●	●
0.90	1.80	5.40	0.85	3.00	39	**3270S-6X-0.90**	●	●	●	●	●
1.00	2.00	6.00	0.95	3.00	39	**3270S-6X-1.00**	●	●	●	●	●
1.10	2.20	6.60	1.05	3.00	39	**3270S-6X-1.10**	●	●	●	●	●
1.20	2.40	7.20	1.15	3.00	39	**3270S-6X-1.20**	●	●	●	●	●
1.30	2.60	7.80	1.25	3.00	39	**3270S-6X-1.30**	●	●	●	●	●
1.40	2.80	8.40	1.35	3.00	39	**3270S-6X-1.40**	●	●	●	●	●
1.50	3.00	9.00	1.45	3.00	39	**3270S-6X-1.50**	●	●	●	●	●
1.60	3.20	9.60	1.55	3.00	39	**3270S-6X-1.60**	●	●	●	●	●
1.70	3.40	10.20	1.65	3.00	39	**3270S-6X-1.70**	●	●	●	●	●
1.80	3.60	10.80	1.75	3.00	39	**3270S-6X-1.80**	●	●	●	●	●
1.90	3.80	11.40	1.85	3.00	39	**3270S-6X-1.90**	●	●	●	●	●
2.00	4.00	12.00	1.95	6.00	50	**3270S-6X-2.00**	●	●	●	●	●
2.10	4.20	12.60	2.05	6.00	50	**3270S-6X-2.10**	●	●	●	●	●
2.20	4.40	13.20	2.15	6.00	50	**3270S-6X-2.20**	●	●	●	●	●
2.30	4.60	13.80	2.25	6.00	50	**3270S-6X-2.30**	●	●	●	●	●
2.40	4.80	14.40	2.35	6.00	50	**3270S-6X-2.40**	●	●	●	●	●
2.50	5.00	15.00	2.45	6.00	50	**3270S-6X-2.50**	●	●	●	●	●
3.00	6.00	18.00	2.95	6.00	50	**3270S-6X-3.00**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3270S-9X



MD
VHM
HM

λ 30°

Sharp Corner

L3
9xD1

Z=2

D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.80	3.60	0.37	3.00	39	**3270S-9X-0.40**	●	●	●	●	●
0.50	1.00	4.50	0.45	3.00	39	**3270S-9X-0.50**	●	●	●	●	●
0.60	1.20	5.40	0.55	3.00	39	**3270S-9X-0.60**	●	●	●	●	●
0.70	1.40	6.30	0.65	3.00	39	**3270S-9X-0.70**	●	●	●	●	●
0.80	1.60	7.20	0.75	3.00	39	**3270S-9X-0.80**	●	●	●	●	●
0.90	1.80	8.10	0.85	3.00	39	**3270S-9X-0.90**	●	●	●	●	●
1.00	2.00	9.00	0.95	3.00	39	**3270S-9X-1.00**	●	●	●	●	●
1.10	2.20	9.90	1.05	3.00	39	**3270S-9X-1.10**	●	●	●	●	●
1.20	2.40	10.80	1.15	3.00	39	**3270S-9X-1.20**	●	●	●	●	●
1.30	2.60	11.70	1.25	3.00	39	**3270S-9X-1.30**	●	●	●	●	●
1.40	2.80	12.60	1.35	3.00	39	**3270S-9X-1.40**	●	●	●	●	●
1.50	3.00	13.50	1.45	3.00	39	**3270S-9X-1.50**	●	●	●	●	●
1.60	3.20	14.40	1.55	3.00	39	**3270S-9X-1.60**	●	●	●	●	●
1.70	3.40	15.30	1.65	3.00	39	**3270S-9X-1.70**	●	●	●	●	●
1.80	3.60	16.20	1.75	3.00	39	**3270S-9X-1.80**	●	●	●	●	●
1.90	3.80	17.10	1.85	3.00	39	**3270S-9X-1.90**	●	●	●	●	●
2.00	4.00	18.00	1.95	6.00	50	**3270S-9X-2.00**	●	●	●	●	●
2.10	4.20	18.90	2.05	6.00	50	**3270S-9X-2.10**	●	●	●	●	●
2.20	4.40	19.80	2.15	6.00	50	**3270S-9X-2.20**	●	●	●	●	●
2.30	4.60	20.70	2.25	6.00	50	**3270S-9X-2.30**	●	●	●	●	●
2.40	4.80	21.60	2.35	6.00	50	**3270S-9X-2.40**	●	●	●	●	●
2.50	5.00	22.50	2.45	6.00	50	**3270S-9X-2.50**	●	●	●	●	●
3.00	6.00	27.00	2.95	6.00	50	**3270S-9X-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3279T-3X

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Radius
Corner

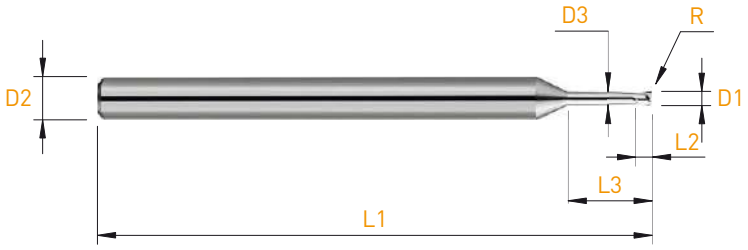
L3
3xD1

Z=2

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	0.90	0.27	3.00	39	**3279T-3X-0.30**	●	●	●	●	●
0.40	0.05	0.80	1.20	0.37	3.00	39	**3279T-3X-0.40**	●	●	●	●	●
0.50	0.05	1.00	1.50	0.45	3.00	39	**3279T-3X-0.50**	●	●	●	●	●
0.60	0.05	1.20	1.80	0.55	3.00	39	**3279T-3X-0.60**	●	●	●	●	●
0.70	0.05	1.40	2.10	0.65	3.00	39	**3279T-3X-0.70**	●	●	●	●	●
0.80	0.05	1.60	2.40	0.75	3.00	39	**3279T-3X-0.80**	●	●	●	●	●
0.90	0.05	1.80	2.70	0.85	3.00	39	**3279T-3X-0.90**	●	●	●	●	●
1.00	0.10	2.00	3.00	0.95	3.00	39	**3279T-3X-1.00**	●	●	●	●	●
1.10	0.10	2.20	3.30	1.05	3.00	39	**3279T-3X-1.10**	●	●	●	●	●
1.20	0.10	2.40	3.60	1.15	3.00	39	**3279T-3X-1.20**	●	●	●	●	●
1.30	0.10	2.60	3.90	1.25	3.00	39	**3279T-3X-1.30**	●	●	●	●	●
1.40	0.10	2.80	4.20	1.35	3.00	39	**3279T-3X-1.40**	●	●	●	●	●
1.50	0.20	3.00	4.50	1.45	3.00	39	**3279T-3X-1.50**	●	●	●	●	●
1.60	0.20	3.20	4.80	1.55	3.00	39	**3279T-3X-1.60**	●	●	●	●	●
1.70	0.20	3.40	5.10	1.65	3.00	39	**3279T-3X-1.70**	●	●	●	●	●
1.80	0.20	3.60	5.40	1.75	3.00	39	**3279T-3X-1.80**	●	●	●	●	●
1.90	0.20	3.80	5.70	1.85	3.00	39	**3279T-3X-1.90**	●	●	●	●	●
2.00	0.20	4.00	6.00	1.95	6.00	50	**3279T-3X-2.00**	●	●	●	●	●
2.10	0.20	4.20	6.30	2.05	6.00	50	**3279T-3X-2.10**	●	●	●	●	●
2.20	0.20	4.40	6.60	2.15	6.00	50	**3279T-3X-2.20**	●	●	●	●	●
2.30	0.20	4.60	6.90	2.25	6.00	50	**3279T-3X-2.30**	●	●	●	●	●
2.40	0.20	4.80	7.20	2.35	6.00	50	**3279T-3X-2.40**	●	●	●	●	●
2.50	0.20	5.00	7.50	2.45	6.00	50	**3279T-3X-2.50**	●	●	●	●	●
3.00	0.20	6.00	9.00	2.95	6.00	50	**3279T-3X-3.00**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3279T-6X



MD
VHM
HM

λ 30°

Radius Corner

L3
6xD1

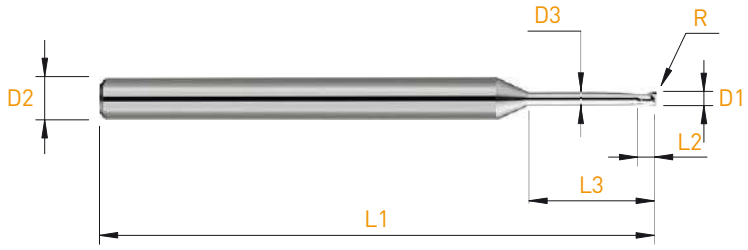
Z=2

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	1.80	0.27	3.00	39	**3279T-6X-0.30**	●	●	●	●	●
0.40	0.05	0.80	2.40	0.37	3.00	39	**3279T-6X-0.40**	●	●	●	●	●
0.50	0.05	1.00	3.00	0.45	3.00	39	**3279T-6X-0.50**	●	●	●	●	●
0.60	0.05	1.20	3.60	0.55	3.00	39	**3279T-6X-0.60**	●	●	●	●	●
0.70	0.05	1.40	4.20	0.65	3.00	39	**3279T-6X-0.70**	●	●	●	●	●
0.80	0.05	1.60	4.80	0.75	3.00	39	**3279T-6X-0.80**	●	●	●	●	●
0.90	0.05	1.80	5.40	0.85	3.00	39	**3279T-6X-0.90**	●	●	●	●	●
1.00	0.10	2.00	6.00	0.95	3.00	39	**3279T-6X-1.00**	●	●	●	●	●
1.10	0.10	2.20	6.60	1.05	3.00	39	**3279T-6X-1.10**	●	●	●	●	●
1.20	0.10	2.40	7.20	1.15	3.00	39	**3279T-6X-1.20**	●	●	●	●	●
1.30	0.10	2.60	7.80	1.25	3.00	39	**3279T-6X-1.30**	●	●	●	●	●
1.40	0.10	2.80	8.40	1.35	3.00	39	**3279T-6X-1.40**	●	●	●	●	●
1.50	0.20	3.00	9.00	1.45	3.00	39	**3279T-6X-1.50**	●	●	●	●	●
1.60	0.20	3.20	9.60	1.55	3.00	39	**3279T-6X-1.60**	●	●	●	●	●
1.70	0.20	3.40	10.20	1.65	3.00	39	**3279T-6X-1.70**	●	●	●	●	●
1.80	0.20	3.60	10.80	1.75	3.00	39	**3279T-6X-1.80**	●	●	●	●	●
1.90	0.20	3.80	11.40	1.85	3.00	39	**3279T-6X-1.90**	●	●	●	●	●
2.00	0.20	4.00	12.00	1.95	6.00	50	**3279T-6X-2.00**	●	●	●	●	●
2.10	0.20	4.20	12.60	2.05	6.00	50	**3279T-6X-2.10**	●	●	●	●	●
2.20	0.20	4.40	13.20	2.15	6.00	50	**3279T-6X-2.20**	●	●	●	●	●
2.30	0.20	4.60	13.80	2.25	6.00	50	**3279T-6X-2.30**	●	●	●	●	●
2.40	0.20	4.80	14.40	2.35	6.00	50	**3279T-6X-2.40**	●	●	●	●	●
2.50	0.20	5.00	15.00	2.45	6.00	50	**3279T-6X-2.50**	●	●	●	●	●
3.00	0.20	6.00	18.00	2.95	6.00	50	**3279T-6X-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3279T-9X

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Radius
Corner

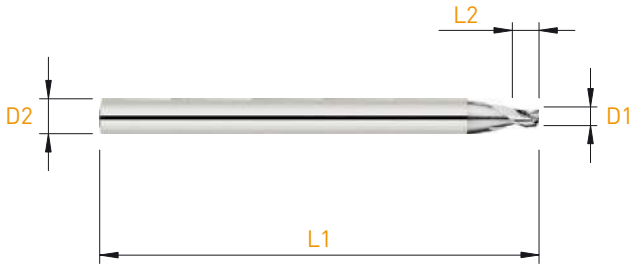
L3
9xD1

Z=2

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.05	0.80	3.60	0.37	3.00	39	**3279T-9X-0.40**	●	●	●	●	●
0.50	0.05	1.00	4.50	0.45	3.00	39	**3279T-9X-0.50**	●	●	●	●	●
0.60	0.05	1.20	5.40	0.55	3.00	39	**3279T-9X-0.60**	●	●	●	●	●
0.70	0.05	1.40	6.30	0.65	3.00	39	**3279T-9X-0.70**	●	●	●	●	●
0.80	0.05	1.60	7.20	0.75	3.00	39	**3279T-9X-0.80**	●	●	●	●	●
0.90	0.05	1.80	8.10	0.85	3.00	39	**3279T-9X-0.90**	●	●	●	●	●
1.00	0.10	2.00	9.00	0.95	3.00	39	**3279T-9X-1.00**	●	●	●	●	●
1.10	0.10	2.20	9.90	1.05	3.00	39	**3279T-9X-1.10**	●	●	●	●	●
1.20	0.10	2.40	10.80	1.15	3.00	39	**3279T-9X-1.20**	●	●	●	●	●
1.30	0.10	2.60	11.70	1.25	3.00	39	**3279T-9X-1.30**	●	●	●	●	●
1.40	0.10	2.80	12.60	1.35	3.00	39	**3279T-9X-1.40**	●	●	●	●	●
1.50	0.20	3.00	13.50	1.45	3.00	39	**3279T-9X-1.50**	●	●	●	●	●
1.60	0.20	3.20	14.40	1.55	3.00	39	**3279T-9X-1.60**	●	●	●	●	●
1.70	0.20	3.40	15.30	1.65	3.00	39	**3279T-9X-1.70**	●	●	●	●	●
1.80	0.20	3.60	16.20	1.75	3.00	39	**3279T-9X-1.80**	●	●	●	●	●
1.90	0.20	3.80	17.10	1.85	3.00	39	**3279T-9X-1.90**	●	●	●	●	●
2.00	0.20	4.00	18.00	1.95	6.00	50	**3279T-9X-2.00**	●	●	●	●	●
2.10	0.20	4.20	18.90	2.05	6.00	50	**3279T-9X-2.10**	●	●	●	●	●
2.20	0.20	4.40	19.80	2.15	6.00	50	**3279T-9X-2.20**	●	●	●	●	●
2.30	0.20	4.60	20.70	2.25	6.00	50	**3279T-9X-2.30**	●	●	●	●	●
2.40	0.20	4.80	21.60	2.35	6.00	50	**3279T-9X-2.40**	●	●	●	●	●
2.50	0.20	5.00	22.50	2.45	6.00	50	**3279T-9X-2.50**	●	●	●	●	●
3.00	0.20	6.00	27.00	2.95	6.00	50	**3279T-9X-3.00**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3371-1.3



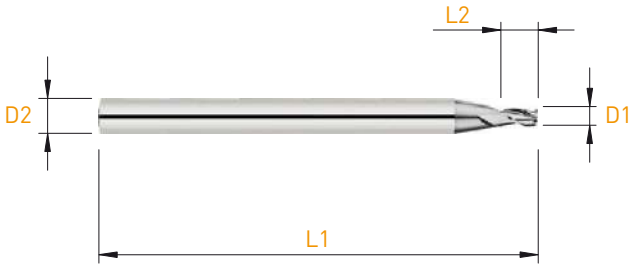
MD VHM HM | λ 30° | Sharp Corner | 1.3xD1 | Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.40	3.00	39	**3371-1.3-0.30**	●	●	●	●	●
0.35	0.50	3.00	39	**3371-1.3-0.35**	●	●	●	●	●
0.40	0.50	3.00	39	**3371-1.3-0.40**	●	●	●	●	●
0.45	0.60	3.00	39	**3371-1.3-0.45**	●	●	●	●	●
0.50	0.70	3.00	39	**3371-1.3-0.50**	●	●	●	●	●
0.60	0.80	3.00	39	**3371-1.3-0.60**	●	●	●	●	●
0.70	0.90	3.00	39	**3371-1.3-0.70**	●	●	●	●	●
0.80	1.00	3.00	39	**3371-1.3-0.80**	●	●	●	●	●
0.90	1.30	3.00	39	**3371-1.3-0.90**	●	●	●	●	●
1.00	1.30	3.00	39	**3371-1.3-1.00**	●	●	●	●	●
1.10	1.50	3.00	39	**3371-1.3-1.10**	●	●	●	●	●
1.20	1.60	3.00	39	**3371-1.3-1.20**	●	●	●	●	●
1.30	1.80	3.00	39	**3371-1.3-1.30**	●	●	●	●	●
1.40	1.80	3.00	39	**3371-1.3-1.40**	●	●	●	●	●
1.50	2.00	3.00	39	**3371-1.3-1.50**	●	●	●	●	●
1.55	2.00	3.00	39	**3371-1.3-1.55**	●	●	●	●	●
1.60	2.00	3.00	39	**3371-1.3-1.60**	●	●	●	●	●
1.65	2.00	3.00	39	**3371-1.3-1.65**	●	●	●	●	●
1.70	2.00	3.00	39	**3371-1.3-1.70**	●	●	●	●	●
1.80	2.40	3.00	39	**3371-1.3-1.80**	●	●	●	●	●
1.90	2.40	3.00	39	**3371-1.3-1.90**	●	●	●	●	●
2.00	2.60	3.00	39	**3371-1.3-2.00**	●	●	●	●	●
2.05	2.70	3.00	39	**3371-1.3-2.05**	●	●	●	●	●
2.20	3.00	3.00	39	**3371-1.3-2.20**	●	●	●	●	●
2.50	3.30	3.00	39	**3371-1.3-2.50**	●	●	●	●	●
2.80	3.50	3.00	39	**3371-1.3-2.80**	●	●	●	●	●
2.90	3.50	3.00	39	**3371-1.3-2.90**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3371-2

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Sharp Corner

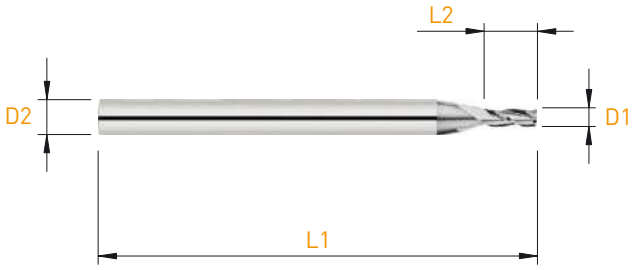
2xD1

Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	3.00	39	**3371-2-0.30**	●	●	●	●	●
0.35	0.70	3.00	39	**3371-2-0.35**	●	●	●	●	●
0.40	0.80	3.00	39	**3371-2-0.40**	●	●	●	●	●
0.45	0.90	3.00	39	**3371-2-0.45**	●	●	●	●	●
0.50	1.00	3.00	39	**3371-2-0.50**	●	●	●	●	●
0.60	1.20	3.00	39	**3371-2-0.60**	●	●	●	●	●
0.70	1.40	3.00	39	**3371-2-0.70**	●	●	●	●	●
0.75	1.50	3.00	39	**3371-2-0.75**	●	●	●	●	●
0.80	1.60	3.00	39	**3371-2-0.80**	●	●	●	●	●
0.90	1.80	3.00	39	**3371-2-0.90**	●	●	●	●	●
0.95	1.90	3.00	39	**3371-2-0.95**	●	●	●	●	●
1.00	2.00	3.00	39	**3371-2-1.00**	●	●	●	●	●
1.10	2.20	3.00	39	**3371-2-1.10**	●	●	●	●	●
1.20	2.40	3.00	39	**3371-2-1.20**	●	●	●	●	●
1.30	2.60	3.00	39	**3371-2-1.30**	●	●	●	●	●
1.40	2.80	3.00	39	**3371-2-1.40**	●	●	●	●	●
1.50	3.00	3.00	39	**3371-2-1.50**	●	●	●	●	●
1.60	3.20	3.00	39	**3371-2-1.60**	●	●	●	●	●
1.70	3.40	3.00	39	**3371-2-1.70**	●	●	●	●	●
1.80	3.60	3.00	39	**3371-2-1.80**	●	●	●	●	●
1.90	3.80	3.00	39	**3371-2-1.90**	●	●	●	●	●
2.00	4.00	3.00	39	**3371-2-2.00**	●	●	●	●	●
2.10	4.20	3.00	39	**3371-2-2.10**	●	●	●	●	●
2.20	4.40	3.00	39	**3371-2-2.20**	●	●	●	●	●
2.30	4.60	3.00	39	**3371-2-2.30**	●	●	●	●	●
2.40	4.80	3.00	39	**3371-2-2.40**	●	●	●	●	●
2.50	5.00	3.00	39	**3371-2-2.50**	●	●	●	●	●
2.60	5.20	3.00	39	**3371-2-2.60**	●	●	●	●	●
2.70	5.40	3.00	39	**3371-2-2.70**	●	●	●	●	●
2.80	5.60	3.00	39	**3371-2-2.80**	●	●	●	●	●
2.90	5.80	3.00	39	**3371-2-2.90**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3371-3



MD
VHM
HM

λ 30°

Sharp Corner

3xD1

Z=3

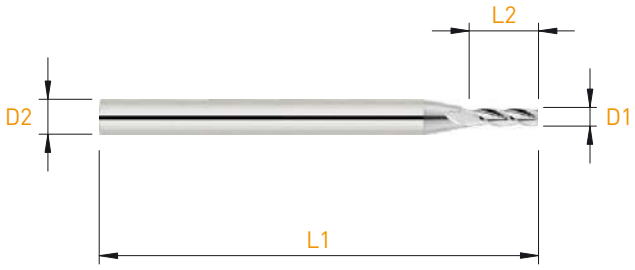
D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.90	3.00	39	**3371-3-0.30**	●	●	●	●	●
0.40	1.20	3.00	39	**3371-3-0.40**	●	●	●	●	●
0.45	1.40	3.00	39	**3371-3-0.45**	●	●	●	●	●
0.50	1.50	3.00	39	**3371-3-0.50**	●	●	●	●	●
0.55	1.80	3.00	39	**3371-3-0.55**	●	●	●	●	●
0.60	2.00	3.00	39	**3371-3-0.60**	●	●	●	●	●
0.65	2.00	3.00	39	**3371-3-0.65**	●	●	●	●	●
0.70	2.00	3.00	39	**3371-3-0.70**	●	●	●	●	●
0.75	2.00	3.00	39	**3371-3-0.75**	●	●	●	●	●
0.80	2.50	3.00	39	**3371-3-0.80**	●	●	●	●	●
0.85	2.50	3.00	39	**3371-3-0.85**	●	●	●	●	●
0.90	2.50	3.00	39	**3371-3-0.90**	●	●	●	●	●
0.95	2.90	3.00	39	**3371-3-0.95**	●	●	●	●	●
1.00	3.00	3.00	39	**3371-3-1.00**	●	●	●	●	●
1.05	3.20	3.00	39	**3371-3-1.05**	●	●	●	●	●
1.10	3.30	3.00	39	**3371-3-1.10**	●	●	●	●	●
1.15	3.50	3.00	39	**3371-3-1.15**	●	●	●	●	●
1.20	4.00	3.00	39	**3371-3-1.20**	●	●	●	●	●
1.25	4.00	3.00	39	**3371-3-1.25**	●	●	●	●	●
1.30	4.00	3.00	39	**3371-3-1.30**	●	●	●	●	●
1.35	4.00	3.00	39	**3371-3-1.35**	●	●	●	●	●
1.40	4.00	3.00	39	**3371-3-1.40**	●	●	●	●	●
1.45	4.50	3.00	39	**3371-3-1.45**	●	●	●	●	●
1.50	4.50	3.00	39	**3371-3-1.50**	●	●	●	●	●
1.60	4.50	3.00	39	**3371-3-1.60**	●	●	●	●	●
1.65	5.00	3.00	39	**3371-3-1.65**	●	●	●	●	●
1.70	5.00	3.00	39	**3371-3-1.70**	●	●	●	●	●
1.80	6.00	3.00	39	**3371-3-1.80**	●	●	●	●	●
1.85	6.00	3.00	39	**3371-3-1.85**	●	●	●	●	●
1.90	6.00	3.00	39	**3371-3-1.90**	●	●	●	●	●
1.95	6.00	3.00	39	**3371-3-1.95**	●	●	●	●	●

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
2.00	6.00	3.00	39	**3371-3-2.00**	●	●	●	●	●
2.10	6.00	3.00	39	**3371-3-2.10**	●	●	●	●	●
2.20	6.50	3.00	39	**3371-3-2.20**	●	●	●	●	●
2.30	7.00	3.00	39	**3371-3-2.30**	●	●	●	●	●
2.40	7.00	3.00	39	**3371-3-2.40**	●	●	●	●	●
2.50	7.50	3.00	39	**3371-3-2.50**	●	●	●	●	●
2.60	7.50	3.00	39	**3371-3-2.60**	●	●	●	●	●
2.70	8.00	3.00	39	**3371-3-2.70**	●	●	●	●	●
2.80	8.00	3.00	39	**3371-3-2.80**	●	●	●	●	●
2.90	8.50	3.00	39	**3371-3-2.90**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3371-4

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

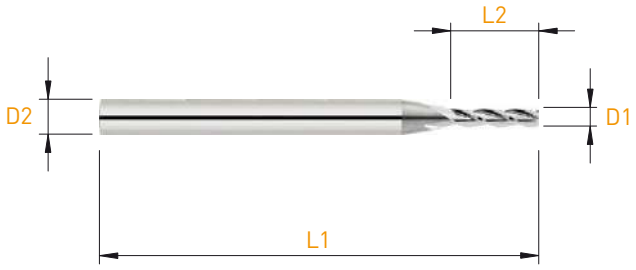
λ 30°

Sharp Corner

4xD1

Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	1.20	3.00	39	**3371-4-0.30**	●	●	●	●	●
0.40	1.60	3.00	39	**3371-4-0.40**	●	●	●	●	●
0.50	2.00	3.00	39	**3371-4-0.50**	●	●	●	●	●
0.60	2.40	3.00	39	**3371-4-0.60**	●	●	●	●	●
0.70	2.80	3.00	39	**3371-4-0.70**	●	●	●	●	●
0.80	3.20	3.00	39	**3371-4-0.80**	●	●	●	●	●
0.90	3.60	3.00	39	**3371-4-0.90**	●	●	●	●	●
1.00	4.00	3.00	39	**3371-4-1.00**	●	●	●	●	●
1.10	4.40	3.00	39	**3371-4-1.10**	●	●	●	●	●
1.20	4.80	3.00	39	**3371-4-1.20**	●	●	●	●	●
1.30	5.20	3.00	39	**3371-4-1.30**	●	●	●	●	●
1.40	5.60	3.00	39	**3371-4-1.40**	●	●	●	●	●
1.50	6.00	3.00	39	**3371-4-1.50**	●	●	●	●	●
1.60	6.40	3.00	39	**3371-4-1.60**	●	●	●	●	●
1.70	6.80	3.00	39	**3371-4-1.70**	●	●	●	●	●
1.80	7.20	3.00	39	**3371-4-1.80**	●	●	●	●	●
1.90	7.60	3.00	39	**3371-4-1.90**	●	●	●	●	●
2.00	8.00	3.00	39	**3371-4-2.00**	●	●	●	●	●
2.10	8.40	3.00	39	**3371-4-2.10**	●	●	●	●	●
2.20	8.80	3.00	39	**3371-4-2.20**	●	●	●	●	●
2.30	9.20	3.00	39	**3371-4-2.30**	●	●	●	●	●
2.40	9.60	3.00	39	**3371-4-2.40**	●	●	●	●	●
2.50	10.00	3.00	39	**3371-4-2.50**	●	●	●	●	●
2.60	10.40	3.00	39	**3371-4-2.60**	●	●	●	●	●
2.70	10.80	3.00	39	**3371-4-2.70**	●	●	●	●	●
2.80	11.20	3.00	39	**3371-4-2.80**	●	●	●	●	●
2.90	11.60	3.00	39	**3371-4-2.90**	●	●	●	●	●



MD
VHM
HM

λ 30°

Sharp Corner

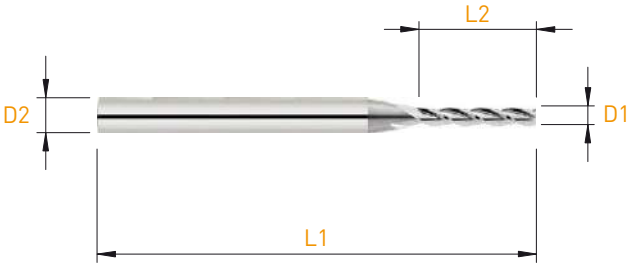
5xD1

Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.50	2.50	3.00	39	**3371-5-0.50**	●	●	●	●	●
0.60	3.00	3.00	39	**3371-5-0.60**	●	●	●	●	●
0.70	3.50	3.00	39	**3371-5-0.70**	●	●	●	●	●
0.80	4.00	3.00	39	**3371-5-0.80**	●	●	●	●	●
0.90	4.50	3.00	39	**3371-5-0.90**	●	●	●	●	●
1.00	5.00	3.00	39	**3371-5-1.00**	●	●	●	●	●
1.10	5.50	3.00	39	**3371-5-1.10**	●	●	●	●	●
1.20	6.00	3.00	39	**3371-5-1.20**	●	●	●	●	●
1.50	7.50	3.00	39	**3371-5-1.50**	●	●	●	●	●
2.00	10.00	3.00	39	**3371-5-2.00**	●	●	●	●	●
2.50	12.50	3.00	39	**3371-5-2.50**	●	●	●	●	●

3371-8

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Sharp Corner

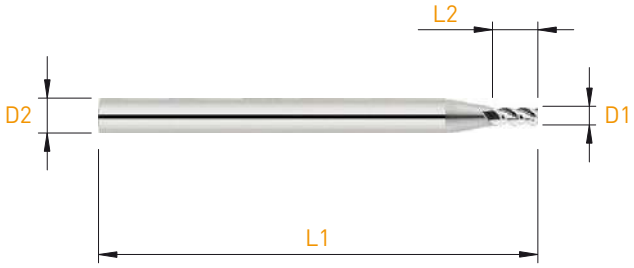
8xD1

Z=3

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.50	4.00	3.00	39	**3371-8-0.50**	●	●	●	●	●
0.60	5.00	3.00	39	**3371-8-0.60**	●	●	●	●	●
0.70	5.60	3.00	39	**3371-8-0.70**	●	●	●	●	●
0.80	6.00	3.00	39	**3371-8-0.80**	●	●	●	●	●
0.90	7.20	3.00	39	**3371-8-0.90**	●	●	●	●	●
1.00	8.00	3.00	39	**3371-8-1.00**	●	●	●	●	●
1.20	9.00	3.00	39	**3371-8-1.20**	●	●	●	●	●
1.30	11.00	3.00	39	**3371-8-1.30**	●	●	●	●	●
1.50	12.00	4.00	50	**3371-8-1.50**	●	●	●	●	●
2.00	16.00	4.00	50	**3371-8-2.00**	●	●	●	●	●
2.50	20.00	4.00	50	**3371-8-2.50**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3375-2.5



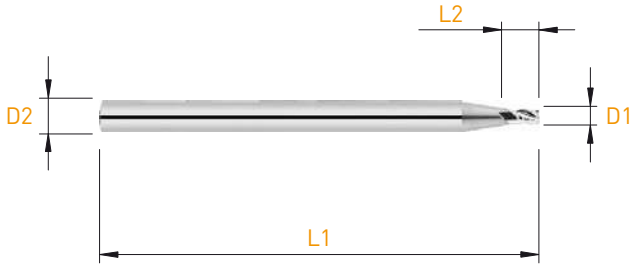
MD VHM HM | λ 45° | Sharp Corner | 2.5xD1 | Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.80	3.00	39	**3375-2.5-0.30**	●	●	●	●	●
0.40	1.00	3.00	39	**3375-2.5-0.40**	●	●	●	●	●
0.50	1.30	3.00	39	**3375-2.5-0.50**	●	●	●	●	●
0.60	1.50	3.00	39	**3375-2.5-0.60**	●	●	●	●	●
0.70	1.70	3.00	39	**3375-2.5-0.70**	●	●	●	●	●
0.80	2.00	3.00	39	**3375-2.5-0.80**	●	●	●	●	●
0.90	2.30	3.00	39	**3375-2.5-0.90**	●	●	●	●	●
1.00	2.50	3.00	39	**3375-2.5-1.00**	●	●	●	●	●
1.10	2.80	3.00	39	**3375-2.5-1.10**	●	●	●	●	●
1.20	3.00	3.00	39	**3375-2.5-1.20**	●	●	●	●	●
1.30	3.30	3.00	39	**3375-2.5-1.30**	●	●	●	●	●
1.40	3.50	3.00	39	**3375-2.5-1.40**	●	●	●	●	●
1.50	3.80	3.00	39	**3375-2.5-1.50**	●	●	●	●	●
1.60	4.00	3.00	39	**3375-2.5-1.60**	●	●	●	●	●
1.70	4.30	3.00	39	**3375-2.5-1.70**	●	●	●	●	●
1.80	4.50	3.00	39	**3375-2.5-1.80**	●	●	●	●	●
1.90	4.80	3.00	39	**3375-2.5-1.90**	●	●	●	●	●
2.00	5.00	3.00	39	**3375-2.5-2.00**	●	●	●	●	●
2.10	5.30	3.00	39	**3375-2.5-2.10**	●	●	●	●	●
2.20	5.50	3.00	39	**3375-2.5-2.20**	●	●	●	●	●
2.30	5.80	3.00	39	**3375-2.5-2.30**	●	●	●	●	●
2.40	6.00	3.00	39	**3375-2.5-2.40**	●	●	●	●	●
2.50	6.30	3.00	39	**3375-2.5-2.50**	●	●	●	●	●
2.60	6.50	3.00	39	**3375-2.5-2.60**	●	●	●	●	●
2.70	6.80	3.00	39	**3375-2.5-2.70**	●	●	●	●	●
2.80	7.00	3.00	39	**3375-2.5-2.80**	●	●	●	●	●
2.90	7.30	3.00	39	**3375-2.5-2.90**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

DHD3371-1.5

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



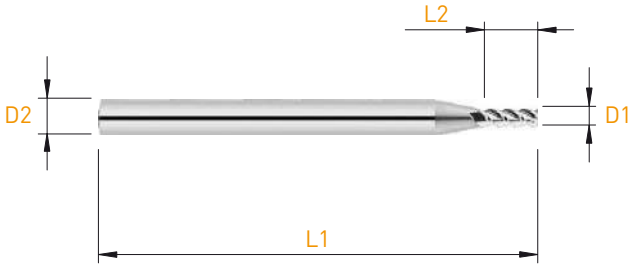
MD VHM HM	λ 36° 38° 40°	Sharp Corner		1.5xD1	Z=3	

DHD — Denture à pas irrégulier, hélice différente
Ungleiche Teilung, unterschiedliche Spirale
Uneven tooth pitch, different helix

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.45	3.00	39	**DHD3371-1.5-0.30**	●	●	●	●	●
0.40	0.60	3.00	39	**DHD3371-1.5-0.40**	●	●	●	●	●
0.50	0.75	3.00	39	**DHD3371-1.5-0.50**	●	●	●	●	●
0.60	0.90	3.00	39	**DHD3371-1.5-0.60**	●	●	●	●	●
0.70	1.05	3.00	39	**DHD3371-1.5-0.70**	●	●	●	●	●
0.80	1.20	3.00	39	**DHD3371-1.5-0.80**	●	●	●	●	●
0.90	1.35	3.00	39	**DHD3371-1.5-0.90**	●	●	●	●	●
1.00	1.50	3.00	39	**DHD3371-1.5-1.00**	●	●	●	●	●
1.10	1.65	3.00	39	**DHD3371-1.5-1.10**	●	●	●	●	●
1.20	1.80	3.00	39	**DHD3371-1.5-1.20**	●	●	●	●	●
1.30	1.95	3.00	39	**DHD3371-1.5-1.30**	●	●	●	●	●
1.40	2.10	3.00	39	**DHD3371-1.5-1.40**	●	●	●	●	●
1.50	2.25	3.00	39	**DHD3371-1.5-1.50**	●	●	●	●	●
1.60	2.40	3.00	39	**DHD3371-1.5-1.60**	●	●	●	●	●
1.70	2.55	3.00	39	**DHD3371-1.5-1.70**	●	●	●	●	●
1.80	2.70	3.00	39	**DHD3371-1.5-1.80**	●	●	●	●	●
1.90	2.85	3.00	39	**DHD3371-1.5-1.90**	●	●	●	●	●
2.00	3.00	3.00	39	**DHD3371-1.5-2.00**	●	●	●	●	●
2.50	3.75	3.00	39	**DHD3371-1.5-2.50**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

DHD3371-3



MD
VHM
HM

λ 36°
38°
40°

Sharp Corner

3xD1

Z=3

DHD — Denture à pas irrégulier, hélice différente
Ungleiche Teilung, unterschiedliche Spirale
Uneven tooth pitch, different helix

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.90	3.00	39	**DHD3371-3-0.30**	●	●	●	●	●
0.40	1.20	3.00	39	**DHD3371-3-0.40**	●	●	●	●	●
0.50	1.50	3.00	39	**DHD3371-3-0.50**	●	●	●	●	●
0.60	1.80	3.00	39	**DHD3371-3-0.60**	●	●	●	●	●
0.70	2.10	3.00	39	**DHD3371-3-0.70**	●	●	●	●	●
0.80	2.40	3.00	39	**DHD3371-3-0.80**	●	●	●	●	●
0.90	2.70	3.00	39	**DHD3371-3-0.90**	●	●	●	●	●
1.00	3.00	3.00	39	**DHD3371-3-1.00**	●	●	●	●	●
1.10	3.30	3.00	39	**DHD3371-3-1.10**	●	●	●	●	●
1.20	3.60	3.00	39	**DHD3371-3-1.20**	●	●	●	●	●
1.30	3.90	3.00	39	**DHD3371-3-1.30**	●	●	●	●	●
1.40	4.20	3.00	39	**DHD3371-3-1.40**	●	●	●	●	●
1.50	4.50	3.00	39	**DHD3371-3-1.50**	●	●	●	●	●
1.60	4.80	3.00	39	**DHD3371-3-1.60**	●	●	●	●	●
1.70	5.10	3.00	39	**DHD3371-3-1.70**	●	●	●	●	●
1.80	5.40	3.00	39	**DHD3371-3-1.80**	●	●	●	●	●
1.90	5.70	3.00	39	**DHD3371-3-1.90**	●	●	●	●	●
2.00	6.00	3.00	39	**DHD3371-3-2.00**	●	●	●	●	●
2.50	7.50	3.00	39	**DHD3371-3-2.50**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3370S-3X

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Sharp Corner

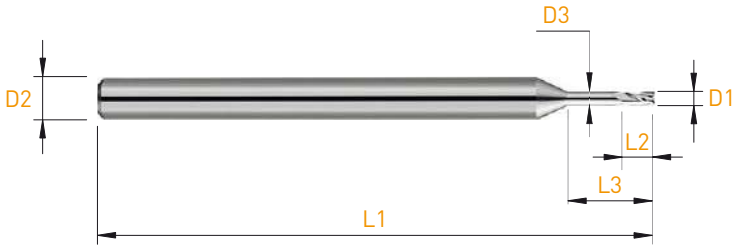
L3
3xD1

Z=3

D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	0.90	0.27	3.00	39	**3370S-3X-0.30**	●	●	●	●	●
0.40	0.80	1.20	0.37	3.00	39	**3370S-3X-0.40**	●	●	●	●	●
0.50	1.00	1.50	0.45	3.00	39	**3370S-3X-0.50**	●	●	●	●	●
0.60	1.20	1.80	0.55	3.00	39	**3370S-3X-0.60**	●	●	●	●	●
0.70	1.40	2.10	0.65	3.00	39	**3370S-3X-0.70**	●	●	●	●	●
0.80	1.60	2.40	0.75	3.00	39	**3370S-3X-0.80**	●	●	●	●	●
0.90	1.80	2.70	0.85	3.00	39	**3370S-3X-0.90**	●	●	●	●	●
1.00	2.00	3.00	0.95	3.00	39	**3370S-3X-1.00**	●	●	●	●	●
1.10	2.20	3.30	1.05	3.00	39	**3370S-3X-1.10**	●	●	●	●	●
1.20	2.40	3.60	1.15	3.00	39	**3370S-3X-1.20**	●	●	●	●	●
1.30	2.60	3.90	1.25	3.00	39	**3370S-3X-1.30**	●	●	●	●	●
1.40	2.80	4.20	1.35	3.00	39	**3370S-3X-1.40**	●	●	●	●	●
1.50	3.00	4.50	1.45	3.00	39	**3370S-3X-1.50**	●	●	●	●	●
1.60	3.20	4.80	1.55	3.00	39	**3370S-3X-1.60**	●	●	●	●	●
1.70	3.40	5.10	1.65	3.00	39	**3370S-3X-1.70**	●	●	●	●	●
1.80	3.60	5.40	1.75	3.00	39	**3370S-3X-1.80**	●	●	●	●	●
1.90	3.80	5.70	1.85	3.00	39	**3370S-3X-1.90**	●	●	●	●	●
2.00	4.00	6.00	1.95	6.00	50	**3370S-3X-2.00**	●	●	●	●	●
2.10	4.20	6.30	2.05	6.00	50	**3370S-3X-2.10**	●	●	●	●	●
2.20	4.40	6.60	2.15	6.00	50	**3370S-3X-2.20**	●	●	●	●	●
2.30	4.60	6.90	2.25	6.00	50	**3370S-3X-2.30**	●	●	●	●	●
2.40	4.80	7.20	2.35	6.00	50	**3370S-3X-2.40**	●	●	●	●	●
2.50	5.00	7.50	2.45	6.00	50	**3370S-3X-2.50**	●	●	●	●	●
3.00	6.00	9.00	2.95	6.00	50	**3370S-3X-3.00**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3370S-6X



MD
VHM
HM

λ 30°

Sharp Corner

L3
6xD1

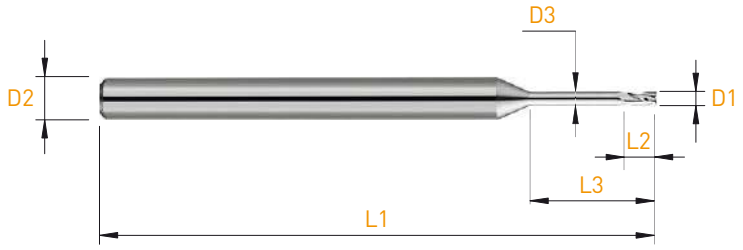
Z=3

D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	1.80	0.27	3.00	39	**3370S-6X-0.30**	●	●	●	●	●
0.40	0.80	2.40	0.37	3.00	39	**3370S-6X-0.40**	●	●	●	●	●
0.50	1.00	3.00	0.45	3.00	39	**3370S-6X-0.50**	●	●	●	●	●
0.60	1.20	3.60	0.55	3.00	39	**3370S-6X-0.60**	●	●	●	●	●
0.70	1.40	4.20	0.65	3.00	39	**3370S-6X-0.70**	●	●	●	●	●
0.80	1.60	4.80	0.75	3.00	39	**3370S-6X-0.80**	●	●	●	●	●
0.90	1.80	5.40	0.85	3.00	39	**3370S-6X-0.90**	●	●	●	●	●
1.00	2.00	6.00	0.95	3.00	39	**3370S-6X-1.00**	●	●	●	●	●
1.10	2.20	6.60	1.05	3.00	39	**3370S-6X-1.10**	●	●	●	●	●
1.20	2.40	7.20	1.15	3.00	39	**3370S-6X-1.20**	●	●	●	●	●
1.30	2.60	7.80	1.25	3.00	39	**3370S-6X-1.30**	●	●	●	●	●
1.40	2.80	8.40	1.35	3.00	39	**3370S-6X-1.40**	●	●	●	●	●
1.50	3.00	9.00	1.45	3.00	39	**3370S-6X-1.50**	●	●	●	●	●
1.60	3.20	9.60	1.55	3.00	39	**3370S-6X-1.60**	●	●	●	●	●
1.70	3.40	10.20	1.65	3.00	39	**3370S-6X-1.70**	●	●	●	●	●
1.80	3.60	10.80	1.75	3.00	39	**3370S-6X-1.80**	●	●	●	●	●
1.90	3.80	11.40	1.85	3.00	39	**3370S-6X-1.90**	●	●	●	●	●
2.00	4.00	12.00	1.95	6.00	50	**3370S-6X-2.00**	●	●	●	●	●
2.10	4.20	12.60	2.05	6.00	50	**3370S-6X-2.10**	●	●	●	●	●
2.20	4.40	13.20	2.15	6.00	50	**3370S-6X-2.20**	●	●	●	●	●
2.30	4.60	13.80	2.25	6.00	50	**3370S-6X-2.30**	●	●	●	●	●
2.40	4.80	14.40	2.35	6.00	50	**3370S-6X-2.40**	●	●	●	●	●
2.50	5.00	15.00	2.45	6.00	50	**3370S-6X-2.50**	●	●	●	●	●
3.00	6.00	18.00	2.95	6.00	50	**3370S-6X-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3370S-9X

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Sharp Corner

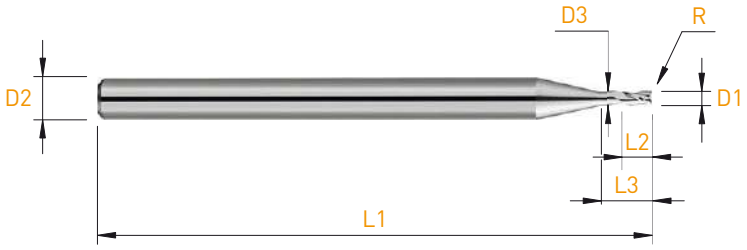
L3
9xD1

Z=3

D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.80	3.60	0.37	3.00	39	**3370S-9X-0.40**	●	●	●	●	●
0.50	1.00	4.50	0.45	3.00	39	**3370S-9X-0.50**	●	●	●	●	●
0.60	1.20	5.40	0.55	3.00	39	**3370S-9X-0.60**	●	●	●	●	●
0.70	1.40	6.30	0.65	3.00	39	**3370S-9X-0.70**	●	●	●	●	●
0.80	1.60	7.20	0.75	3.00	39	**3370S-9X-0.80**	●	●	●	●	●
0.90	1.80	8.10	0.85	3.00	39	**3370S-9X-0.90**	●	●	●	●	●
1.00	2.00	9.00	0.95	3.00	39	**3370S-9X-1.00**	●	●	●	●	●
1.10	2.20	9.90	1.05	3.00	39	**3370S-9X-1.10**	●	●	●	●	●
1.20	2.40	10.80	1.15	3.00	39	**3370S-9X-1.20**	●	●	●	●	●
1.30	2.60	11.70	1.25	3.00	39	**3370S-9X-1.30**	●	●	●	●	●
1.40	2.80	12.60	1.35	3.00	39	**3370S-9X-1.40**	●	●	●	●	●
1.50	3.00	13.50	1.45	3.00	39	**3370S-9X-1.50**	●	●	●	●	●
1.60	3.20	14.40	1.55	3.00	39	**3370S-9X-1.60**	●	●	●	●	●
1.70	3.40	15.30	1.65	3.00	39	**3370S-9X-1.70**	●	●	●	●	●
1.80	3.60	16.20	1.75	3.00	39	**3370S-9X-1.80**	●	●	●	●	●
1.90	3.80	17.10	1.85	3.00	39	**3370S-9X-1.90**	●	●	●	●	●
2.00	4.00	18.00	1.95	6.00	50	**3370S-9X-2.00**	●	●	●	●	●
2.10	4.20	18.90	2.05	6.00	50	**3370S-9X-2.10**	●	●	●	●	●
2.20	4.40	19.80	2.15	6.00	50	**3370S-9X-2.20**	●	●	●	●	●
2.30	4.60	20.70	2.25	6.00	50	**3370S-9X-2.30**	●	●	●	●	●
2.40	4.80	21.60	2.35	6.00	50	**3370S-9X-2.40**	●	●	●	●	●
2.50	5.00	22.50	2.45	6.00	50	**3370S-9X-2.50**	●	●	●	●	●
3.00	6.00	27.00	2.95	6.00	50	**3370S-9X-3.00**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3379T-3X



MD
VHM
HM

λ 30°

Radius
Corner

L3
3xD1

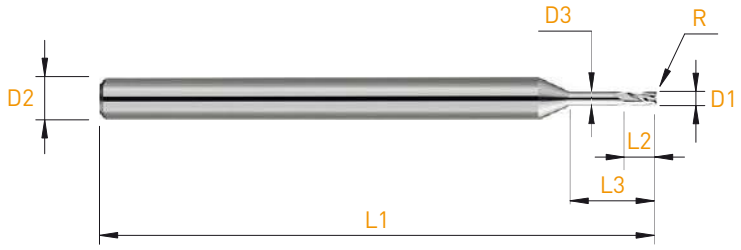
Z=3

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	0.90	0.27	3.00	39	**3379T-3X-0.30**	●	●	●	●	●
0.40	0.05	0.80	1.20	0.37	3.00	39	**3379T-3X-0.40**	●	●	●	●	●
0.50	0.05	1.00	1.50	0.45	3.00	39	**3379T-3X-0.50**	●	●	●	●	●
0.60	0.05	1.20	1.80	0.55	3.00	39	**3379T-3X-0.60**	●	●	●	●	●
0.70	0.05	1.40	2.10	0.65	3.00	39	**3379T-3X-0.70**	●	●	●	●	●
0.80	0.05	1.60	2.40	0.75	3.00	39	**3379T-3X-0.80**	●	●	●	●	●
0.90	0.05	1.80	2.70	0.85	3.00	39	**3379T-3X-0.90**	●	●	●	●	●
1.00	0.10	2.00	3.00	0.95	3.00	39	**3379T-3X-1.00**	●	●	●	●	●
1.10	0.10	2.20	3.30	1.05	3.00	39	**3379T-3X-1.10**	●	●	●	●	●
1.20	0.10	2.40	3.60	1.15	3.00	39	**3379T-3X-1.20**	●	●	●	●	●
1.30	0.10	2.60	3.90	1.25	3.00	39	**3379T-3X-1.30**	●	●	●	●	●
1.40	0.10	2.80	4.20	1.35	3.00	39	**3379T-3X-1.40**	●	●	●	●	●
1.50	0.20	3.00	4.50	1.45	3.00	39	**3379T-3X-1.50**	●	●	●	●	●
1.60	0.20	3.20	4.80	1.55	3.00	39	**3379T-3X-1.60**	●	●	●	●	●
1.70	0.20	3.40	5.10	1.65	3.00	39	**3379T-3X-1.70**	●	●	●	●	●
1.80	0.20	3.60	5.40	1.75	3.00	39	**3379T-3X-1.80**	●	●	●	●	●
1.90	0.20	3.80	5.70	1.85	3.00	39	**3379T-3X-1.90**	●	●	●	●	●
2.00	0.20	4.00	6.00	1.95	6.00	50	**3379T-3X-2.00**	●	●	●	●	●
2.10	0.20	4.20	6.30	2.05	6.00	50	**3379T-3X-2.10**	●	●	●	●	●
2.20	0.20	4.40	6.60	2.15	6.00	50	**3379T-3X-2.20**	●	●	●	●	●
2.30	0.20	4.60	6.90	2.25	6.00	50	**3379T-3X-2.30**	●	●	●	●	●
2.40	0.20	4.80	7.20	2.35	6.00	50	**3379T-3X-2.40**	●	●	●	●	●
2.50	0.20	5.00	7.50	2.45	6.00	50	**3379T-3X-2.50**	●	●	●	●	●
3.00	0.20	6.00	9.00	2.95	6.00	50	**3379T-3X-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3379T-6X

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Radius
Corner

L3
6xD1

Z=3

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	1.80	0.27	3.00	39	**3379T-6X-0.30**	●	●	●	●	●
0.40	0.05	0.80	2.40	0.37	3.00	39	**3379T-6X-0.40**	●	●	●	●	●
0.50	0.05	1.00	3.00	0.45	3.00	39	**3379T-6X-0.50**	●	●	●	●	●
0.60	0.05	1.20	3.60	0.55	3.00	39	**3379T-6X-0.60**	●	●	●	●	●
0.70	0.05	1.40	4.20	0.65	3.00	39	**3379T-6X-0.70**	●	●	●	●	●
0.80	0.05	1.60	4.80	0.75	3.00	39	**3379T-6X-0.80**	●	●	●	●	●
0.90	0.05	1.80	5.40	0.85	3.00	39	**3379T-6X-0.90**	●	●	●	●	●
1.00	0.10	2.00	6.00	0.95	3.00	39	**3379T-6X-1.00**	●	●	●	●	●
1.10	0.10	2.20	6.60	1.05	3.00	39	**3379T-6X-1.10**	●	●	●	●	●
1.20	0.10	2.40	7.20	1.15	3.00	39	**3379T-6X-1.20**	●	●	●	●	●
1.30	0.10	2.60	7.80	1.25	3.00	39	**3379T-6X-1.30**	●	●	●	●	●
1.40	0.10	2.80	8.40	1.35	3.00	39	**3379T-6X-1.40**	●	●	●	●	●
1.50	0.20	3.00	9.00	1.45	3.00	39	**3379T-6X-1.50**	●	●	●	●	●
1.60	0.20	3.20	9.60	1.55	3.00	39	**3379T-6X-1.60**	●	●	●	●	●
1.70	0.20	3.40	10.20	1.65	3.00	39	**3379T-6X-1.70**	●	●	●	●	●
1.80	0.20	3.60	10.80	1.75	3.00	39	**3379T-6X-1.80**	●	●	●	●	●
1.90	0.20	3.80	11.40	1.85	3.00	39	**3379T-6X-1.90**	●	●	●	●	●
2.00	0.20	4.00	12.00	1.95	6.00	50	**3379T-6X-2.00**	●	●	●	●	●
2.10	0.20	4.20	12.60	2.05	6.00	50	**3379T-6X-2.10**	●	●	●	●	●
2.20	0.20	4.40	13.20	2.15	6.00	50	**3379T-6X-2.20**	●	●	●	●	●
2.30	0.20	4.60	13.80	2.25	6.00	50	**3379T-6X-2.30**	●	●	●	●	●
2.40	0.20	4.80	14.40	2.35	6.00	50	**3379T-6X-2.40**	●	●	●	●	●
2.50	0.20	5.00	15.00	2.45	6.00	50	**3379T-6X-2.50**	●	●	●	●	●
3.00	0.20	6.00	18.00	2.95	6.00	50	**3379T-6X-3.00**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3379T-9X



MD
VHM
HM

λ 30°

Radius
Corner

L3
9xD1

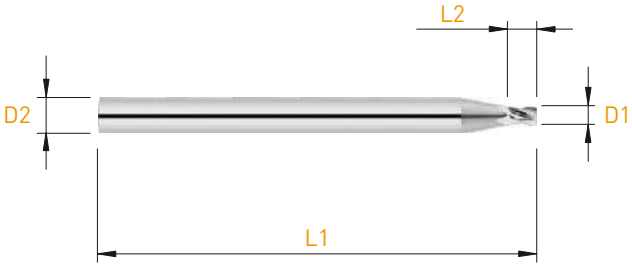
Z=3

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.05	0.80	3.60	0.37	3.00	39	**3379T-9X-0.40**	●	●	●	●	●
0.50	0.05	1.00	4.50	0.45	3.00	39	**3379T-9X-0.50**	●	●	●	●	●
0.60	0.05	1.20	5.40	0.55	3.00	39	**3379T-9X-0.60**	●	●	●	●	●
0.70	0.05	1.40	6.30	0.65	3.00	39	**3379T-9X-0.70**	●	●	●	●	●
0.80	0.05	1.60	7.20	0.75	3.00	39	**3379T-9X-0.80**	●	●	●	●	●
0.90	0.05	1.80	8.10	0.85	3.00	39	**3379T-9X-0.90**	●	●	●	●	●
1.00	0.10	2.00	9.00	0.95	3.00	39	**3379T-9X-1.00**	●	●	●	●	●
1.10	0.10	2.20	9.90	1.05	3.00	39	**3379T-9X-1.10**	●	●	●	●	●
1.20	0.10	2.40	10.80	1.15	3.00	39	**3379T-9X-1.20**	●	●	●	●	●
1.30	0.10	2.60	11.70	1.25	3.00	39	**3379T-9X-1.30**	●	●	●	●	●
1.40	0.10	2.80	12.60	1.35	3.00	39	**3379T-9X-1.40**	●	●	●	●	●
1.50	0.20	3.00	13.50	1.45	3.00	39	**3379T-9X-1.50**	●	●	●	●	●
1.60	0.20	3.20	14.40	1.55	3.00	39	**3379T-9X-1.60**	●	●	●	●	●
1.70	0.20	3.40	15.30	1.65	3.00	39	**3379T-9X-1.70**	●	●	●	●	●
1.80	0.20	3.60	16.20	1.75	3.00	39	**3379T-9X-1.80**	●	●	●	●	●
1.90	0.20	3.80	17.10	1.85	3.00	39	**3379T-9X-1.90**	●	●	●	●	●
2.00	0.20	4.00	18.00	1.95	6.00	50	**3379T-9X-2.00**	●	●	●	●	●
2.10	0.20	4.20	18.90	2.05	6.00	50	**3379T-9X-2.10**	●	●	●	●	●
2.20	0.20	4.40	19.80	2.15	6.00	50	**3379T-9X-2.20**	●	●	●	●	●
2.30	0.20	4.60	20.70	2.25	6.00	50	**3379T-9X-2.30**	●	●	●	●	●
2.40	0.20	4.80	21.60	2.35	6.00	50	**3379T-9X-2.40**	●	●	●	●	●
2.50	0.20	5.00	22.50	2.45	6.00	50	**3379T-9X-2.50**	●	●	●	●	●
3.00	0.20	6.00	27.00	2.95	6.00	50	**3379T-9X-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3471-1.5

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Sharp Corner

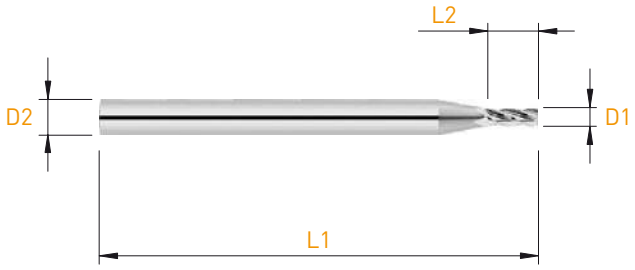
1.5xD1

Z=4

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.45	3.00	39	**3471-1.5-0.30**	●	●	●	●	●
0.40	0.60	3.00	39	**3471-1.5-0.40**	●	●	●	●	●
0.50	0.75	3.00	39	**3471-1.5-0.50**	●	●	●	●	●
0.60	0.90	3.00	39	**3471-1.5-0.60**	●	●	●	●	●
0.70	1.05	3.00	39	**3471-1.5-0.70**	●	●	●	●	●
0.80	1.20	3.00	39	**3471-1.5-0.80**	●	●	●	●	●
0.90	1.35	3.00	39	**3471-1.5-0.90**	●	●	●	●	●
1.00	1.50	3.00	39	**3471-1.5-1.00**	●	●	●	●	●
1.10	1.65	3.00	39	**3471-1.5-1.10**	●	●	●	●	●
1.20	1.80	3.00	39	**3471-1.5-1.20**	●	●	●	●	●
1.30	1.95	3.00	39	**3471-1.5-1.30**	●	●	●	●	●
1.40	2.10	3.00	39	**3471-1.5-1.40**	●	●	●	●	●
1.50	2.25	3.00	39	**3471-1.5-1.50**	●	●	●	●	●
1.60	2.40	3.00	39	**3471-1.5-1.60**	●	●	●	●	●
1.70	2.55	3.00	39	**3471-1.5-1.70**	●	●	●	●	●
1.80	2.70	3.00	39	**3471-1.5-1.80**	●	●	●	●	●
1.90	2.85	3.00	39	**3471-1.5-1.90**	●	●	●	●	●
2.00	3.00	3.00	39	**3471-1.5-2.00**	●	●	●	●	●
2.10	3.15	3.00	39	**3471-1.5-2.10**	●	●	●	●	●
2.20	3.30	3.00	39	**3471-1.5-2.20**	●	●	●	●	●
2.30	3.45	3.00	39	**3471-1.5-2.30**	●	●	●	●	●
2.40	3.60	3.00	39	**3471-1.5-2.40**	●	●	●	●	●
2.50	3.75	3.00	39	**3471-1.5-2.50**	●	●	●	●	●
2.60	3.90	3.00	39	**3471-1.5-2.60**	●	●	●	●	●
2.70	4.05	3.00	39	**3471-1.5-2.70**	●	●	●	●	●
2.80	4.20	3.00	39	**3471-1.5-2.80**	●	●	●	●	●
2.90	4.35	3.00	39	**3471-1.5-2.90**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3471-3



MD
VHM
HM

λ 30°

Sharp Corner

3xD1

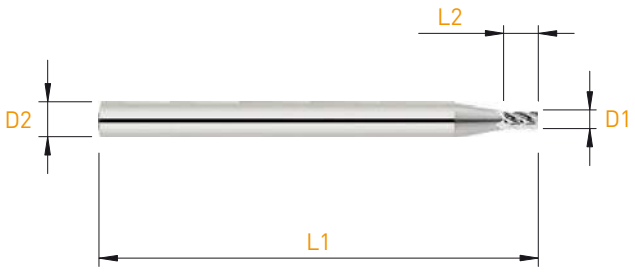
Z=4

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.90	3.00	39	**3471-3-0.30**	●	●	●	●	●
0.40	1.20	3.00	39	**3471-3-0.40**	●	●	●	●	●
0.50	1.50	3.00	39	**3471-3-0.50**	●	●	●	●	●
0.55	1.70	3.00	39	**3471-3-0.55**	●	●	●	●	●
0.60	1.80	3.00	39	**3471-3-0.60**	●	●	●	●	●
0.70	2.10	3.00	39	**3471-3-0.70**	●	●	●	●	●
0.75	2.30	3.00	39	**3471-3-0.75**	●	●	●	●	●
0.80	2.40	3.00	39	**3471-3-0.80**	●	●	●	●	●
0.85	2.60	3.00	39	**3471-3-0.85**	●	●	●	●	●
0.90	2.70	3.00	39	**3471-3-0.90**	●	●	●	●	●
0.95	2.90	3.00	39	**3471-3-0.95**	●	●	●	●	●
1.00	3.00	3.00	39	**3471-3-1.00**	●	●	●	●	●
1.10	3.30	3.00	39	**3471-3-1.10**	●	●	●	●	●
1.20	3.60	3.00	39	**3471-3-1.20**	●	●	●	●	●
1.30	3.90	3.00	39	**3471-3-1.30**	●	●	●	●	●
1.40	4.20	3.00	39	**3471-3-1.40**	●	●	●	●	●
1.50	4.50	3.00	39	**3471-3-1.50**	●	●	●	●	●
1.60	4.80	3.00	39	**3471-3-1.60**	●	●	●	●	●
1.70	5.10	3.00	39	**3471-3-1.70**	●	●	●	●	●
1.80	5.40	3.00	39	**3471-3-1.80**	●	●	●	●	●
1.90	5.70	3.00	39	**3471-3-1.90**	●	●	●	●	●
2.00	6.00	3.00	39	**3471-3-2.00**	●	●	●	●	●
2.10	6.30	3.00	39	**3471-3-2.10**	●	●	●	●	●
2.20	6.60	3.00	39	**3471-3-2.20**	●	●	●	●	●
2.30	6.90	3.00	39	**3471-3-2.30**	●	●	●	●	●
2.40	7.20	3.00	39	**3471-3-2.40**	●	●	●	●	●
2.50	7.50	3.00	39	**3471-3-2.50**	●	●	●	●	●
2.60	7.80	3.00	39	**3471-3-2.60**	●	●	●	●	●
2.70	8.10	3.00	39	**3471-3-2.70**	●	●	●	●	●
2.80	8.40	3.00	39	**3471-3-2.80**	●	●	●	●	●
2.90	8.70	3.00	39	**3471-3-2.90**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3472-2

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 40°

Sharp Corner

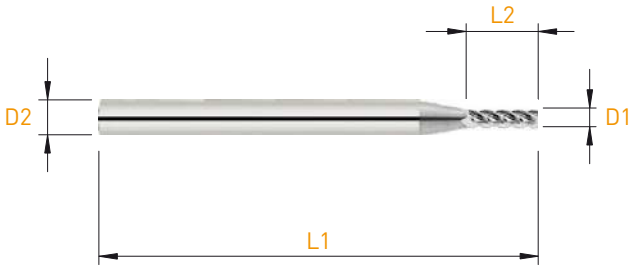
2xD1

Z=4

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	3.00	39	**3472-2-0.30**	●	●	●	●	●
0.40	0.80	3.00	39	**3472-2-0.40**	●	●	●	●	●
0.50	1.00	3.00	39	**3472-2-0.50**	●	●	●	●	●
0.60	1.20	3.00	39	**3472-2-0.60**	●	●	●	●	●
0.70	1.40	3.00	39	**3472-2-0.70**	●	●	●	●	●
0.80	1.60	3.00	39	**3472-2-0.80**	●	●	●	●	●
0.90	1.80	3.00	39	**3472-2-0.90**	●	●	●	●	●
1.00	2.00	3.00	39	**3472-2-1.00**	●	●	●	●	●
1.10	2.20	3.00	39	**3472-2-1.10**	●	●	●	●	●
1.20	2.40	3.00	39	**3472-2-1.20**	●	●	●	●	●
1.30	2.60	3.00	39	**3472-2-1.30**	●	●	●	●	●
1.40	2.80	3.00	39	**3472-2-1.40**	●	●	●	●	●
1.50	3.00	3.00	39	**3472-2-1.50**	●	●	●	●	●
1.60	3.20	3.00	39	**3472-2-1.60**	●	●	●	●	●
1.70	3.40	3.00	39	**3472-2-1.70**	●	●	●	●	●
1.80	3.60	3.00	39	**3472-2-1.80**	●	●	●	●	●
1.90	3.80	3.00	39	**3472-2-1.90**	●	●	●	●	●
2.00	4.00	3.00	39	**3472-2-2.00**	●	●	●	●	●
2.10	4.20	3.00	39	**3472-2-2.10**	●	●	●	●	●
2.20	4.40	3.00	39	**3472-2-2.20**	●	●	●	●	●
2.30	4.60	3.00	39	**3472-2-2.30**	●	●	●	●	●
2.40	4.80	3.00	39	**3472-2-2.40**	●	●	●	●	●
2.50	5.00	3.00	39	**3472-2-2.50**	●	●	●	●	●
2.60	5.20	3.00	39	**3472-2-2.60**	●	●	●	●	●
2.70	5.40	3.00	39	**3472-2-2.70**	●	●	●	●	●
2.80	5.60	3.00	39	**3472-2-2.80**	●	●	●	●	●
2.90	5.80	3.00	39	**3472-2-2.90**	●	●	●	●	●

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3472-4



MD
VHM
HM

λ 40°

Sharp Corner

4xD1

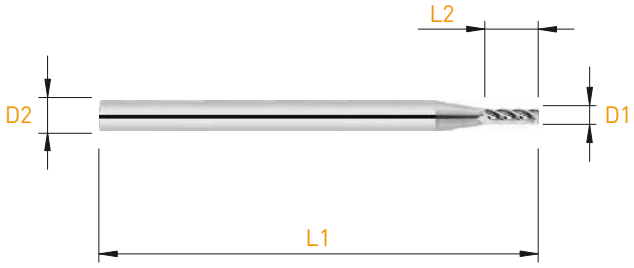
Z=4

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	1.60	3.00	39	**3472-4-0.40**	●	●	●	●	●
0.50	2.00	3.00	39	**3472-4-0.50**	●	●	●	●	●
0.60	2.40	3.00	39	**3472-4-0.60**	●	●	●	●	●
0.70	2.80	3.00	39	**3472-4-0.70**	●	●	●	●	●
0.80	3.20	3.00	39	**3472-4-0.80**	●	●	●	●	●
0.90	3.60	3.00	39	**3472-4-0.90**	●	●	●	●	●
1.00	4.00	3.00	39	**3472-4-1.00**	●	●	●	●	●
1.10	4.40	3.00	39	**3472-4-1.10**	●	●	●	●	●
1.20	4.80	3.00	39	**3472-4-1.20**	●	●	●	●	●
1.30	5.20	3.00	39	**3472-4-1.30**	●	●	●	●	●
1.40	5.60	3.00	39	**3472-4-1.40**	●	●	●	●	●
1.50	6.00	3.00	39	**3472-4-1.50**	●	●	●	●	●
1.60	6.40	3.00	39	**3472-4-1.60**	●	●	●	●	●
1.70	6.80	3.00	39	**3472-4-1.70**	●	●	●	●	●
1.80	7.20	3.00	39	**3472-4-1.80**	●	●	●	●	●
1.90	7.60	3.00	39	**3472-4-1.90**	●	●	●	●	●
2.00	8.00	3.00	39	**3472-4-2.00**	●	●	●	●	●
2.10	8.40	3.00	39	**3472-4-2.10**	●	●	●	●	●
2.20	8.80	3.00	39	**3472-4-2.20**	●	●	●	●	●
2.30	9.20	3.00	39	**3472-4-2.30**	●	●	●	●	●
2.40	9.60	3.00	39	**3472-4-2.40**	●	●	●	●	●
2.50	10.00	3.00	39	**3472-4-2.50**	●	●	●	●	●
2.60	10.40	3.00	39	**3472-4-2.60**	●	●	●	●	●
2.70	10.80	3.00	39	**3472-4-2.70**	●	●	●	●	●
2.80	11.20	3.00	39	**3472-4-2.80**	●	●	●	●	●
2.90	11.60	3.00	39	**3472-4-2.90**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

DHP3471-3

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 35° ↓ 38°

Sharp Corner

3xD1

Z=4

DHP

Denture à pas irrégulier, hélice progressive
Ungleiche Teilung, progressive Spirale
Uneven tooth pitch, progressive helix

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.50	1.50	3.00	39	**DHP3471-3-0.50**	●	●	●	●	●
0.60	1.80	3.00	39	**DHP3471-3-0.60**	●	●	●	●	●
0.70	2.10	3.00	39	**DHP3471-3-0.70**	●	●	●	●	●
0.80	2.40	3.00	39	**DHP3471-3-0.80**	●	●	●	●	●
0.90	2.70	3.00	39	**DHP3471-3-0.90**	●	●	●	●	●
1.00	3.00	3.00	39	**DHP3471-3-1.00**	●	●	●	●	●
1.10	3.30	3.00	39	**DHP3471-3-1.10**	●	●	●	●	●
1.20	3.60	3.00	39	**DHP3471-3-1.20**	●	●	●	●	●
1.30	3.90	3.00	39	**DHP3471-3-1.30**	●	●	●	●	●
1.40	4.20	3.00	39	**DHP3471-3-1.40**	●	●	●	●	●
1.50	4.50	3.00	39	**DHP3471-3-1.50**	●	●	●	●	●
1.60	4.80	3.00	39	**DHP3471-3-1.60**	●	●	●	●	●
1.70	5.10	3.00	39	**DHP3471-3-1.70**	●	●	●	●	●
1.80	5.40	3.00	39	**DHP3471-3-1.80**	●	●	●	●	●
1.90	5.70	3.00	39	**DHP3471-3-1.90**	●	●	●	●	●
2.00	6.00	3.00	39	**DHP3471-3-2.00**	●	●	●	●	●
2.50	7.50	3.00	39	**DHP3471-3-2.50**	●	●	●	●	●

Micro-fraises hémisphériques
Vollradius Mikrofräser
Ball nose micro end mills

3278-0.75



MD
VHM
HM

λ 30°

0.75xD1

Z=2

D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.15	3.00	39	**3278-0.75-0.20**	●				
0.30	0.15	0.20	3.00	39	**3278-0.75-0.30**	●	●	●	●	●
0.40	0.20	0.30	3.00	39	**3278-0.75-0.40**	●	●	●	●	●
0.50	0.25	0.35	3.00	39	**3278-0.75-0.50**	●	●	●	●	●
0.60	0.30	0.45	3.00	39	**3278-0.75-0.60**	●	●	●	●	●
0.70	0.35	0.55	3.00	39	**3278-0.75-0.70**	●	●	●	●	●
0.80	0.40	0.60	3.00	39	**3278-0.75-0.80**	●	●	●	●	●
0.90	0.45	0.70	3.00	39	**3278-0.75-0.90**	●	●	●	●	●
1.00	0.50	0.75	3.00	39	**3278-0.75-1.00**	●	●	●	●	●
1.50	0.75	1.15	3.00	39	**3278-0.75-1.50**	●	●	●	●	●
2.00	1.00	1.50	3.00	39	**3278-0.75-2.00**	●	●	●	●	●
2.50	1.25	1.90	3.00	39	**3278-0.75-2.50**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3278-1

Micro-fraises hémisphériques
Vollradius Mikrofräser
Ball nose micro end mills



MD
VHM
HM

λ 30°

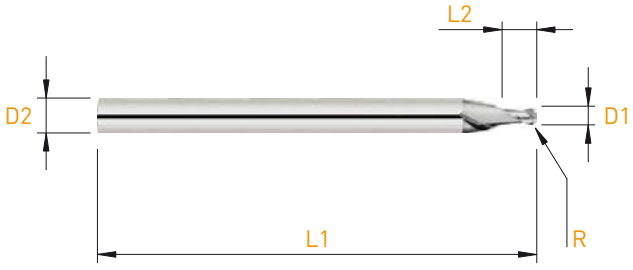
1xD1

Z=2

D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.20	3.00	39	**3278-1-0.20**	●				
0.30	0.15	0.30	3.00	39	**3278-1-0.30**	●	●	●	●	●
0.40	0.20	0.40	3.00	39	**3278-1-0.40**	●	●	●	●	●
0.50	0.25	0.50	3.00	39	**3278-1-0.50**	●	●	●	●	●
0.60	0.30	0.60	3.00	39	**3278-1-0.60**	●	●	●	●	●
0.70	0.35	0.70	3.00	39	**3278-1-0.70**	●	●	●	●	●
0.80	0.40	0.80	3.00	39	**3278-1-0.80**	●	●	●	●	●
0.90	0.45	0.90	3.00	39	**3278-1-0.90**	●	●	●	●	●
1.00	0.50	1.00	3.00	39	**3278-1-1.00**	●	●	●	●	●
1.10	0.55	1.10	3.00	39	**3278-1-1.10**	●	●	●	●	●
1.20	0.60	1.20	3.00	39	**3278-1-1.20**	●	●	●	●	●
1.30	0.35	1.30	3.00	39	**3278-1-1.30**	●	●	●	●	●
1.40	0.70	1.40	3.00	39	**3278-1-1.40**	●	●	●	●	●
1.50	0.75	1.50	3.00	39	**3278-1-1.50**	●	●	●	●	●
1.60	0.80	1.60	3.00	39	**3278-1-1.60**	●	●	●	●	●
1.70	0.85	1.70	3.00	39	**3278-1-1.70**	●	●	●	●	●
1.80	0.90	1.80	3.00	39	**3278-1-1.80**	●	●	●	●	●
1.90	0.95	1.90	3.00	39	**3278-1-1.90**	●	●	●	●	●
2.00	1.00	2.00	3.00	39	**3278-1-2.00**	●	●	●	●	●
2.10	1.05	2.10	3.00	39	**3278-1-2.10**	●	●	●	●	●
2.20	1.10	2.20	3.00	39	**3278-1-2.20**	●	●	●	●	●
2.30	1.15	2.30	3.00	39	**3278-1-2.30**	●	●	●	●	●
2.40	1.20	2.40	3.00	39	**3278-1-2.40**	●	●	●	●	●
2.50	1.25	2.50	3.00	39	**3278-1-2.50**	●	●	●	●	●
2.60	1.30	2.60	3.00	39	**3278-1-2.60**	●	●	●	●	●
2.70	1.35	2.70	3.00	39	**3278-1-2.70**	●	●	●	●	●
2.80	1.40	2.80	3.00	39	**3278-1-2.80**	●	●	●	●	●
2.90	1.45	2.90	3.00	39	**3278-1-2.90**	●	●	●	●	●

Micro-fraises hémisphériques
Vollradius Mikrofräser
Ball nose micro end mills

3278-1.5



MD
VHM
HM

λ 30°

1.5xD1

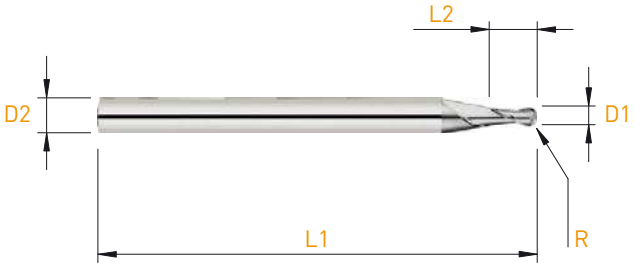
Z=2

D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.30	3.00	39	**3278-1.5-0.20**	●				
0.25	0.125	0.35	3.00	39	**3278-1.5-0.25**	●				
0.30	0.15	0.45	3.00	39	**3278-1.5-0.30**	●	●	●	●	●
0.40	0.20	0.60	3.00	39	**3278-1.5-0.40**	●	●	●	●	●
0.50	0.25	0.75	3.00	39	**3278-1.5-0.50**	●	●	●	●	●
0.60	0.30	0.90	3.00	39	**3278-1.5-0.60**	●	●	●	●	●
0.70	0.35	1.05	3.00	39	**3278-1.5-0.70**	●	●	●	●	●
0.80	0.40	1.20	3.00	39	**3278-1.5-0.80**	●	●	●	●	●
0.85	0.40	1.30	3.00	39	**3278-1.5-0.85**	●	●	●	●	●
0.90	0.45	1.35	3.00	39	**3278-1.5-0.90**	●	●	●	●	●
1.00	0.50	1.50	3.00	39	**3278-1.5-1.00**	●	●	●	●	●
1.10	0.55	1.65	3.00	39	**3278-1.5-1.10**	●	●	●	●	●
1.15	0.55	1.75	3.00	39	**3278-1.5-1.15**	●	●	●	●	●
1.20	0.60	1.80	3.00	39	**3278-1.5-1.20**	●	●	●	●	●
1.30	0.65	1.95	3.00	39	**3278-1.5-1.30**	●	●	●	●	●
1.40	0.70	2.10	3.00	39	**3278-1.5-1.40**	●	●	●	●	●
1.50	0.75	2.25	3.00	39	**3278-1.5-1.50**	●	●	●	●	●
1.60	0.80	2.40	3.00	39	**3278-1.5-1.60**	●	●	●	●	●
1.70	0.85	2.60	3.00	39	**3278-1.5-1.70**	●	●	●	●	●
1.80	0.90	2.70	3.00	39	**3278-1.5-1.80**	●	●	●	●	●
1.90	0.95	2.90	3.00	39	**3278-1.5-1.90**	●	●	●	●	●
2.00	1.00	3.00	3.00	39	**3278-1.5-2.00**	●	●	●	●	●
2.10	1.05	3.20	3.00	39	**3278-1.5-2.10**	●	●	●	●	●
2.20	1.10	3.30	3.00	39	**3278-1.5-2.20**	●	●	●	●	●
2.30	1.15	3.50	3.00	39	**3278-1.5-2.30**	●	●	●	●	●
2.40	1.20	3.60	3.00	39	**3278-1.5-2.40**	●	●	●	●	●
2.50	1.25	3.75	3.00	39	**3278-1.5-2.50**	●	●	●	●	●
2.60	1.30	3.90	3.00	39	**3278-1.5-2.60**	●	●	●	●	●
2.70	1.35	4.00	3.00	39	**3278-1.5-2.70**	●	●	●	●	●
2.80	1.40	4.20	3.00	39	**3278-1.5-2.80**	●	●	●	●	●
2.90	1.45	4.40	3.00	39	**3278-1.5-2.90**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3278-3

Micro-fraises hémisphériques
Vollradius Mikrofräser
Ball nose micro end mills



MD
VHM
HM

λ 30°

3xD1

Z=2

D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.60	3.00	39	**3278-3-0.20**	●				
0.30	0.15	1.00	3.00	39	**3278-3-0.30**	●	●	●	●	●
0.40	0.20	1.00	3.00	39	**3278-3-0.40**	●	●	●	●	●
0.50	0.25	1.50	3.00	39	**3278-3-0.50**	●	●	●	●	●
0.60	0.30	1.50	3.00	39	**3278-3-0.60**	●	●	●	●	●
0.70	0.35	2.00	3.00	39	**3278-3-0.70**	●	●	●	●	●
0.80	0.40	2.00	3.00	39	**3278-3-0.80**	●	●	●	●	●
0.90	0.45	2.50	3.00	39	**3278-3-0.90**	●	●	●	●	●
1.00	0.50	3.00	3.00	39	**3278-3-1.00**	●	●	●	●	●
1.20	0.60	4.00	3.00	39	**3278-3-1.20**	●	●	●	●	●
1.30	0.65	4.00	3.00	39	**3278-3-1.30**	●	●	●	●	●
1.40	0.70	4.00	3.00	39	**3278-3-1.40**	●	●	●	●	●
1.50	0.75	4.50	3.00	39	**3278-3-1.50**	●	●	●	●	●
1.55	0.775	5.00	3.00	39	**3278-3-1.55**	●	●	●	●	●
1.60	0.80	5.00	3.00	39	**3278-3-1.60**	●	●	●	●	●
1.80	0.90	5.50	3.00	39	**3278-3-1.80**	●	●	●	●	●
2.00	1.00	6.00	3.00	39	**3278-3-2.00**	●	●	●	●	●
2.10	1.05	6.50	3.00	39	**3278-3-2.10**	●	●	●	●	●
2.20	1.10	7.00	3.00	39	**3278-3-2.20**	●	●	●	●	●
2.50	1.25	7.50	3.00	39	**3278-3-2.50**	●	●	●	●	●
2.60	1.30	7.80	3.00	39	**3278-3-2.60**	●	●	●	●	●
2.70	1.35	8.10	3.00	39	**3278-3-2.70**	●	●	●	●	●
2.80	1.40	8.40	3.00	39	**3278-3-2.80**	●	●	●	●	●
2.90	1.45	8.70	3.00	39	**3278-3-2.90**	●	●	●	●	●

Micro-fraises hémisphériques
Vollradius Mikrofräser
Ball nose micro end mills

3278H-3X



MD
VHM
HM

λ 30°

L3
3xD1

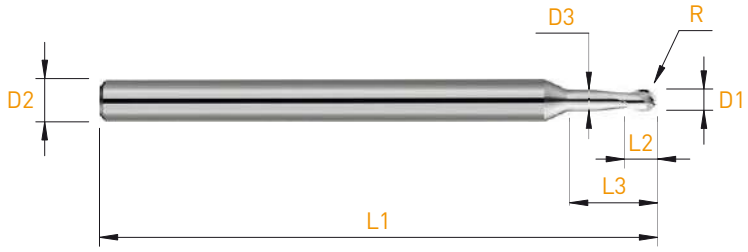
Z=2

D1 +0.005 / -0.010	R	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.30	0.60	0.19	3.00	39	**3278H-3X-0.20**	●				
0.30	0.15	0.45	0.90	0.27	3.00	39	**3278H-3X-0.30**	●	●	●	●	●
0.40	0.20	0.60	1.20	0.37	3.00	39	**3278H-3X-0.40**	●	●	●	●	●
0.50	0.25	0.75	1.50	0.45	3.00	39	**3278H-3X-0.50**	●	●	●	●	●
0.60	0.30	0.90	1.80	0.55	3.00	39	**3278H-3X-0.60**	●	●	●	●	●
0.70	0.35	1.05	2.10	0.65	3.00	39	**3278H-3X-0.70**	●	●	●	●	●
0.80	0.40	1.20	2.40	0.75	3.00	39	**3278H-3X-0.80**	●	●	●	●	●
0.90	0.45	1.35	2.70	0.85	3.00	39	**3278H-3X-0.90**	●	●	●	●	●
1.00	0.50	1.50	3.00	0.95	3.00	39	**3278H-3X-1.00**	●	●	●	●	●
1.10	0.55	1.65	3.30	1.05	3.00	39	**3278H-3X-1.10**	●	●	●	●	●
1.20	0.60	1.80	3.60	1.15	3.00	39	**3278H-3X-1.20**	●	●	●	●	●
1.30	0.65	1.95	3.90	1.25	3.00	39	**3278H-3X-1.30**	●	●	●	●	●
1.40	0.70	2.10	4.20	1.35	3.00	39	**3278H-3X-1.40**	●	●	●	●	●
1.50	0.75	2.25	4.50	1.45	3.00	39	**3278H-3X-1.50**	●	●	●	●	●
1.60	0.80	2.40	4.80	1.55	3.00	39	**3278H-3X-1.60**	●	●	●	●	●
1.70	0.85	2.55	5.10	1.65	3.00	39	**3278H-3X-1.70**	●	●	●	●	●
1.80	0.90	2.70	5.40	1.75	3.00	39	**3278H-3X-1.80**	●	●	●	●	●
1.90	0.95	2.85	5.70	1.85	3.00	39	**3278H-3X-1.90**	●	●	●	●	●
2.00	1.00	3.00	6.00	1.95	6.00	50	**3278H-3X-2.00**	●	●	●	●	●
2.10	1.05	3.15	6.30	2.05	6.00	50	**3278H-3X-2.10**	●	●	●	●	●
2.20	1.10	3.30	6.60	2.15	6.00	50	**3278H-3X-2.20**	●	●	●	●	●
2.30	1.15	3.45	6.90	2.25	6.00	50	**3278H-3X-2.30**	●	●	●	●	●
2.40	1.20	3.60	7.20	2.35	6.00	50	**3278H-3X-2.40**	●	●	●	●	●
2.50	1.25	3.75	7.50	2.45	6.00	50	**3278H-3X-2.50**	●	●	●	●	●
3.00	1.50	4.50	9.00	2.95	6.00	50	**3278H-3X-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3278H-6X

Micro-fraises hémisphériques
Vollradius Mikrofräser
Ball nose micro end mills



MD
VHM
HM

λ 30°

L3
6xD1

Z=2

D1 +0.005 / -0.010	R	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.15	0.45	1.80	0.27	3.00	39	**3278H-6X-0.30**	●	●	●	●	●
0.40	0.20	0.60	2.40	0.37	3.00	39	**3278H-6X-0.40**	●	●	●	●	●
0.50	0.25	0.75	3.00	0.45	3.00	39	**3278H-6X-0.50**	●	●	●	●	●
0.60	0.30	0.90	3.60	0.55	3.00	39	**3278H-6X-0.60**	●	●	●	●	●
0.70	0.35	1.05	4.20	0.65	3.00	39	**3278H-6X-0.70**	●	●	●	●	●
0.80	0.40	1.20	4.80	0.75	3.00	39	**3278H-6X-0.80**	●	●	●	●	●
0.90	0.45	1.35	5.40	0.85	3.00	39	**3278H-6X-0.90**	●	●	●	●	●
1.00	0.50	1.50	6.00	0.95	3.00	39	**3278H-6X-1.00**	●	●	●	●	●
1.10	0.55	1.65	6.60	1.05	3.00	39	**3278H-6X-1.10**	●	●	●	●	●
1.20	0.60	1.80	7.20	1.15	3.00	39	**3278H-6X-1.20**	●	●	●	●	●
1.30	0.65	1.95	7.80	1.25	3.00	39	**3278H-6X-1.30**	●	●	●	●	●
1.40	0.70	2.10	8.40	1.35	3.00	39	**3278H-6X-1.40**	●	●	●	●	●
1.50	0.75	2.25	9.00	1.45	3.00	39	**3278H-6X-1.50**	●	●	●	●	●
1.60	0.80	2.40	9.60	1.55	3.00	39	**3278H-6X-1.60**	●	●	●	●	●
1.70	0.85	2.55	10.20	1.65	3.00	39	**3278H-6X-1.70**	●	●	●	●	●
1.80	0.90	2.70	10.80	1.75	3.00	39	**3278H-6X-1.80**	●	●	●	●	●
1.90	0.95	2.85	11.40	1.85	3.00	39	**3278H-6X-1.90**	●	●	●	●	●
2.00	1.00	3.00	12.00	1.95	6.00	50	**3278H-6X-2.00**	●	●	●	●	●
2.10	1.05	3.15	12.60	2.05	6.00	50	**3278H-6X-2.10**	●	●	●	●	●
2.20	1.10	3.30	13.20	2.15	6.00	50	**3278H-6X-2.20**	●	●	●	●	●
2.30	1.15	3.45	13.80	2.25	6.00	50	**3278H-6X-2.30**	●	●	●	●	●
2.40	1.20	3.60	14.40	2.35	6.00	50	**3278H-6X-2.40**	●	●	●	●	●
2.50	1.25	3.75	15.00	2.45	6.00	50	**3278H-6X-2.50**	●	●	●	●	●
3.00	1.50	4.50	18.00	2.95	6.00	50	**3278H-6X-3.00**	●	●	●	●	●

Micro-fraises hémisphériques
Vollradius Mikrofräser
Ball nose micro end mills

3278H-9X



MD VHM HM | λ 30° | L3 9xD1 | Z=2

D1 +0.005 / -0.010	R	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.20	0.60	3.60	0.37	3.00	39	**3278H-9X-0.40**	●	●	●	●	●
0.50	0.25	0.75	4.50	0.45	3.00	39	**3278H-9X-0.50**	●	●	●	●	●
0.60	0.30	0.90	5.40	0.55	3.00	39	**3278H-9X-0.60**	●	●	●	●	●
0.70	0.35	1.05	6.30	0.65	3.00	39	**3278H-9X-0.70**	●	●	●	●	●
0.80	0.40	1.20	7.20	0.75	3.00	39	**3278H-9X-0.80**	●	●	●	●	●
0.90	0.45	1.35	8.10	0.85	3.00	39	**3278H-9X-0.90**	●	●	●	●	●
1.00	0.50	1.50	9.00	0.95	3.00	39	**3278H-9X-1.00**	●	●	●	●	●
1.10	0.55	1.65	9.90	1.05	3.00	39	**3278H-9X-1.10**	●	●	●	●	●
1.20	0.60	1.80	10.80	1.15	3.00	39	**3278H-9X-1.20**	●	●	●	●	●
1.30	0.65	1.95	11.70	1.25	3.00	39	**3278H-9X-1.30**	●	●	●	●	●
1.40	0.70	2.10	12.60	1.35	3.00	39	**3278H-9X-1.40**	●	●	●	●	●
1.50	0.75	2.25	13.50	1.45	3.00	39	**3278H-9X-1.50**	●	●	●	●	●
1.60	0.80	2.40	14.40	1.55	3.00	39	**3278H-9X-1.60**	●	●	●	●	●
1.70	0.85	2.55	15.30	1.65	3.00	39	**3278H-9X-1.70**	●	●	●	●	●
1.80	0.90	2.70	16.20	1.75	3.00	39	**3278H-9X-1.80**	●	●	●	●	●
1.90	0.95	2.85	17.10	1.85	3.00	39	**3278H-9X-1.90**	●	●	●	●	●
2.00	1.00	3.00	18.00	1.95	6.00	50	**3278H-9X-2.00**	●	●	●	●	●
2.10	1.05	3.15	18.90	2.05	6.00	50	**3278H-9X-2.10**	●	●	●	●	●
2.20	1.10	3.30	19.80	2.15	6.00	50	**3278H-9X-2.20**	●	●	●	●	●
2.30	1.15	3.45	20.70	2.25	6.00	50	**3278H-9X-2.30**	●	●	●	●	●
2.40	1.20	3.60	21.60	2.35	6.00	50	**3278H-9X-2.40**	●	●	●	●	●
2.50	1.25	3.75	22.50	2.45	6.00	50	**3278H-9X-2.50**	●	●	●	●	●
3.00	1.50	4.50	27.00	2.95	6.00	50	**3278H-9X-3.00**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data
> 16.54

Z	λ	D1	D2	Type	Corner	page
Z=3	Div.	Ø1.00 - 8.00	Ø3/6/8	**E-DHP3300-1.5**		> 16.57
Z=4	26° / 33°	Ø10.00	Ø10 h6	**E-DHP3400-1.5**		
Z=3	Div.	Ø1.00 - 8.00	Ø3/6/8	**E-DHP3300-2.5**		
Z=4	26° / 33°	Ø10.00	Ø10 h6	**E-DHP3400-2.5**		
Z=1	23°	Ø1.00 - 6.00	Ø6 h5	**3123-2**	Sharp Corner	> 16.58
		Ø1.00 - 6.00	Ø6 h5	**3123-4**		> 16.59
Z=2	60°	Ø0.50 - 6.00	Ø3/6/8	**3260MV**		> 16.60
	90°	Ø0.30 - 6.00	Ø3/6/8	**3290MV**		> 16.61
	120°	Ø0.50 - 6.00	Ø3/6/8	**32120MV**		> 16.62
Z=2	30°	Ø1.00 - 6.00	Ø6 h5	**3230**		> 16.63
		Ø3.00 - 6.00	Ø6 h5	**3230-1.5**	Sharp Corner	> 16.64
		Ø3.00 - 6.00	Ø6 h5	**3230-3**		> 16.65
		Ø2.00 - 6.00	D1 = D2	**3231**		> 16.66
		Ø3.00 - 6.00	Ø6 h5	**3239T-2.5X**	U	> 16.67
		Ø3.00 - 6.00	Ø6 h5	**3239T-4X**		> 16.68
Z=3	30°	Ø1.00 - 6.00	Ø6 h5	**3330-S**		> 16.69
		Ø3.00-12.00	D1 = D2	**3330**		> 16.70
		Ø3.00 - 6.00	Ø6 h5	**3330-4**		> 16.71
		Ø2.00 - 6.00	D1 = D2	**3331**		> 16.72
		Ø1.50 - 6.00	Ø6 h5	**3336-HA**	Sharp Corner	> 16.73
		Ø1.50 - 6.00	Ø6 h5	**3337-HA**		> 16.73
	45°	Ø2.00 - 6.00	D1 = D2	**3341**		> 16.74
		Ø0.50 - 6.00	Ø6 h5	**3345-S**		> 16.75
	60°	Ø2.00 - 6.00	D1 = D2	**3361**		> 16.76
	35° / 38°	Ø1.00 - 6.00	Ø6 h5	**DHP3336**		> 16.77
Z=4	30°	Ø3.00 - 6.00	D1 = D2	**3430**		> 16.78
		Ø2.00 - 6.00	D1 = D2	**3431**		> 16.79
	45°	Ø2.00 - 6.00	D1 = D2	**3441**	Sharp Corner	> 16.80
		Ø0.50 - 6.00	Ø6 h5	**3445-S**		> 16.81
	50°	Ø1.00 - 6.00	Ø6 h5	**3450**		> 16.82
	35° / 38°	Ø1.00 - 6.00	Ø6 h5	**DHP3436**		> 16.83
	30°	Ø3.00 - 6.00	Ø6 h5	**3439T-2.5X**	U	> 16.84
		Ø3.00 - 6.00	Ø6 h5	**3439T-4X**		> 16.85
Z=5	45°	Ø1.00 - 6.00	Ø6 h5	**3545**	Sharp Corner	> 16.86
Z=4/5/6		Ø1.00 - 6.00	Ø6 h5	**35645**		> 16.87
Z=8	10°	Ø6.00	Ø6 h5	**3810**		> 16.88

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

> 16.54

Z	λ	D1	D2	**Type**	Corner	page
Z=2	30°	Ø2.00 - 6.00	D1 = D2	**3238**		> 16.89
Z=3	30°	Ø2.00 - 6.00	D1 = D2	**3338**		> 16.90
Z=3	30°	Ø8.00-12.00	Ø6 h6	**3383**		> 16.91
Z=10	30°	Ø16.3 / 20.30	Ø10 h6	**3831 / 3833**		> 16.92
Z=3	0°	Ø0.50 -3.00	Ø3 h4	**3611**		> 16.93
Z=3	0°	Ø0.50 -3.00	Ø3 h4	**3911**		> 16.94
Z=4	0°	Ø3.00-8.00	Ø3 h4 Ø6 h5 Ø8 h6	**1901 / 3901**		> 16.95

Fraises ébauches
Schruppfräser
Roughing mills

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material	VC (m/min)	1.0 - 2.0 fz (mm)	2.0 - 4.0 fz (mm)	4.0 - 6.0 fz (mm)	6.0 - 10.0 fz (mm)	N	TiAlN	STF
Acier de décolletage Automatenstahl Free-cutting steel (P)	100 - 140	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	★★★	★★★
Acier Stahl < 600 N/mm² (P) Steel	90 - 140	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	★★★	★★★
Acier Stahl < 800 N/mm² (P) Steel	90 - 140	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	★★★	★★★
Acier Stahl > 800 N/mm² (P) Steel	80 - 120	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	★★★	★★★
Acier trempé Gehärteter Stahl -55HRC (H) Hardened steel	120 - 170	0.005 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.035	-	★★★	★★★
Acier trempé Gehärteter Stahl +55HRC (H) Hardened steel	110 - 150	0.005 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.035	-	★★★	★★★
Inox Rostfreistahl (M) Stainless steel	50 - 90	0.004 - 0.008	0.008 - 0.012	0.012 - 0.020	0.020 - 0.040	-	★★★	★★★
Aluminium (N)	250 - 350	0.008 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.065	-	★★★	★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze (N) Copper, brass, bronze	130 - 240	0.005 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★
Matière synthétique Synthetisches Material (N) Synthetic material	150 - 300	0.020 - 0.030	0.030 - 0.050	0.050 - 0.080	0.080 - 0.150	-	★★★	★★
Métaux précieux Edelmetalle (N) Precious metals	120 - 150	0.005 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★
Titane Titan (S) Titanium	50 - 100	0.010 - 0.015	0.015 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★★
Alliage de nickel Nickel-Legierung (S) Nickel alloy	40 - 60	0.005 - 0.007	0.007-0.012	0.012 - 0.020	0.020 - 0.030	-	★★★	★★★
Matière exotique Exotisches material (O) Exotic material	15 - 25	0.005 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

★ Bien / Gut / Good
★★ Très bien / Sehr gut / Very good
★★★ Excellent / Ausgezeichnet / Excellent

Matière Werkstoff Material	VC (m/min)	0.50 - 2.0 fz (mm)	2.0 - 4.0 fz (mm)	4.0 - 6.0 fz (mm)	6.0 - 8.0 fz (mm)	8.0 - 12.0 fz (mm)	N	TiAlN	STF	DLC
Acier de décolletage Automatenstahl Free-cutting steel (P)	80 - 130	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	★★★	★★★	-
Acier Stahl Steel < 600 N/mm² (P)	70 - 100	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	★★★	★★★	-
Acier Stahl Steel < 800 N/mm² (P)	70 - 100	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	★★★	★★★	-
Acier Stahl Steel > 800 N/mm² (P)	50 - 80	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	★★★	★★★	-
Acier trempé Gehärteter Stahl -55HRC (H) Hardened steel	60 - 90	0.002 - 0.008	0.008 - 0.015	0.012 - 0.020	0.020 - 0.025	0.025 - 0.030	-	★★★	★★★	-
Acier trempé Gehärteter Stahl +55HRC (H) Hardened steel	40 - 70	0.002 - 0.008	0.008 - 0.015	0.012 - 0.020	0.020 - 0.025	0.020 - 0.030	-	★★★	★★★	-
Inox Rostfreistahl Stainless steel (M)	40 - 80	0.003 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★★	-
Aluminium (N)	230 - 320	0.003 - 0.010	0.010 - 0.025	0.025 - 0.030	0.030 - 0.050	0.050 - 0.080	★★	★	★★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N)	100 - 190	0.003 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.040	0.040 - 0.070	★★	★	★★	★★★
Matière synthétique Synthetisches Material Synthetic material (N)	250 - 500	0.005 - 0.030	0.030 - 0.050	0.050 - 0.080	0.080 - 0.100	0.100 - 0.200	★★★	-	★★	★★★
Métaux précieux Edelmetalle Precious metals (N)	90 - 150	0.003 - 0.015	0.015 - 0.025	0.025 - 0.030	0.030 - 0.050	0.050 - 0.080	★★★	★	★★	★★★
Titane Titan Titanium (S)	30 - 70	0.004 - 0.010	0.010 - 0.017	0.017-0.025	0.025 - 0.035	0.035 - 0.050	-	★★	★★★	-
Alliage de nickel Nickel-Legierung Nickel alloy (S)	30 - 60	0.003 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.025	0.025 - 0.040	-	★★★	★★★	-
Matière exotique Exotisches material Exotic material (O)	15 - 25	0.002 - 0.008	0.008 - 0.020	0.020 - 0.030	0.030 - 0.040	0.040 - 0.050	-	★★★	★★★	★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

★ Bien / Gut / Good
★★ Très bien / Sehr gut / Very good
★★★ Excellent / Ausgezeichnet / Excellent

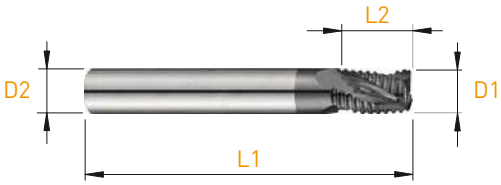
Fraises à angler
Kegelsenker
Chamfering tools

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material	VC (m/min)	N	TiAlN	STF
Acier de décolletage Automatenstahl Free-cutting steel (P)	80 - 130	★	★★★	★★★
Acier Stahl < 600 N/mm² Steel (P)	70 - 100	★	★★★	★★★
Acier Stahl < 800 N/mm² Steel (P)	70 - 100	★	★★★	★★★
Acier Stahl > 800 N/mm² Steel (P)	50 - 80	★	★★★	★★★
Acier trempé Gehärteter Stahl -55HRC Hardened steel (H)	60 - 90	-	★★	★★★
Acier trempé Gehärteter Stahl +55HRC Hardened steel (H)	40 - 70	-	★★	★★★
Inox Rostfreistahl Stainless steel (M)	50 - 100	★	★★★	★★★
Aluminium (N)	200 - 300	★★★	★★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N)	100 - 200	★★★	★★	★★★
Matière synthétique Synthetisches Material Synthetic material (N)	200 - 500	★★★	★★	★★
Métaux précieux Edelmetalle Precious metals (N)	90 - 140	★★★	★★	★★★
Titane Titan Titanium (S)	30 - 80	-	★★★	★★★
Alliage de nickel Nickel-Legierung Nickel alloy (S)	30 - 60	-	★★★	★★★
Matière exotique Exotisches material Exotic material (O)	20 - 30	-	★★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

★ Bien / Gut / Good
★★ Très bien / Sehr gut / Very good
★★★ Excellent / Ausgezeichnet / Excellent



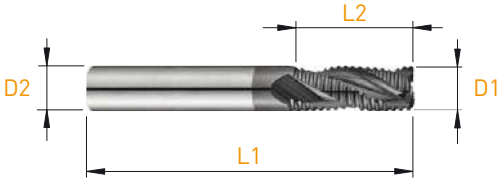
MD
VHM
HM





1.5xD1

	Z	E	λ	D1 h10	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6 Ø10 h6	L1	Art. N°	N	TiAlN	STF
	3	0.05	26°/30°	1.00	1.50	3.00	39	**E-DHP3300-1.5-1.00**	●	●	●
	3	0.10	26°/30°	1.50	2.25	3.00	39	**E-DHP3300-1.5-1.50**	●	●	●
	3	0.20	26°/30°	2.00	3.00	3.00	39	**E-DHP3300-1.5-2.00**	●	●	●
	3	0.20	26°/33°	2.50	3.75	6.00	50	**E-DHP3300-1.5-2.50**	●	●	●
	3	0.20	26°/33°	3.00	4.25	6.00	50	**E-DHP3300-1.5-3.00**	●	●	●
	3	0.30	26°/33°	4.00	6.00	6.00	50	**E-DHP3300-1.5-4.00**	●	●	●
	3	0.30	26°/33°	5.00	7.50	6.00	50	**E-DHP3300-1.5-5.00**	●	●	●
	3	0.40	26°/33°	6.00	9.00	6.00	50	**E-DHP3300-1.5-6.00**	●	●	●
	3	0.50	26°/33°	8.00	12.00	8.00	64	**E-DHP3300-1.5-8.00**	●	●	●
	4	0.50	26°/33°	10.00	15.00	10.00	73	**E-DHP3400-1.5-10.00**	●	●	●



MD
VHM
HM





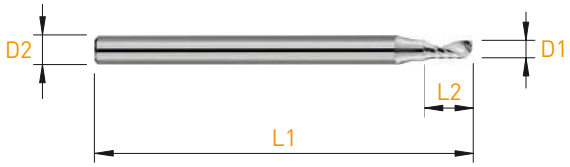
2.5xD1

	Z	E	λ	D1 h10	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6 Ø10 h6	L1	Art. N°	N	TiAlN	STF
	3	0.05	26°/30°	1.00	2.50	3.00	39	**E-DHP3300-2.5-1.00**	●	●	●
	3	0.10	26°/30°	1.50	3.75	3.00	39	**E-DHP3300-2.5-1.50**	●	●	●
	3	0.20	26°/30°	2.00	5.00	3.00	39	**E-DHP3300-2.5-2.00**	●	●	●
	3	0.20	26°/33°	2.50	6.25	6.00	57	**E-DHP3300-2.5-2.50**	●	●	●
	3	0.20	26°/33°	3.00	7.50	6.00	57	**E-DHP3300-2.5-3.00**	●	●	●
	3	0.30	26°/33°	4.00	10.00	6.00	57	**E-DHP3300-2.5-4.00**	●	●	●
	3	0.30	26°/33°	5.00	12.50	6.00	57	**E-DHP3300-2.5-5.00**	●	●	●
	3	0.40	26°/33°	6.00	15.00	6.00	57	**E-DHP3300-2.5-6.00**	●	●	●
	3	0.50	26°/33°	8.00	20.00	8.00	64	**E-DHP3300-2.5-8.00**	●	●	●
	4	0.50	26°/33°	10.00	25.00	10.00	73	**E-DHP3400-2.5-10.00**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3123-2

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

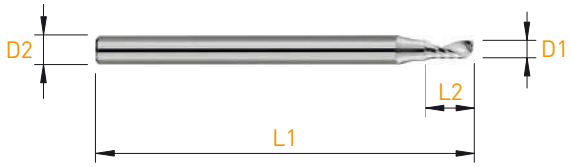


MD VHM HM	λ 23°	Sharp Corner		2xD1	Z=1

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF	DLC
1.00	2.00	6.00	50	**3123-2-1.0**	●	●	●	●
2.00	4.00	6.00	50	**3123-2-2.0**	●	●	●	●
3.00	6.00	6.00	50	**3123-2-3.0**	●	●	●	●
4.00	8.00	6.00	50	**3123-2-4.0**	●	●	●	●
5.00	10.00	6.00	50	**3123-2-5.0**	●	●	●	●
6.00	12.00	6.00	50	**3123-2-6.0**	●	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3123-4

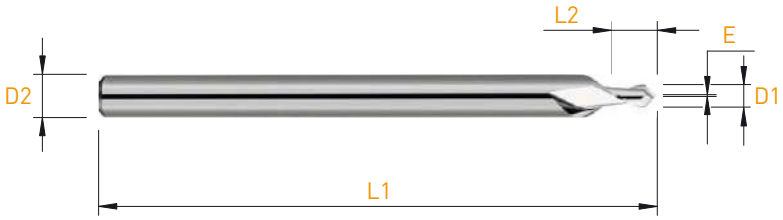


MD VHM HM	λ 23°	Sharp Corner		4xD1	Z=1

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF	DLC
1.00	4.00	6.00	50	**3123-4-1.0**	●	●	●	●
2.00	8.00	6.00	50	**3123-4-2.0**	●	●	●	●
3.00	12.00	6.00	50	**3123-4-3.0**	●	●	●	●
4.00	16.00	6.00	50	**3123-4-4.0**	●	●	●	●
5.00	20.00	6.00	50	**3123-4-5.0**	●	●	●	●
6.00	24.00	6.00	50	**3123-4-6.0**	●	●	●	●

3260MV

Fraises en bout
Schaftfräser
End mills



MD VHM HM	60°		Z=2	

D1 h10	E	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6	L1	Art. N°	N	TiAlN	STF
0.50	0.05	1.00	3.00	39	**3260MV-0.5**	●	●	●
1.00	0.10	2.00	3.00	39	**3260MV-1.0**	●	●	●
1.50	0.15	3.00	3.00	39	**3260MV-1.5**	●	●	●
2.00	0.20	4.00	3.00	39	**3260MV-2.0**	●	●	●
2.50	0.25	5.00	3.00	39	**3260MV-2.5**	●	●	●
3.00	0.30	6.00	6.00	50	**3260MV-3.0**	●	●	●
4.00	0.40	8.00	6.00	50	**3260MV-4.0**	●	●	●
6.00	0.60	12.00	8.00	64	**3260MV-6.0**	●	●	●



MD
VHM
HM

90°

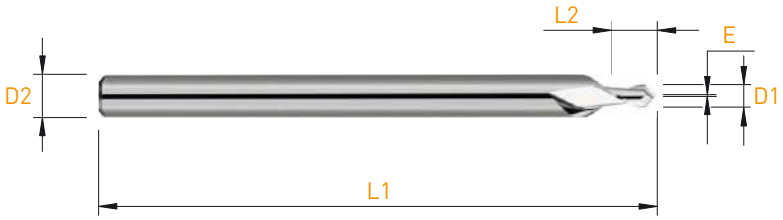
Z=2

D1 h10	E	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6	L1	Art. N°	N	TiAlN	STF
0.30	0.03	0.60	3.00	39	**3290MV-0.3**	●	●	●
0.40	0.04	0.80	3.00	39	**3290MV-0.4**	●	●	●
0.50	0.05	1.00	3.00	39	**3290MV-0.5**	●	●	●
0.60	0.06	1.20	3.00	39	**3290MV-0.6**	●	●	●
0.70	0.07	1.40	3.00	39	**3290MV-0.7**	●	●	●
0.80	0.08	1.60	3.00	39	**3290MV-0.8**	●	●	●
0.90	0.09	1.80	3.00	39	**3290MV-0.9**	●	●	●
1.00	0.10	2.00	3.00	39	**3290MV-1.0**	●	●	●
1.10	0.11	2.20	3.00	39	**3290MV-1.1**	●	●	●
1.20	0.12	2.40	3.00	39	**3290MV-1.2**	●	●	●
1.30	0.13	2.60	3.00	39	**3290MV-1.3**	●	●	●
1.40	0.14	2.80	3.00	39	**3290MV-1.4**	●	●	●
1.50	0.15	3.00	3.00	39	**3290MV-1.5**	●	●	●
1.60	0.16	3.20	3.00	39	**3290MV-1.6**	●	●	●
1.70	0.17	3.40	3.00	39	**3290MV-1.7**	●	●	●
1.80	0.18	3.60	3.00	39	**3290MV-1.8**	●	●	●
1.90	0.19	3.80	3.00	39	**3290MV-1.9**	●	●	●
2.00	0.20	4.00	3.00	39	**3290MV-2.0**	●	●	●
2.50	0.25	5.00	3.00	39	**3290MV-2.5**	●	●	●
3.00	0.30	6.00	6.00	50	**3290MV-3.0**	●	●	●
4.00	0.40	8.00	6.00	50	**3290MV-4.0**	●	●	●
6.00	0.60	12.00	8.00	64	**3290MV-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

32120MV

Fraises en bout
Schaftfräser
End mills



MD VHM HM	120°		Z=2	

D1 h10	E	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6	L1	Art. N°	N	TiAlN	STF
0.50	0.05	1.00	3.00	39	**32120MV-0.5**	●	●	●
1.00	0.10	2.00	3.00	39	**32120MV-1.0**	●	●	●
1.50	0.15	3.00	3.00	39	**32120MV-1.5**	●	●	●
2.00	0.20	4.00	3.00	39	**32120MV-2.0**	●	●	●
2.50	0.25	5.00	3.00	39	**32120MV-2.5**	●	●	●
3.00	0.30	6.00	6.00	50	**32120MV-3.0**	●	●	●
4.00	0.40	8.00	6.00	50	**32120MV-4.0**	●	●	●
6.00	0.60	12.00	8.00	64	**32120MV-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3230



MD
VHM
HM

λ 30°

Sharp Corner

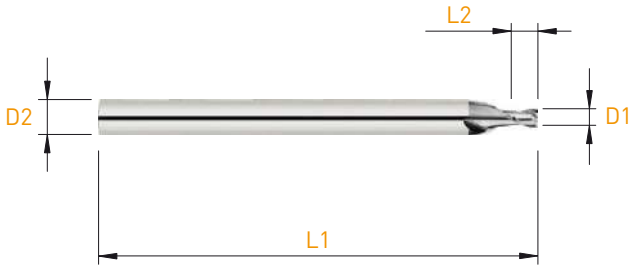
Z=2

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	1.00	6.00	50	**3230-1.0**	●	●	●
1.50	1.50	6.00	50	**3230-1.5**	●	●	●
2.00	2.00	6.00	50	**3230-2.0**	●	●	●
2.50	2.50	6.00	50	**3230-2.5**	●	●	●
3.00	3.00	6.00	50	**3230-3.0**	●	●	●
4.00	4.00	6.00	50	**3230-4.0**	●	●	●
5.00	5.00	6.00	50	**3230-5.0**	●	●	●
6.00	6.00	6.00	50	**3230-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3230-1.5

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

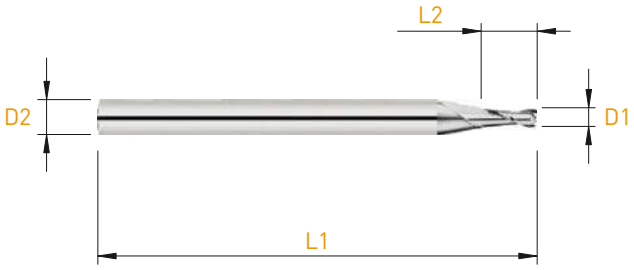


MD VHM HM	λ 30°	Sharp Corner		1.5xD1	Z=2	

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	4.50	6.00	50	**3230-1.5-3.0**	●	●	●
3.50	5.00	6.00	50	**3230-1.5-3.5**	●	●	●
4.00	6.00	6.00	50	**3230-1.5-4.0**	●	●	●
4.50	7.00	6.00	50	**3230-1.5-4.5**	●	●	●
5.00	8.00	6.00	50	**3230-1.5-5.0**	●	●	●
6.00	9.00	6.00	50	**3230-1.5-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3230-3



MD
VHM
HM

λ 30°

Sharp Corner

3xD1

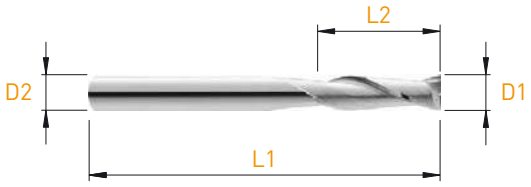
Z=2

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	9.00	6.00	50	**3230-3-3.0**	●	●	●
3.50	10.00	6.00	50	**3230-3-3.5**	●	●	●
4.00	12.00	6.00	50	**3230-3-4.0**	●	●	●
4.50	13.00	6.00	50	**3230-3-4.5**	●	●	●
5.00	15.00	6.00	50	**3230-3-5.0**	●	●	●
6.00	18.00	6.00	50	**3230-3-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3231

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 30°

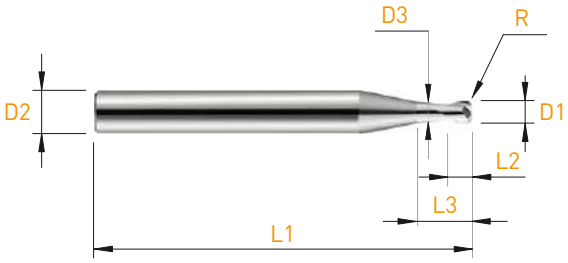
Sharp Corner

Z=2

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3231-2.0**	●	●	●
2.50	8.00	2.50	32	**3231-2.5**	●	●	●
3.00	12.00	3.00	32	**3231-3.0**	●	●	●
3.50	12.00	3.50	32	**3231-3.5**	●	●	●
4.00	12.00	4.00	40	**3231-4.0**	●	●	●
4.50	14.00	4.50	50	**3231-4.5**	●	●	●
5.00	14.00	5.00	50	**3231-5.0**	●	●	●
6.00	16.00	6.00	50	**3231-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3239T-2.5X



MD
VHM
HM

λ 30°

Radius Corner

L3
2.5xD1

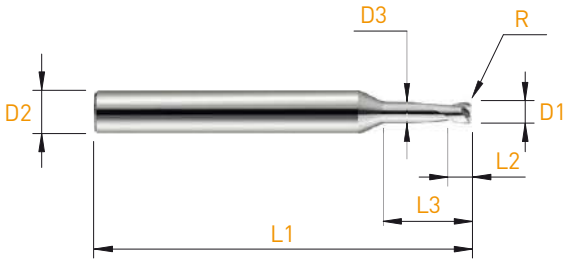
Z=2

D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	0.50	3.00	7.50	2.95	6.00	57	**3239T-2.5X-3.0**	●	●	●
3.50	0.50	3.50	8.75	3.45	6.00	57	**3239T-2.5X-3.5**	●	●	●
4.00	0.50	4.00	10.00	3.95	6.00	57	**3239T-2.5X-4.0**	●	●	●
4.50	0.50	4.50	11.25	4.45	6.00	57	**3239T-2.5X-4.5**	●	●	●
5.00	0.50	5.00	12.50	4.95	6.00	57	**3239T-2.5X-5.0**	●	●	●
5.50	0.50	5.50	13.75	5.45	6.00	57	**3239T-2.5X-5.5**	●	●	●
6.00	0.50	6.00	15.00	5.95	6.00	57	**3239T-2.5X-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3239T-4X

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 30°

Radius Corner

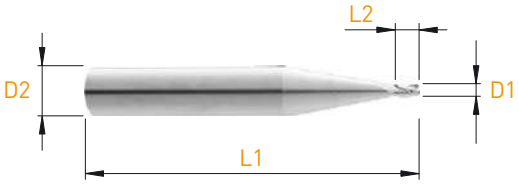
L3
4xD1

Z=2

D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	0.50	3.00	12.00	2.95	6.00	57	**3239T-4X-3.0**	●	●	●
3.50	0.50	3.50	14.00	3.45	6.00	57	**3239T-4X-3.5**	●	●	●
4.00	0.50	4.00	16.00	3.95	6.00	57	**3239T-4X-4.0**	●	●	●
4.50	0.50	4.50	18.00	4.45	6.00	57	**3239T-4X-4.5**	●	●	●
5.00	0.50	5.00	20.00	4.95	6.00	57	**3239T-4X-5.0**	●	●	●
5.50	0.50	5.50	22.00	5.45	6.00	57	**3239T-4X-5.5**	●	●	●
6.00	0.50	6.00	24.00	5.95	6.00	57	**3239T-4X-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3330-S



MD
VHM
HM

λ 30°

Sharp Corner

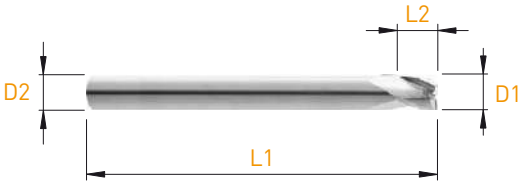
Z=3

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	3.00	6.00	40	**3330-S-1.0**	●	●	●
1.50	3.00	6.00	40	**3330-S-1.5**	●	●	●
2.00	3.00	6.00	40	**3330-S-2.0**	●	●	●
2.50	3.00	6.00	40	**3330-S-2.5**	●	●	●
3.00	4.00	6.00	40	**3330-S-3.0**	●	●	●
3.50	4.00	6.00	40	**3330-S-3.5**	●	●	●
4.00	5.00	6.00	40	**3330-S-4.0**	●	●	●
4.50	5.00	6.00	40	**3330-S-4.5**	●	●	●
5.00	6.00	6.00	40	**3330-S-5.0**	●	●	●
6.00	7.00	6.00	40	**3330-S-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3330

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 30°

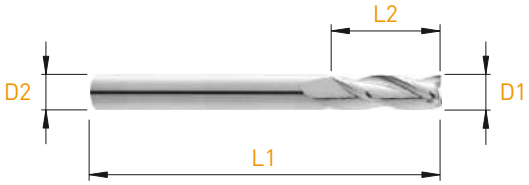
Sharp Corner

Z=3

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	3.00	3.00	39	**3330-3.0**	●	●	●
4.00	4.00	4.00	50	**3330-4.0**	●	●	●
5.00	5.00	5.00	50	**3330-5.0**	●	●	●
6.00	6.00	6.00	50	**3330-6.0**	●	●	●
8.00	8.00	8.00	58	**3330-8.0**	●		
10.00	10.00	10.00	66	**3330-10.0**	●		
12.00	12.00	12.00	73	**3330-12.0**	●		

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3330-4



MD
VHM
HM

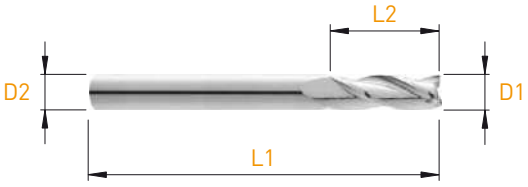
λ 30°

Sharp Corner

4xD1

Z=3

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	12.00	6.00	50	**3330-4-3.0**	●	●	●
4.00	16.00	6.00	50	**3330-4-4.0**	●	●	●
5.00	20.00	6.00	50	**3330-4-5.0**	●	●	●
6.00	24.00	6.00	57	**3330-4-6.0**	●	●	●



MD
VHM
HM

λ 30°

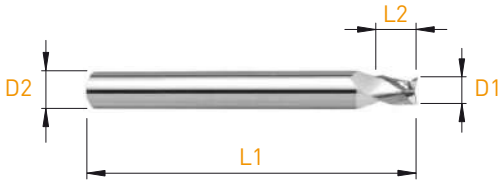
Sharp Corner

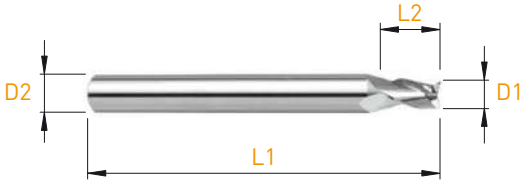
Z=3

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3331-2.0**	●	●	●
2.50	8.00	2.50	32	**3331-2.5**	●	●	●
3.00	12.00	3.00	32	**3331-3.0**	●	●	●
3.50	12.00	3.50	32	**3331-3.5**	●	●	●
4.00	12.00	4.00	40	**3331-4.0**	●	●	●
4.50	14.00	4.50	50	**3331-4.5**	●	●	●
5.00	14.00	5.00	50	**3331-5.0**	●	●	●
6.00	16.00	6.00	50	**3331-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3336-HA / 3337-HA





MD VHM HM | λ 30° | Sharp Corner | DIN 6527K | Z=3

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.50	3.00	6.00	50	**3336-HA-1.5**	●	●	●
1.80	3.00	6.00	50	**3336-HA-1.8**	●	●	●
2.00	3.00	6.00	50	**3336-HA-2.0**	●	●	●
2.50	3.00	6.00	50	**3336-HA-2.5**	●	●	●
2.80	4.00	6.00	50	**3336-HA-2.8**	●	●	●
3.00	4.00	6.00	50	**3336-HA-3.0**	●	●	●
3.50	4.00	6.00	50	**3336-HA-3.5**	●	●	●
3.80	5.00	6.00	54	**3336-HA-3.8**	●	●	●
4.00	5.00	6.00	54	**3336-HA-4.0**	●	●	●
4.50	5.00	6.00	54	**3336-HA-4.5**	●	●	●
4.80	6.00	6.00	54	**3336-HA-4.8**	●	●	●
5.00	6.00	6.00	54	**3336-HA-5.0**	●	●	●
5.50	7.00	6.00	54	**3336-HA-5.5**	●	●	●
5.80	7.00	6.00	54	**3336-HA-5.8**	●	●	●
6.00	7.00	6.00	54	**3336-HA-6.0**	●	●	●

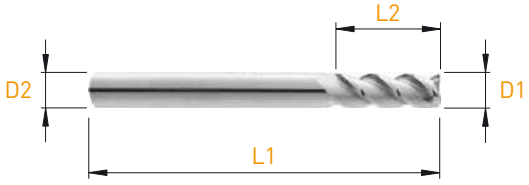
MD VHM HM | λ 30° | Sharp Corner | DIN 6527L | Z=3

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.50	6.00	6.00	57	**3337-HA-1.5**	●	●	●
1.80	6.00	6.00	57	**3337-HA-1.8**	●	●	●
2.00	6.00	6.00	57	**3337-HA-2.0**	●	●	●
2.50	6.00	6.00	57	**3337-HA-2.5**	●	●	●
2.80	7.00	6.00	57	**3337-HA-2.8**	●	●	●
3.00	7.00	6.00	57	**3337-HA-3.0**	●	●	●
3.50	7.00	6.00	57	**3337-HA-3.5**	●	●	●
3.80	8.00	6.00	57	**3337-HA-3.8**	●	●	●
4.00	8.00	6.00	57	**3337-HA-4.0**	●	●	●
4.50	8.00	6.00	57	**3337-HA-4.5**	●	●	●
4.80	10.00	6.00	57	**3337-HA-4.8**	●	●	●
5.00	10.00	6.00	57	**3337-HA-5.0**	●	●	●
5.50	10.00	6.00	57	**3337-HA-5.5**	●	●	●
5.80	10.00	6.00	57	**3337-HA-5.8**	●	●	●
6.00	10.00	6.00	57	**3337-HA-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3341

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 45°

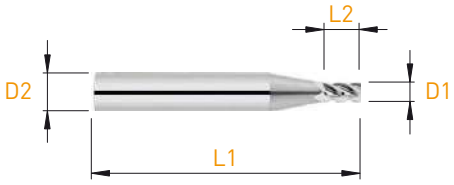
Sharp Corner

Z=3

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3341-2.0**	●	●	●
2.50	8.00	2.50	32	**3341-2.5**	●	●	●
3.00	12.00	3.00	32	**3341-3.0**	●	●	●
3.50	12.00	3.50	32	**3341-3.5**	●	●	●
4.00	12.00	4.00	40	**3341-4.0**	●	●	●
4.50	14.00	4.50	50	**3341-4.5**	●	●	●
5.00	14.00	5.00	50	**3341-5.0**	●	●	●
6.00	16.00	6.00	50	**3341-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3345-S



MD
VHM
HM

λ 45°

Sharp Corner

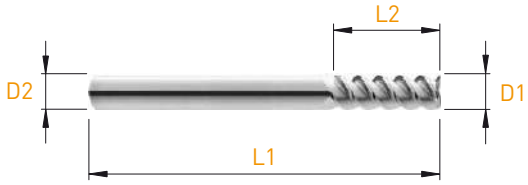
Z=3

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
0.50	1.00	6.00	40	**3345-S-0.5**	●	●	●
0.60	1.20	6.00	40	**3345-S-0.6**	●	●	●
0.70	1.40	6.00	40	**3345-S-0.7**	●	●	●
0.80	1.60	6.00	40	**3345-S-0.8**	●	●	●
0.90	1.80	6.00	40	**3345-S-0.9**	●	●	●
1.00	2.00	6.00	40	**3345-S-1.0**	●	●	●
1.10	2.20	6.00	40	**3345-S-1.1**	●	●	●
1.20	2.40	6.00	40	**3345-S-1.2**	●	●	●
1.30	2.60	6.00	40	**3345-S-1.3**	●	●	●
1.40	2.80	6.00	40	**3345-S-1.4**	●	●	●
1.50	3.00	6.00	40	**3345-S-1.5**	●	●	●
1.60	3.20	6.00	40	**3345-S-1.6**	●	●	●
1.70	3.40	6.00	40	**3345-S-1.7**	●	●	●
1.80	3.60	6.00	40	**3345-S-1.8**	●	●	●
1.90	3.80	6.00	40	**3345-S-1.9**	●	●	●
2.00	4.00	6.00	40	**3345-S-2.0**	●	●	●
2.10	4.20	6.00	40	**3345-S-2.1**	●	●	●
2.20	4.40	6.00	40	**3345-S-2.2**	●	●	●
2.30	4.60	6.00	40	**3345-S-2.3**	●	●	●
2.40	4.80	6.00	40	**3345-S-2.4**	●	●	●
2.50	5.00	6.00	40	**3345-S-2.5**	●	●	●
2.60	5.20	6.00	40	**3345-S-2.6**	●	●	●
2.70	5.40	6.00	40	**3345-S-2.7**	●	●	●
2.80	5.60	6.00	40	**3345-S-2.8**	●	●	●
2.90	5.80	6.00	40	**3345-S-2.9**	●	●	●
3.00	6.00	6.00	40	**3345-S-3.0**	●	●	●
3.50	7.00	6.00	40	**3345-S-3.5**	●	●	●
4.00	8.00	6.00	40	**3345-S-4.0**	●	●	●
4.50	9.00	6.00	40	**3345-S-4.5**	●	●	●
5.00	10.00	6.00	40	**3345-S-5.0**	●	●	●
6.00	12.00	6.00	40	**3345-S-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3361

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 60°

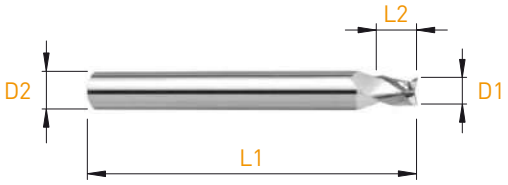
Sharp Corner

Z=3

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3361-2.0**	●	●	●
2.50	8.00	2.50	32	**3361-2.5**	●	●	●
3.00	12.00	3.00	32	**3361-3.0**	●	●	●
3.50	12.00	3.50	32	**3361-3.5**	●	●	●
4.00	12.00	4.00	40	**3361-4.0**	●	●	●
4.50	14.00	4.50	50	**3361-4.5**	●	●	●
5.00	14.00	5.00	50	**3361-5.0**	●	●	●
6.00	16.00	6.00	50	**3361-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

DHP3336



MD VHM HM	λ 35° ↓ 38°	Sharp Corner		Z=3

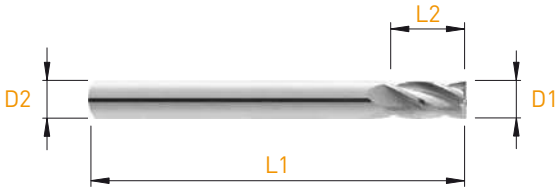
DHP — Denture à pas irrégulier, hélice progressive
Ungleiche Teilung, progressive Spirale
Uneven tooth pitch, progressive helix

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	4.00	6.00	40	**DHP3336-1.0**	●	●	●
1.50	4.00	6.00	40	**DHP3336-1.5**	●	●	●
2.00	4.00	6.00	40	**DHP3336-2.0**	●	●	●
2.50	4.00	6.00	40	**DHP3336-2.5**	●	●	●
3.00	5.00	6.00	40	**DHP3336-3.0**	●	●	●
3.50	5.00	6.00	40	**DHP3336-3.5**	●	●	●
4.00	6.00	6.00	40	**DHP3336-4.0**	●	●	●
5.00	7.00	6.00	40	**DHP3336-5.0**	●	●	●
6.00	8.00	6.00	40	**DHP3336-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3430

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 30°

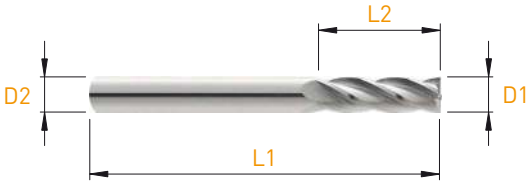
Sharp Corner

Z=4

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	3.00	3.00	39	**3430-3.0**	●	●	●
4.00	4.00	4.00	50	**3430-4.0**	●	●	●
5.00	5.00	5.00	50	**3430-5.0**	●	●	●
6.00	6.00	6.00	50	**3430-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3431



MD
VHM
HM

λ 30°

Sharp Corner

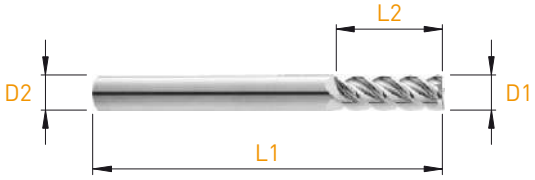
Z=4

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3431-2.0**	●	●	●
2.50	8.00	2.50	32	**3431-2.5**	●	●	●
3.00	12.00	3.00	32	**3431-3.0**	●	●	●
3.50	12.00	3.50	32	**3431-3.5**	●	●	●
4.00	12.00	4.00	40	**3431-4.0**	●	●	●
4.50	14.00	4.50	50	**3431-4.5**	●	●	●
5.00	14.00	5.00	50	**3431-5.0**	●	●	●
6.00	16.00	6.00	50	**3431-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3441

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 45°

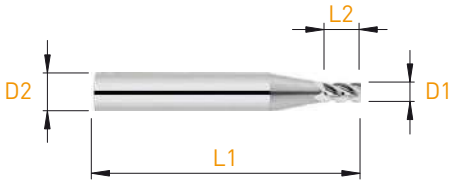
Sharp Corner

Z=4

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3441-2.0**	●	●	●
2.50	8.00	2.50	32	**3441-2.5**	●	●	●
3.00	12.00	3.00	32	**3441-3.0**	●	●	●
3.50	12.00	3.50	32	**3441-3.5**	●	●	●
4.00	12.00	4.00	40	**3441-4.0**	●	●	●
4.50	14.00	4.50	50	**3441-4.5**	●	●	●
5.00	14.00	5.00	50	**3441-5.0**	●	●	●
6.00	16.00	6.00	50	**3441-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3445-S



MD
VHM
HM

λ 45°

Sharp Corner

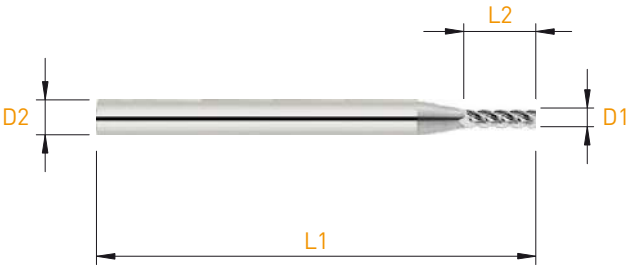
Z=4

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
0.50	1.00	6.00	40	**3445-S-0.5**	●	●	●
0.60	1.20	6.00	40	**3445-S-0.6**	●	●	●
0.70	1.40	6.00	40	**3445-S-0.7**	●	●	●
0.80	1.60	6.00	40	**3445-S-0.8**	●	●	●
0.90	1.80	6.00	40	**3445-S-0.9**	●	●	●
1.00	2.00	6.00	40	**3445-S-1.0**	●	●	●
1.10	2.20	6.00	40	**3445-S-1.1**	●	●	●
1.20	2.40	6.00	40	**3445-S-1.2**	●	●	●
1.30	2.60	6.00	40	**3445-S-1.3**	●	●	●
1.40	2.80	6.00	40	**3445-S-1.4**	●	●	●
1.50	3.00	6.00	40	**3445-S-1.5**	●	●	●
1.60	3.20	6.00	40	**3445-S-1.6**	●	●	●
1.70	3.40	6.00	40	**3445-S-1.7**	●	●	●
1.80	3.60	6.00	40	**3445-S-1.8**	●	●	●
1.90	3.80	6.00	40	**3445-S-1.9**	●	●	●
2.00	4.00	6.00	40	**3445-S-2.0**	●	●	●
2.10	4.20	6.00	40	**3445-S-2.1**	●	●	●
2.20	4.40	6.00	40	**3445-S-2.2**	●	●	●
2.30	4.60	6.00	40	**3445-S-2.3**	●	●	●
2.40	4.80	6.00	40	**3445-S-2.4**	●	●	●
2.50	5.00	6.00	40	**3445-S-2.5**	●	●	●
2.60	5.20	6.00	40	**3445-S-2.6**	●	●	●
2.70	5.40	6.00	40	**3445-S-2.7**	●	●	●
2.80	5.60	6.00	40	**3445-S-2.8**	●	●	●
2.90	5.80	6.00	40	**3445-S-2.9**	●	●	●
3.00	6.00	6.00	40	**3445-S-3.0**	●	●	●
3.50	7.00	6.00	40	**3445-S-3.5**	●	●	●
4.00	8.00	6.00	40	**3445-S-4.0**	●	●	●
4.50	9.00	6.00	40	**3445-S-4.5**	●	●	●
5.00	10.00	6.00	40	**3445-S-5.0**	●	●	●
6.00	12.00	6.00	40	**3445-S-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3450

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 50°

Sharp Corner

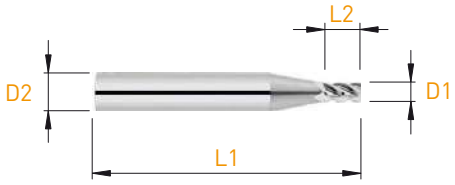
1.5xD1

Z=4

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	1.50	6.00	50	**3450-1.0**	●	●	●
1.50	2.25	6.00	50	**3450-1.5**	●	●	●
2.00	3.00	6.00	50	**3450-2.0**	●	●	●
2.50	3.75	6.00	50	**3450-2.5**	●	●	●
3.00	4.50	6.00	50	**3450-3.0**	●	●	●
3.50	5.25	6.00	50	**3450-3.5**	●	●	●
4.00	6.00	6.00	50	**3450-4.0**	●	●	●
5.00	7.50	6.00	50	**3450-5.0**	●	●	●
6.00	9.00	6.00	50	**3450-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

DHP3436



MD VHM HM	λ 35°↓38°	Sharp Corner		Z=4	

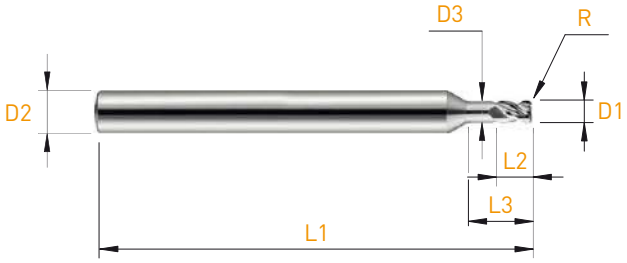
DHP — Denture à pas irrégulier, hélice progressive
Ungleiche Teilung, progressive Spirale
Uneven tooth pitch, progressive helix

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	4.00	6.00	40	**DHP3436-1.0**	●	●	●
1.50	4.00	6.00	40	**DHP3436-1.5**	●	●	●
2.00	4.00	6.00	40	**DHP3436-2.0**	●	●	●
2.50	4.00	6.00	40	**DHP3436-2.5**	●	●	●
3.00	5.00	6.00	40	**DHP3436-3.0**	●	●	●
3.50	5.00	6.00	40	**DHP3436-3.5**	●	●	●
4.00	6.00	6.00	40	**DHP3436-4.0**	●	●	●
5.00	7.00	6.00	40	**DHP3436-5.0**	●	●	●
6.00	8.00	6.00	40	**DHP3436-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3439T-2.5X

Fraises en bout toriques
Torische Schaftfräser
Toric end mills



MD
VHM
HM

λ 30°

Radius Corner

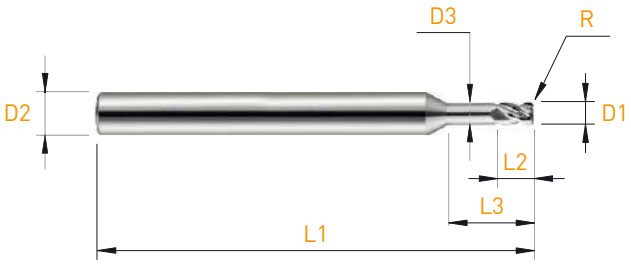
L3
2.5xD1

Z=4

D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	0.50	3.00	7.50	2.95	6.00	57	**3439T-2.5X-3.0**	●	●	●
3.50	0.50	3.50	8.75	3.45	6.00	57	**3439T-2.5X-3.5**	●	●	●
4.00	0.50	4.00	10.00	3.95	6.00	57	**3439T-2.5X-4.0**	●	●	●
4.50	0.50	4.50	11.25	4.45	6.00	57	**3439T-2.5X-4.5**	●	●	●
5.00	0.50	5.00	12.50	4.95	6.00	57	**3439T-2.5X-5.0**	●	●	●
5.50	0.50	5.50	13.75	5.45	6.00	57	**3439T-2.5X-5.5**	●	●	●
6.00	0.50	6.00	15.00	5.95	6.00	57	**3439T-2.5X-6.0**	●	●	●

Fraises en bout toriques
Torische Schaftfräser
Toric end mills

3439T-4X



MD
VHM
HM

λ 30°

Radius
Corner

L3
4xD1

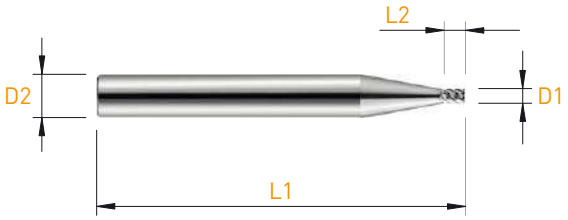
Z=4

D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	0.50	3.00	12.00	2.95	6.00	57	**3439T-4X-3.0**	●	●	●
3.50	0.50	3.50	14.00	3.45	6.00	57	**3439T-4X-3.5**	●	●	●
4.00	0.50	4.00	16.00	3.95	6.00	57	**3439T-4X-4.0**	●	●	●
4.50	0.50	4.50	18.00	4.45	6.00	57	**3439T-4X-4.5**	●	●	●
5.00	0.50	5.00	20.00	4.95	6.00	57	**3439T-4X-5.0**	●	●	●
5.50	0.50	5.50	22.00	5.45	6.00	57	**3439T-4X-5.5**	●	●	●
6.00	0.50	6.00	24.00	5.95	6.00	57	**3439T-4X-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3545

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 45°

Sharp Corner

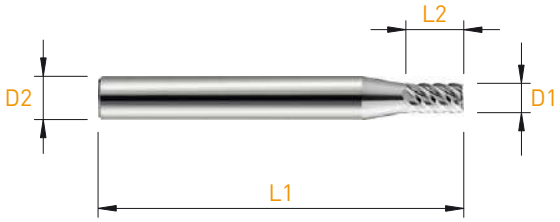
1.5xD1

Z=5

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	1.50	6.00	50	**3545-1.0**	●	●	●
2.00	3.00	6.00	50	**3545-2.0**	●	●	●
3.00	4.50	6.00	50	**3545-3.0**	●	●	●
4.00	6.00	6.00	50	**3545-4.0**	●	●	●
5.00	7.50	6.00	50	**3545-5.0**	●	●	●
6.00	9.00	6.00	50	**3545-6.0**	●	●	●

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

35645



MD
VHM
HM

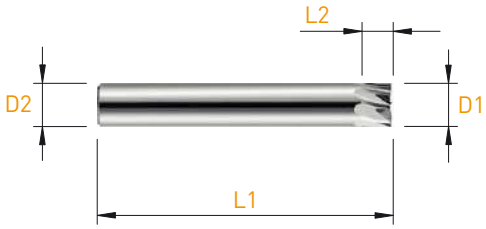
λ 45°

Sharp Corner

Z=4
Z=5
Z=6

D1 h10	L2	Z	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	2.00	4	6.00	50	**35645-1.0**	●	●	●
1.50	3.00	5	6.00	50	**35645-1.5**	●	●	●
2.00	4.00	5	6.00	50	**35645-2.0**	●	●	●
2.50	5.00	5	6.00	50	**35645-2.5**	●	●	●
3.00	6.00	5	6.00	50	**35645-3.0**	●	●	●
3.50	7.00	5	6.00	50	**35645-3.5**	●	●	●
4.00	8.00	6	6.00	50	**35645-4.0**	●	●	●
4.50	9.00	6	6.00	50	**35645-4.5**	●	●	●
5.00	10.00	6	6.00	50	**35645-5.0**	●	●	●
6.00	12.00	6	6.00	50	**35645-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request



MD
VHM
HM

λ 10°

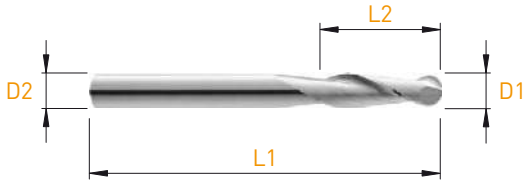
Sharp Corner

Z=8

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
6.00	4.00	6.00	50	**3810-0.65-6.0**	●	●	●
6.00	6.00	6.00	57	**3810-1.0-6.0**	●	●	●
6.00	9.00	6.00	57	**3810-1.5-6.0**	●	●	●

Fraises en bout hémisphériques
Vollradius Schaftfräser
Ball nose end mills

3238



MD
VHM
HM

λ 30°

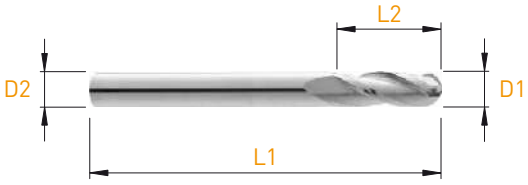
Z=2

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3238-2.0**	●	●	●
2.50	8.00	2.50	32	**3238-2.5**	●	●	●
3.00	12.00	3.00	32	**3238-3.0**	●	●	●
3.50	12.00	3.50	32	**3238-3.5**	●	●	●
4.00	12.00	4.00	40	**3238-4.0**	●	●	●
4.50	14.00	4.50	50	**3238-4.5**	●	●	●
5.00	14.00	5.00	50	**3238-5.0**	●	●	●
6.00	16.00	6.00	50	**3238-6.0**	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3338

Fraises en bout hémisphériques
Vollradius Schaftfräser
Ball nose end mills



MD
VHM
HM

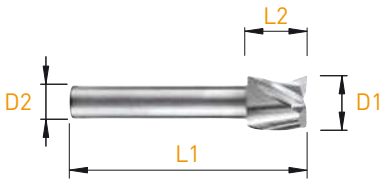
λ 30°

Z=3

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3338-2.0**	●	●	●
2.50	8.00	2.50	32	**3338-2.5**	●	●	●
3.00	12.00	3.00	32	**3338-3.0**	●	●	●
3.50	12.00	3.50	32	**3338-3.5**	●	●	●
4.00	12.00	4.00	40	**3338-4.0**	●	●	●
4.50	14.00	4.50	50	**3338-4.5**	●	●	●
5.00	14.00	5.00	50	**3338-5.0**	●	●	●
6.00	16.00	6.00	50	**3338-6.0**	●	●	●

Fraises en bout pour usinage en bout plat
Schaftfräser für flache Frontbearbeitung
End mills for flat front machining

3383



MD
VHM
HM

λ 30°

Sharp Corner

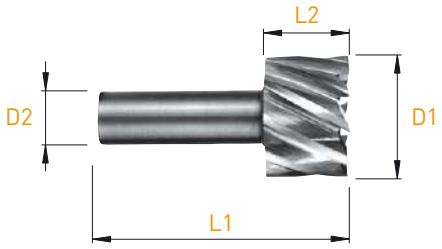
Z=3

D1 h10	L2	D2 h6	L1	Art. N°	z
8.00	8.00	6.00	40	**3383-8.0**	●
10.00	10.00	6.00	40	**3383-10.0**	●
12.00	12.00	6.00	40	**3383-12.0**	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

3831 / 3833

Fraises en bout avec queue réduite
Schaftfräser mit reduziertem Schaft
End mills with reduced shank



MD
VHM
HM

λ 30°

Sharp Corner

Z=10

D1 h10	L2	D2 h6	L1	Art. N°	Z
16.30	15.00	10.00	45	**3831**	●
20.30	15.00	10.00	45	**3833**	●



MD VHM HM	λ 0°		Z=3	60°

D1 +0.005 / -0.010	L2	D2 h4	L1	d	Art. N°	N	TiAlN	STF
0.50	3.00	3.00	39	0.10	**3611-0.5**	●	●	●
0.60	3.00	3.00	39	0.10	**3611-0.6**	●	●	●
0.70	3.00	3.00	39	0.10	**3611-0.7**	●	●	●
0.80	3.00	3.00	39	0.10	**3611-0.8**	●	●	●
0.90	3.00	3.00	39	0.10	**3611-0.9**	●	●	●
1.00	3.00	3.00	39	0.10	**3611-1.0**	●	●	●
1.50	4.50	3.00	39	0.10	**3611-1.5**	●	●	●
2.00	6.00	3.00	39	0.10	**3611-2.0**	●	●	●
2.50	7.50	3.00	39	0.10	**3611-2.5**	●	●	●
3.00	-	3.00	39	0.10	**3611-3.0**	●	●	●

3911

Fraises à angler
Kegelsenker
Chamfering tools



MD
VHM
HM

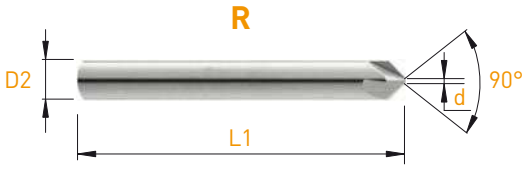
λ 0°

Z=3

90°

D1 +0.010 / -0.010	L2	D2 h4	L1	d	Art. N°	N	TiAlN	STF
0.30	2.00	3.00	39	0.05	**3911-0.30**	●	●	●
0.40	2.00	3.00	39	0.05	**3911-0.40**	●	●	●
0.50	3.00	3.00	39	0.10	**3911-0.50**	●	●	●
0.60	3.00	3.00	39	0.10	**3911-0.60**	●	●	●
0.70	3.00	3.00	39	0.10	**3911-0.70**	●	●	●
0.80	3.00	3.00	39	0.10	**3911-0.80**	●	●	●
0.90	3.00	3.00	39	0.10	**3911-0.90**	●	●	●
1.00	3.00	3.00	39	0.10	**3911-1.00**	●	●	●
1.10	3.00	3.00	39	0.10	**3911-1.10**	●	●	●
1.20	3.00	3.00	39	0.10	**3911-1.20**	●	●	●
1.30	3.00	3.00	39	0.10	**3911-1.30**	●	●	●
1.40	3.00	3.00	39	0.10	**3911-1.40**	●	●	●
1.50	4.50	3.00	39	0.10	**3911-1.50**	●	●	●
2.00	6.00	3.00	39	0.10	**3911-2.00**	●	●	●
2.50	7.50	3.00	39	0.10	**3911-2.50**	●	●	●
3.00	-	3.00	39	0.10	**3911-3.00**	●	●	●





MD VHM HM	λ 0°		Z=4	90°	L		R			
D2 Ø3 h4 Ø6 h5 Ø8 h6	d	L1	Art. N°	N	Art. N°	N	TiAlN	STF
3.00	0.30	39	**1901-3.0**	●	**3901-3.0**	●	●	●
6.00	0.70	50	**1901-6.0**	●	**3901-6.0**	●	●	●
8.00	1.20	59	**1901-8.0**	●	**3901-8.0**	●	●	●

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

> 16.98

Z	λ	D1	D2	**Type**	Corner	page
			Ø6 h4	**701SE330-P**		> 16.99
			Ø6 h4	**701SE330-R**		> 16.100
Z=1	0°	Ø0.50 -3.00	Ø6 h4	**701S3170R-2**		> 16.101
Z=2	0°	Ø0.30 -3.00	Ø6 h4	**701S3279T-3X**		> 16.102
Z=3		Ø0.30 - 3.50	Ø6 h5	**701S3371-1**		> 16.103
		Ø0.30 - 3.00	Ø6 h5	**701S3371-2**		> 16.104
		Ø0.30 - 2.50	Ø6 h5	**701S3371-3**		> 16.105
Z=3	30°	Ø1.00 -2.00	Ø6 h4	**701S3379T-3X**		> 16.106
Z=3	0°	Ø0.40 -2.00	Ø6 h4	**701S3911**		> 16.107



Tous les outils de la gamme MICRO-Line sont réalisables pour la machine WM 701S sur demande.

Alle Werkzeuge aus der MICRO-Line sind machbar für die Maschine WM 701S auf Anfrage.

All tools of MICRO-Line can be produced for the machine WM 701S on request.

Fraises pour machine WM 701S
Werkzeuge für Maschine WM 701S
Executions for machine WM 701S

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material	VC (m/min)	N	TiAlN	STF	DLC
Acier de décolletage Automatenstahl Free-cutting steel (P)	120 - 180	-	★★★	★★★	-
Acier Stahl < 600 N/mm² Steel (P)	100 - 150	-	★★★	★★★	-
Acier Stahl < 800 N/mm² Steel (P)	100 - 130	-	★★★	★★★	-
Acier Stahl > 800 N/mm² Steel (P)	80 - 100	-	★★★	★★★	-
Acier trempé Gehärteter Stahl -55HRC Hardened steel (H)	-	-	★★★	★★★	-
Acier trempé Gehärteter Stahl +55HRC Hardened steel (H)	-	-	★★★	★★★	-
Inox Rostfreistahl Stainless steel (M)	60 - 90	-	★★★	★★★	-
Aluminium (N)	250 - 400	★★	★★★	★★★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N)	150 - 200	★★★	★★	★★	★★★
Matière synthétique Synthetisches Material Synthetic material (N)	100 - 150	★★★	★★	★★	★★★
Métaux précieux Edelmetalle Precious metals (N)	140 - 200	★★★	★★	★★	★★★
Titane Titan Titanium (S)	40 - 70	-	★★★	★★★	-
Alliage de nickel Nickel-Legierung Nickel alloy (S)	30 - 60	-	★★★	★★★	-
Matière exotique Exotisches material Exotic material (O)	30 - 60	-	★★★	★★★	★★★

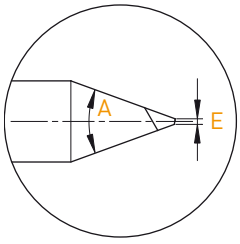
Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

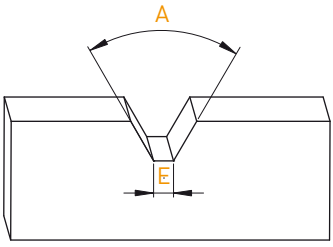
★ Bien / Gut / Good
★★ Très bien / Sehr gut / Very good
★★★ Excellent / Ausgezeichnet / Excellent

Fraises à graver avec plat - WM 701S
Gravierfräser mit Fläche - WM 701S
Engraving mills with flat - WM 701S

701SE330-P







MD
VHM
HM

A	E	D2 h4	L1	Art. N°	N	TiAlN	STF	DLC
30°	0.02-0.10* / 0.10-0.30**	6.00	33	**701SE330-P-_(E)**	●	●	●	●
35°	0.02-0.10* / 0.10-0.30**	6.00	33	**701SE335-P-_(E)**	●	●	●	●
40°	0.02-0.10* / 0.10-0.30**	6.00	33	**701SE340-P-_(E)**	●	●	●	●
50°	0.02-0.10* / 0.10-0.30**	6.00	33	**701SE350-P-_(E)**	●	●	●	●
60°	0.02-0.10* / 0.10-0.30**	6.00	33	**701SE360-P-_(E)**	●	●	●	●

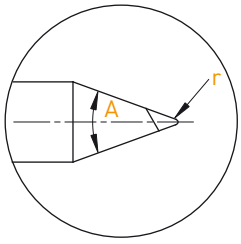
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

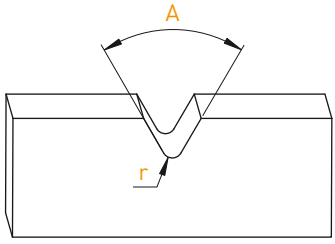
** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

701SE330-R

Fraises à graver à rayon - WM 701S
Gravierfräser mit Radius - WM 701S
Engraving mills with radius - WM 701S







MD
VHM
HM

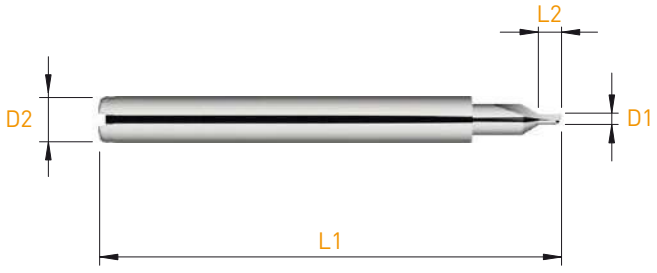
A	r	D2 h4	L1	Art. N°	N	TiAlN	STF	DLC
30°	0.04-0.10* / 0.10-0.30**	6.00	33	**701SE330-R-_(r)**	●	●	●	●
35°	0.04-0.10* / 0.10-0.30**	6.00	33	**701SE335-R-_(r)**	●	●	●	●
40°	0.04-0.10* / 0.10-0.30**	6.00	33	**701SE340-R-_(r)**	●	●	●	●
50°	0.04-0.10* / 0.10-0.30**	6.00	33	**701SE350-R-_(r)**	●	●	●	●
60°	0.04-0.10* / 0.10-0.30**	6.00	33	**701SE360-R-_(r)**	●	●	●	●

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises en bout - WM 701S
Schaftfräser - WM 701S
End mills - WM 701S

701S3170R-2



MD
VHM
HM

λ 0°

Sharp Corner

2xD1

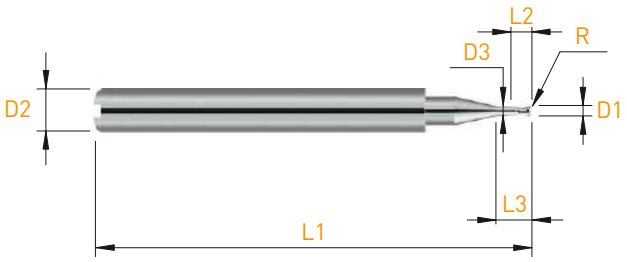
Z=1

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	DLC
0.50	1.00	6.00	33	**701S3170R-2-0.50**	●	●	●	●
1.00	2.00	6.00	33	**701S3170R-2-1.00**	●	●	●	●
1.50	3.00	6.00	33	**701S3170R-2-1.50**	●	●	●	●
2.00	4.00	6.00	33	**701S3170R-2-2.00**	●	●	●	●
2.50	5.00	6.00	33	**701S3170R-2-2.50**	●	●	●	●
3.00	6.00	6.00	33	**701S3170R-2-3.00**	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

701S3279T-3X

Fraises en bout toriques - WM 701S
Torische Schaftfräser - WM 701S
Toric end mills - WM 701S



MD
VHM
HM

Radius Corner

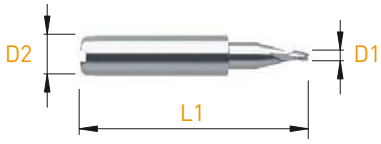
L3
3xD1

Z=2

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4	L1	Art. N°	N	TiAlN	STF	DLC
0.30	0.05	0.30	0.90	0.27	6.00	33	**701S3279T-3X-0.30**	●	●	●	●
0.40	0.05	0.40	1.20	0.45	6.00	33	**701S3279T-3X-0.40**	●	●	●	●
0.50	0.05	0.50	1.50	0.45	6.00	33	**701S3279T-3X-0.50**	●	●	●	●
0.60	0.05	0.60	1.80	0.55	6.00	33	**701S3279T-3X-0.60**	●	●	●	●
0.80	0.05	0.80	2.40	0.75	6.00	33	**701S3279T-3X-0.80**	●	●	●	●
1.00	0.10	1.00	3.00	0.95	6.00	33	**701S3279T-3X-1.00**	●	●	●	●
1.20	0.10	1.20	3.60	1.15	6.00	33	**701S3279T-3X-1.20**	●	●	●	●
1.50	0.20	1.50	4.50	1.45	6.00	33	**701S3279T-3X-1.50**	●	●	●	●
1.80	0.20	1.80	5.40	1.75	6.00	33	**701S3279T-3X-1.80**	●	●	●	●
2.00	0.20	2.00	6.00	1.95	6.00	33	**701S3279T-3X-2.00**	●	●	●	●
2.50	0.20	2.50	7.50	2.45	6.00	33	**701S3279T-3X-2.50**	●	●	●	●
3.00	0.20	3.00	9.00	2.95	6.00	33	**701S3279T-3X-3.00**	●	●	●	●

Fraises en bout - WM 701S
Schaftfräser - WM 701S
End mills - WM 701S

701S3371-1



MD
VHM
HM

λ 36° ↓ 38°

Sharp Corner

1xD1

Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.30	6.00	33	**701S3371-1-0.30**	●	●	●	●	●
0.40	0.40	6.00	33	**701S3371-1-0.40**	●	●	●	●	●
0.50	0.50	6.00	33	**701S3371-1-0.50**	●	●	●	●	●
0.60	0.60	6.00	33	**701S3371-1-0.60**	●	●	●	●	●
0.80	0.80	6.00	33	**701S3371-1-0.80**	●	●	●	●	●
1.00	1.00	6.00	33	**701S3371-1-1.00**	●	●	●	●	●
1.20	1.20	6.00	33	**701S3371-1-1.20**	●	●	●	●	●
1.50	1.50	6.00	33	**701S3371-1-1.50**	●	●	●	●	●
1.80	1.80	6.00	33	**701S3371-1-1.80**	●	●	●	●	●
2.00	2.00	6.00	33	**701S3371-1-2.00**	●	●	●	●	●
2.50	2.50	6.00	33	**701S3371-1-2.50**	●	●	●	●	●
3.00	3.00	6.00	33	**701S3371-1-3.00**	●	●	●	●	●
3.20	3.20	6.00	33	**701S3371-1-3.20**	●	●	●	●	●

701S3371-2

Fraises en bout - WM 701S
Schaftfräser - WM 701S
End mills - WM 701S



MD
VHM
HM

λ 36° ↓ 38°

Sharp Corner

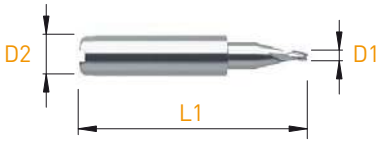
2xD1

Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	6.00	33	**701S3371-2-0.30**	●	●	●	●	●
0.40	0.80	6.00	33	**701S3371-2-0.40**	●	●	●	●	●
0.50	1.00	6.00	33	**701S3371-2-0.50**	●	●	●	●	●
0.60	1.20	6.00	33	**701S3371-2-0.60**	●	●	●	●	●
0.80	1.60	6.00	33	**701S3371-2-0.80**	●	●	●	●	●
1.00	2.00	6.00	33	**701S3371-2-1.00**	●	●	●	●	●
1.20	2.40	6.00	33	**701S3371-2-1.20**	●	●	●	●	●
1.50	3.00	6.00	33	**701S3371-2-1.50**	●	●	●	●	●
1.80	3.60	6.00	33	**701S3371-2-1.80**	●	●	●	●	●
2.00	4.00	6.00	33	**701S3371-2-2.00**	●	●	●	●	●
2.50	5.00	6.00	33	**701S3371-2-2.50**	●	●	●	●	●
3.00	6.00	6.00	33	**701S3371-2-3.00**	●	●	●	●	●

Fraises en bout - WM 701S
Schaftfräser - WM 701S
End mills - WM 701S

701S3371-3



MD
VHM
HM

λ 36° ↓ 38°

Sharp Corner

3xD1

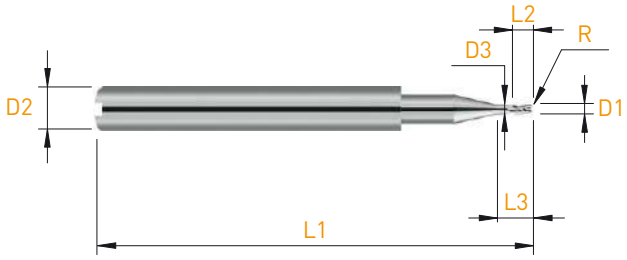
Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.90	6.00	33	**701S3371-3-0.30**	●	●	●	●	●
0.40	1.20	6.00	33	**701S3371-3-0.40**	●	●	●	●	●
0.50	1.50	6.00	33	**701S3371-3-0.50**	●	●	●	●	●
0.60	1.80	6.00	33	**701S3371-3-0.60**	●	●	●	●	●
0.80	2.40	6.00	33	**701S3371-3-0.80**	●	●	●	●	●
1.00	3.00	6.00	33	**701S3371-3-1.00**	●	●	●	●	●
1.20	3.60	6.00	33	**701S3371-3-1.20**	●	●	●	●	●
1.50	4.50	6.00	33	**701S3371-3-1.50**	●	●	●	●	●
1.80	5.40	6.00	33	**701S3371-3-1.80**	●	●	●	●	●
2.00	6.00	6.00	33	**701S3371-3-2.00**	●	●	●	●	●
2.50	7.50	6.00	33	**701S3371-3-2.50**	●	●	●	●	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

701S3379T-3X

Fraises en bout toriques - WM 701S
Torische Schaftfräser - WM 701S
Toric end mills - WM 701S



MD
VHM
HM

λ 30°

Radius Corner

L3
3xD1

Z=3

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4	L1	Art. N°	N	TiAlN	STF	DLC
1.00	0.10	2.00	3.00	0.95	6.00	33	**701S3379T-3X-1.00**	●	●	●	●
1.50	0.20	3.00	4.50	1.45	6.00	33	**701S3379T-3X-1.50**	●	●	●	●
2.00	0.20	4.00	6.00	1.95	6.00	33	**701S3379T-3X-2.00**	●	●	●	●

Fraises à angler - WM 701S
Kegelsenker - WM 701S
Chamfering tools - WM 701S

701S3911



MD
VHM
HM

λ 0°

Z=3

90°

D1 +0.010 / -0.010	L2	D2 h4	L1	d +/- 0.02	Art. N°	N	TiAlN	STF	DLC
0.40	2.00	6.00	33	0.05	**701S3911-0.40**	●	●	●	●
0.50	2.50	6.00	33	0.05	**701S3911-0.50**	●	●	●	●
0.60	2.50	6.00	33	0.05	**701S3911-0.60**	●	●	●	●
1.00	3.00	6.00	33	0.05	**701S3911-1.00**	●	●	●	●
1.50	4.50	6.00	33	0.05	**701S3911-1.50**	●	●	●	●
2.00	4.50	6.00	33	0.05	**701S3911-2.00**	●	●	●	●

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

> 16.109

A	Plat [E] / Rayon [r] Fläche [E] / Radius [r] Flat [E] / Radius [r]	D2	**Type**	Page
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90° / 120°	0.05-0.30 0.05-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4 Ø6 h5	**E100-P**	> 16.110
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.02-0.30 0.02-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4	**E300-P**	> 16.111
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4	**E300-R**	> 16.112
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4	**E900-P**	> 16.113
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4	**E900-R**	> 16.114

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Fraises à graver
Gravierfräser
Engraving mills

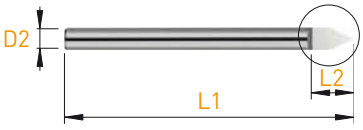
Matière Werkstoff Material	n (tr/min)	Vf (mm/min)	N	TiAlN	STF	TiCN	DLC
Acier de décolletage Automatenstahl Free-cutting steel (P)	20 - 50'000	100 - 180	-	★★★	★★★	★★	-
Acier Stahl < 600 N/mm² Steel (P)	20 - 50'000	100 - 180	-	★★★	★★★	★★	-
Acier Stahl < 800 N/mm² Steel (P)	20 - 50'000	100 - 180	-	★★★	★★★	★★	-
Acier Stahl > 800 N/mm² Steel (P)	20 - 50'000	100 - 150	-	★★★	★★★	★★	-
Acier trempé Gehärteter Stahl -55HRC Hardened steel (H)	20 - 50'000	-	-	★★★	★★★	★	-
Acier trempé Gehärteter Stahl +55HRC Hardened steel (H)	20 - 50'00	-	-	★★★	★★★	★	-
Inox Rostfreistahl Stainless steel (M)	20 - 50'000	100 - 170	-	★★★	★★★	★★	-
Aluminium (N)	20 - 50'000	100 - 250	★★★	★★	★★	★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N)	20 - 50'000	70 - 150	★★★	★★	★★	★★	★★★
Matière synthétique Synthetisches Material Synthetic material (N)	20 - 50'000	100 - 200	★★★	★★	★★	★★	★★★
Métaux précieux Edelmetalle Precious metals (N)	20 - 50'000	100 - 200	★★★	★★	★★	★★	★★★
Titane Titan Titanium (S)	20 - 50'000	70 - 150	-	★★★	★★★	★★	-
Alliage de nickel Nickel-Legierung Nickel alloy (S)	20 - 50'000	80 - 180	-	★★★	★★★	★★	-
Matière exotique Exotisches material Exotic material (O)	20 - 50'000	80 - 180	★	★★★	★★★	★★	★★★

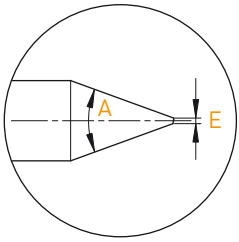
Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

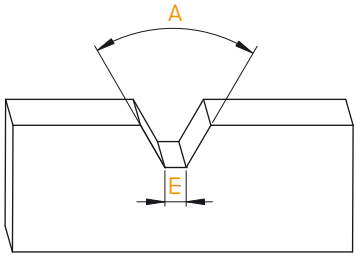
★ Bien / Gut / Good
★★ Très bien / Sehr gut / Very good
★★★ Excellent / Ausgezeichnet / Excellent

E100-P

Fraises à graver avec plat
Gravierfräser mit Fläche
Engraving mills with flat







MD
VHM
HM

A	E	L2	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.05-0.10* / 0.10-0.30 **	5.20	3.00	33	**E120-P-_(E)**	●	●	●	●	●
30°	0.05-0.10* / 0.10-0.30 **	5.20	3.00	33	**E130-P-_(E)**	●	●	●	●	●
35°	0.05-0.10* / 0.10-0.30 **	5.20	3.00	33	**E135P-_(E)**	●	●	●	●	●
40°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	**E140-P-_(E)**	●	●	●	●	●
45°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	**E145-P-_(E)**	●	●	●	●	●
50°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	**E150-P-_(E)**	●	●	●	●	●
55°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	**E155-P-_(E)**	●	●	●	●	●
60°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E160-P-_(E)**	●	●	●	●	●
65°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E165-P-_(E)**	●	●	●	●	●
70°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E170-P-_(E)**	●	●	●	●	●
90°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E190-P-_(E)**	●	●	●	●	●
120°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E1120-P-_(E)**	●	●	●	●	●
30°	0.05-0.10* / 0.10-0.30 **	12.00	6.00	40	**E130-6-P-_(E)**	●	●	●	●	●
40°	0.05-0.10* / 0.10-0.30 **	12.00	6.00	40	**E140-6-P-_(E)**	●	●	●	●	●

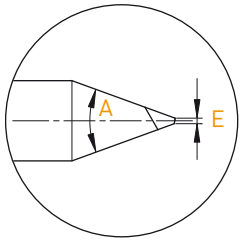
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

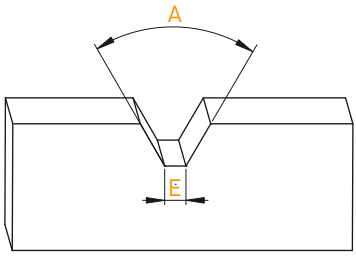
** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises à graver avec plat
Gravierfräser mit Fläche
Engraving mills with flat

E300-P







MD
VHM
HM

A	E	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.02-0.10* / 0.10-0.30**	3.00	33	**E320-P-_(E)**	●	●	●	●	●
30°	0.02-0.10* / 0.10-0.30**	3.00	33	**E330-P-_(E)**	●	●	●	●	●
35°	0.02-0.10* / 0.10-0.30**	3.00	33	**E335-P-_(E)**	●	●	●	●	●
40°	0.02-0.10* / 0.10-0.30**	3.00	33	**E340-P-_(E)**	●	●	●	●	●
45°	0.02-0.10* / 0.10-0.30**	3.00	33	**E345-P-_(E)**	●	●	●	●	●
50°	0.02-0.10* / 0.10-0.30**	3.00	33	**E350-P-_(E)**	●	●	●	●	●
55°	0.02-0.10* / 0.10-0.30**	3.00	33	**E355-P-_(E)**	●	●	●	●	●
60°	0.02-0.10* / 0.10-0.30**	3.00	33	**E360-P-_(E)**	●	●	●	●	●
65°	0.02-0.10* / 0.10-0.30**	3.00	33	**E365-P-_(E)**	●	●	●	●	●
70°	0.02-0.10* / 0.10-0.30**	3.00	33	**E370-P-_(E)**	●	●	●	●	●
90°	0.02-0.10* / 0.10-0.30**	3.00	33	**E390-P-_(E)**	●	●	●	●	●

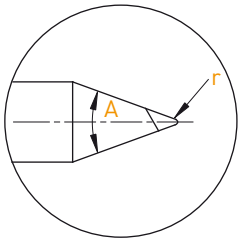
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

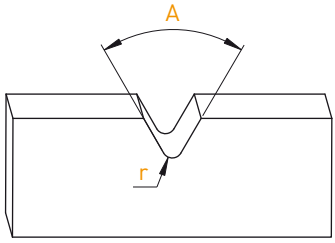
** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

E300-R

Fraises à graver à rayon
Gravierfräser mit Radius
Engraving mills with radius







MD
VHM
HM

A	r	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.04-0.10* / 0.10-0.30**	3.00	33	**E320-R-_(r)**	●	●	●	●	●
30°	0.04-0.10* / 0.10-0.30**	3.00	33	**E330-R-_(r)**	●	●	●	●	●
35°	0.04-0.10* / 0.10-0.30**	3.00	33	**E335-R-_(r)**	●	●	●	●	●
40°	0.04-0.10* / 0.10-0.30**	3.00	33	**E340-R-_(r)**	●	●	●	●	●
45°	0.04-0.10* / 0.10-0.30**	3.00	33	**E345-R-_(r)**	●	●	●	●	●
50°	0.04-0.10* / 0.10-0.30**	3.00	33	**E350-R-_(r)**	●	●	●	●	●
55°	0.04-0.10* / 0.10-0.30**	3.00	33	**E355-R-_(r)**	●	●	●	●	●
60°	0.04-0.10* / 0.10-0.30**	3.00	33	**E360-R-_(r)**	●	●	●	●	●
65°	0.04-0.10* / 0.10-0.30**	3.00	33	**E365-R-_(r)**	●	●	●	●	●
70°	0.04-0.10* / 0.10-0.30**	3.00	33	**E370-R-_(r)**	●	●	●	●	●
90°	0.04-0.10* / 0.10-0.30**	3.00	33	**E390-R-_(r)**	●	●	●	●	●

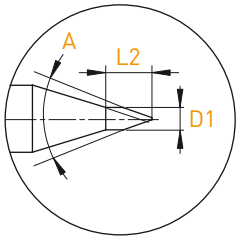
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

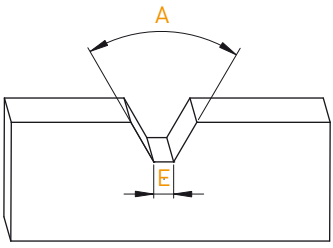
** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises à graver renforcées
Verstärkte Gravierfräser
Reinforced engraving mills

E900-P







MD
VHM
HM

A	E	D1	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	**E920-P-_(E)**	●	●	●	●	●
30°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	**E930-P-_(E)**	●	●	●	●	●
35°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	**E935-P-_(E)**	●	●	●	●	●
40°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	**E940-P-_(E)**	●	●	●	●	●
45°	0.04-0.10* / 0.10-0.30**	1.00	1.80	3.00	33	**E945-P-_(E)**	●	●	●	●	●
50°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	**E950-P-_(E)**	●	●	●	●	●
55°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	**E955-P-_(E)**	●	●	●	●	●
60°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E960-P-_(E)**	●	●	●	●	●
65°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E965-P-_(E)**	●	●	●	●	●
70°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E970-P-_(E)**	●	●	●	●	●
90°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E990-P-_(E)**	●	●	●	●	●

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

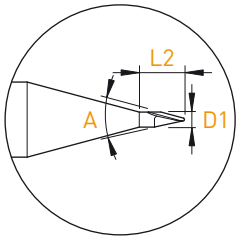
** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

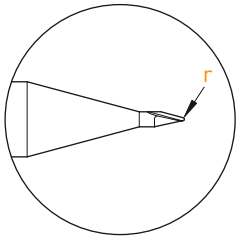
Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

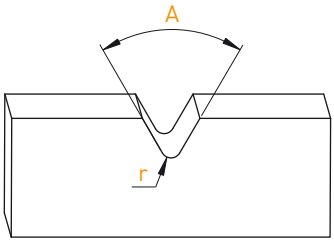
E900-R

Fraises à graver renforcées à rayon
Verstärkte Gravierfräser mit Radius
Reinforced engraving mills with radius









MD
VHM
HM

A	r	D1	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.04-0.10* / 0.10-0.20**	0.60	1.80	3.00	33	**E920-R-_(E)**	●	●	●	●	●
30°	0.04-0.10* / 0.10-0.20**	0.60	1.80	3.00	33	**E930-R-_(E)**	●	●	●	●	●
35°	0.04-0.10* / 0.10-0.20**	0.60	1.80	3.00	33	**E935-R-_(E)**	●	●	●	●	●
40°	0.04-0.10* / 0.10-0.20**	0.60	1.80	3.00	33	**E940-R-_(E)**	●	●	●	●	●
45°	0.04-0.10* / 0.10-0.30**	1.00	1.80	3.00	33	**E945-R-_(E)**	●	●	●	●	●
50°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	**E950-R-_(E)**	●	●	●	●	●
55°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	**E955-R-_(E)**	●	●	●	●	●
60°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E960-R-_(E)**	●	●	●	●	●
65°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E965-R-_(E)**	●	●	●	●	●
70°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E970-R-_(E)**	●	●	●	●	●
90°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E990-R-_(E)**	●	●	●	●	●

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data > 16.116

Micro-forets et forets à centrer
Mikrobohrer und Zentrierbohrer
Micro drills and centering drills

Point angle	λ	L2	D1	D2	**Type**	Page
60°	25°	Div.	Ø 2.00 - 6.00	D1 = D2	**2680-60**	> 16.118
90°	25°	Div.	Ø 0.50 - 20.00	Ø 2.0 - 20.0 h5	**2680-90**	> 16.119
90°	25°	Div.	Ø 2.00 - 16.00	D1 = D2	**1680-90**	> 16.119
120°	25°	Div.	Ø 0.50 - 20.00	Ø 2.0 - 20.0 h5	**2680-120**	> 16.120
120°	25°	Div.	Ø 2.00 - 12.00	D1 = D2	**1680-120**	> 16.120

Micro-forets de préperçage
Mikro Pilotbohrer
Micro pilot drill

Z	Point angle	λ	L2	D1	D2	**Type**	Page
Z2	90°	25° - 32°	Div.	Ø 0.50 - 3.00	Ø2 h5 Ø3 h4	**2690**	> 16.121
Z2	130°	30°	~ 2 x D1	Ø 0.10 - 2.00	Ø3 h6	**2020**	> 16.126

Micro-forets avec affûtage à facettes
Mikrobohrer mit Facettenschliff
Micro drills with faceted drill point

Z	Point angle	λ	L2	D1	D2	**Type**	Page
Z2	118°	25°	~ 5-10 x D1	Ø 0.50 - 6.00	D1 = D2	**1010**	> 16.122
Z2	118°	25°/35°	~ 5-10 x D1	Ø 0.50 - 6.00	D1 = D2	**2010**	> 16.123
Z2	120°	30°	~ 2 x D1	Ø 0.80 - 2.00	Ø2 h6	**2011**	> 16.124
Z2	120°	24°	~ 3 x D1	Ø 0.50 - 2.40	Ø1.5 - 3.0 h6	**2012**	> 16.124
Z2	120°	35°	~ 8 x D1	Ø 0.40 - 1.90	Ø1.0 - 2.0 h6	**2013**	> 16.125
Z2	120°	30°	~ 12 x D1	Ø 0.50 - 1.95	Ø1.5 - 2.0 h6	**2014**	> 16.125
Z2	130°	35°	6 x D1	Ø 0.10 - 3.00	Ø3 h6	**2023**	> 16.128
Z2	130°	35°	12 x D1	Ø 0.20 - 2.00	Ø3 h6	**2026**	> 16.131
Z3	140°	35°	5 x D1	Ø 0.20 - 2.99	Ø3 h6	**2030**	> 16.133

Forets à centrer
Zentrierbohrer
Centering drills

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material	VC (m/min)	f (mm)	N	TiAlN	STF
Acier de décolletage Automatenstahl Free-cutting steel (P)	60	D1/55	★★	★★★	★★★
Acier Stahl < 600 N/mm² Steel (P)	55	D1/55	★★	★★★	★★★
Acier Stahl < 800 N/mm² Steel (P)	55	D1/55	★★	★★★	★★★
Acier Stahl > 800 N/mm² Steel (P)	55	D1/55	★★	★★★	★★★
Acier trempé Gehärteter Stahl -55HRC Hardened steel (H)	10	D1/100	-	★★★	★★★
Acier trempé Gehärteter Stahl +55HRC Hardened steel (H)	-	-	-	-	-
Inox Rostfreistahl Stainless steel (M)	30	D1/85	★★	★★★	★★★
Aluminium (N)	100 - 180	D1/50	★★★	★★	★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N)	60 - 90	D1/60	★★★	★★	★★
Matière synthétique Synthetisches Material Synthetic material (N)	350 - 700	D1/60	★★★	★★	★★
Métaux précieux Edelmetalle Precious metals (N)	50 - 80	D1/100	★★★	★★	★★
Titane Titan Titanium (S)	30	D1/115	★★	★★★	★★★
Alliage de nickel Nickel-Legierung Nickel alloy (S)	15 - 20	D1/120	★★	★★★	★★★
Matière exotique Exotisches material Exotic material (O)	10	D1/100	★★	★★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

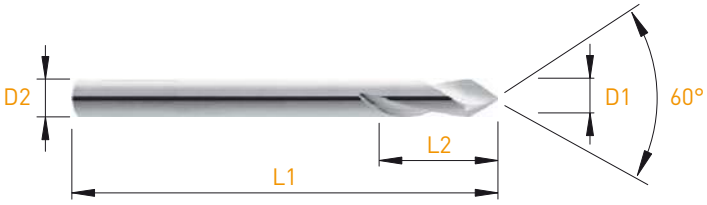
★ Bien / Gut / Good
★★ Très bien / Sehr gut / Very good
★★★ Excellent / Ausgezeichnet / Excellent

Matière Werkstoff Material			VC (m/min)	f (mm)	Débourrage Entspannvorgang Pecking
Acier de décolletage Automatenstahl Free-cutting steel		P	60 - 90	D1/70	1.5xØ
Acier Stahl Steel	< 600 N/mm²	P	50 - 80	D1/70	1.5xØ
Acier Stahl Steel	< 800 N/mm²	P	50 - 80	D1/70	1.5xØ
Acier Stahl Steel	> 800 N/mm²	P	50 - 80	D1/70	1.5xØ
Acier trempé Gehärteter Stahl Hardened steel	-55HRC	H	-	-	-
Acier trempé Gehärteter Stahl Hardened steel	+55HRC	H	-	-	-
Inox Rostfreistahl Stainless steel		M	20 - 30	D1/70	3xØ
Aluminium		N	100 - 180	D1/40	2xØ
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze		N	50 - 85	D1/120	1xØ
Matière synthétique Synthetisches Material Synthetic material		N	350 - 750	D1/40	2xØ
Métaux précieux Edelmetalle Precious metals		N	60 - 90	D1/100	0.85xØ
Titane Titan Titanium		S	20 - 40	D1/120	1.3xØ
Alliage de nickel Nickel-Legierung Nickel alloy		S	20	D1/120	1xØ
Matière exotique Exotisches material Exotic material		O	5 - 10	D1/100	1xØ

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

2680-60

Forets à centrer
Zentrierbohrer
Centering drills



MD
VHM
HM

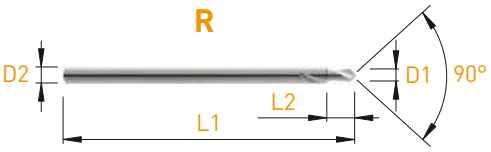
λ 25°

60°

D1 h6	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	39	**2680-2.00-60**	●	●	●
3.00	10.00	3.00	39	**2680-3.00-60**	●	●	●
4.00	12.00	4.00	50	**2680-4.00-60**	●	●	●
5.00	14.00	5.00	50	**2680-5.00-60**	●	●	●
6.00	16.00	6.00	50	**2680-6.00-60**	●	●	●

Forets à centrer
Zentrierbohrer
Centering drills

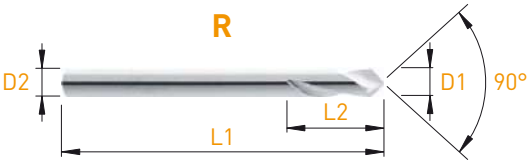
1680-90° / 2680-90°



MD VHM HM | λ 25° | 90°

R					
D1 h6	L2	D2 h5	L1	Art. N°	N
0.50	1.50	2.00	39	**2680-0.50-90**	●
0.60	1.50	2.00	39	**2680-0.60-90**	●
0.70	1.50	2.00	39	**2680-0.70-90**	●
0.80	1.50	2.00	39	**2680-0.80-90**	●
0.90	1.50	2.00	39	**2680-0.90-90**	●
1.00	3.00	2.00	39	**2680-1.00-90**	●
1.10	3.00	2.00	39	**2680-1.10-90**	●
1.20	3.00	2.00	39	**2680-1.20-90**	●
1.30	3.00	2.00	39	**2680-1.30-90**	●
1.40	3.00	2.00	39	**2680-1.40-90**	●
1.50	4.00	2.00	39	**2680-1.50-90**	●
1.60	4.00	2.00	39	**2680-1.60-90**	●
1.70	4.00	2.00	39	**2680-1.70-90**	●
1.80	4.00	2.00	39	**2680-1.80-90**	●
1.90	4.00	2.00	39	**2680-1.90-90**	●





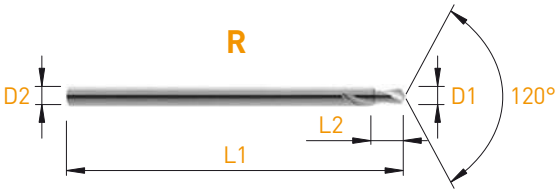
MD VHM HM | λ 25° | 90°

L		R				HSS	R	
D1 h6	L2	D2 h5	L1	Art. N°	N	Art. N°	N	TiAlN	STF		Art. N°	N
2.00	8.00	2.00	39	**1680-2.00-90**	●	**2680-2.00-90**	●	●	●		-	
2.50	8.00	2.50	39	**1680-2.50-90**	●	**2680-2.50-90**	●	●	●		-	
3.00	10.00	3.00	39	**1680-3.00-90**	●	**2680-3.00-90**	●	●	●		**2680-3.00-90-HSS**	●
4.00	12.00	4.00	50	**1680-4.00-90**	●	**2680-4.00-90**	●	●	●		**2680-4.00-90-HSS**	●
5.00	15.00	5.00	50	**1680-5.00-90**	●	**2680-5.00-90**	●	●	●		**2680-5.00-90-HSS**	●
6.00	16.00	6.00	57	**1680-6.00-90**	●	**2680-6.00-90**	●	●	●		**2680-6.00-90-HSS**	●
8.00	20.00	8.00	63	**1680-8.00-90**	●	**2680-8.00-90**	●				**2680-8.00-90-HSS**	●
10.00	22.00	10.00	72	**1680-10.00-90**	●	**2680-10.00-90**	●				**2680-10.00-90-HSS**	●
12.00	24.00	12.00	73	**1680-12.00-90**	●	**2680-12.00-90**	●				**2680-12.00-90-HSS**	●
16.00	26.00	16.00	82	**1680-16.00-90**	●	**2680-16.00-90**	●				-	
20.00	30.00	20.00	92	-		**2680-20.00-90**	●				-	

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

1680-120° / 2680-120°

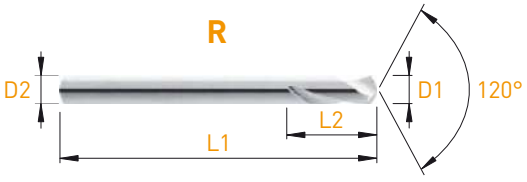
Forets à centrer
Zentrierbohrer
Centering drills



MD VHM HM | λ 25° | 120°

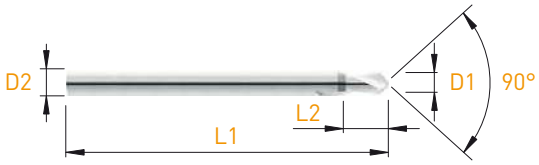
R					
D1 h6	L2	D2 h5	L1	Art. N°	N
0.50	1.50	2.00	39	**2680-0.50-120**	●
0.60	1.50	2.00	39	**2680-0.60-120**	●
0.70	1.50	2.00	39	**2680-0.70-120**	●
0.80	1.50	2.00	39	**2680-0.80-120**	●
0.90	1.50	2.00	39	**2680-0.90-120**	●
1.00	3.00	2.00	39	**2680-1.00-120**	●
1.10	3.00	2.00	39	**2680-1.10-120**	●
1.20	3.00	2.00	39	**2680-1.20-120**	●
1.30	3.00	2.00	39	**2680-1.30-120**	●
1.40	3.00	2.00	39	**2680-1.40-120**	●
1.50	4.00	2.00	39	**2680-1.50-120**	●
1.60	4.00	2.00	39	**2680-1.60-120**	●
1.70	4.00	2.00	39	**2680-1.70-120**	●
1.80	4.00	2.00	39	**2680-1.80-120**	●
1.90	4.00	2.00	39	**2680-1.90-120**	●





MD VHM HM | λ 25° | 120°

L		R			
D1 h6	L2	D2 h5	L1	Art. N°	N	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	39	**1680-2.00-120**	●	**2680-2.00-120**	●	●	●
2.50	8.00	2.50	39	**1680-2.50-120**	●	**2680-2.50-120**	●	●	●
3.00	10.00	3.00	39	**1680-3.00-120**	●	**2680-3.00-120**	●	●	●
4.00	12.00	4.00	50	**1680-4.00-120**	●	**2680-4.00-120**	●	●	●
5.00	15.00	5.00	50	**1680-5.00-120**	●	**2680-5.00-120**	●	●	●
6.00	16.00	6.00	57	**1680-6.00-120**	●	**2680-6.00-120**	●	●	●
8.00	20.00	8.00	63	**1680-8.00-120**	●	**2680-8.00-120**	●		
10.00	22.00	10.00	72	**1680-10.00-120**	●	**2680-10.00-120**	●		
12.00	24.00	12.00	73	**1680-12.00-120**	●	**2680-12.00-120**	●		
16.00	26.00	16.00	82	-		**2680-16.00-120**	●		
20.00	30.00	20.00	92	-		**2680-20.00-120**	●		



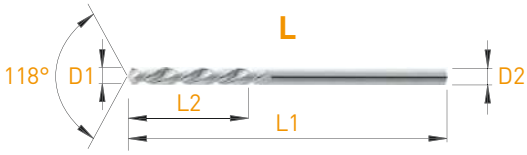
MD
VHM
HM
$\lambda^{32°}$ * $\lambda^{25°}$ 90°

D1 h5	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
0.50*	2.50	2.00	39	**2690-0.50**	●		
0.60*	2.50	2.00	39	**2690-0.60**	●		
0.70*	2.50	2.00	39	**2690-0.70**	●		
0.80*	2.50	2.00	39	**2690-0.80**	●		
0.90*	2.50	2.00	39	**2690-0.90**	●		
1.00	3.00	2.00	39	**2690-1.00**	●		
1.10	3.00	2.00	39	**2690-1.10**	●		
1.20	3.00	2.00	39	**2690-1.20**	●		
1.30	3.00	2.00	39	**2690-1.30**	●		
1.40	3.00	2.00	39	**2690-1.40**	●		
1.50	3.50	2.00	39	**2690-1.50**	●		
1.60	3.50	2.00	39	**2690-1.60**	●		
1.70	3.50	2.00	39	**2690-1.70**	●		
1.80	3.50	2.00	39	**2690-1.80**	●		
1.90	3.50	2.00	39	**2690-1.90**	●		
2.00	-	2.00	39	**2690-2.00**	●	●	●
2.10	4.00	3.00	39	**2690-2.10**	●	●	●
2.20	4.00	3.00	39	**2690-2.20**	●	●	●
2.30	4.00	3.00	39	**2690-2.30**	●	●	●
2.40	4.00	3.00	39	**2690-2.40**	●	●	●
2.50	4.00	3.00	39	**2690-2.50**	●	●	●
2.60	4.00	3.00	39	**2690-2.60**	●	●	●
2.70	4.00	3.00	39	**2690-2.70**	●	●	●
2.80	4.00	3.00	39	**2690-2.80**	●	●	●
2.90	4.00	3.00	39	**2690-2.90**	●	●	●
3.00	-	3.00	50	**2690-3.00**	●	●	●

1010

Coupe à gauche
Linksschneidend
Left hand cut

Forets cylindriques
Zylindrische Bohrer
Cylindrical drills



MD
VHM
HM

λ 25°

Z=2

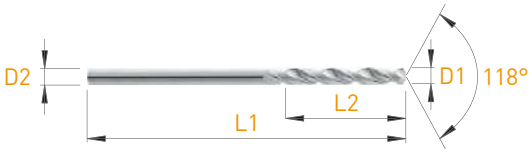
118°

D1 h6 D2 h6	L1	L2	Art. N°	z
0.50	30	5.00	**1010-0.50**	●
0.55	30	5.00	**1010-0.55**	●
0.60	30	5.00	**1010-0.60**	●
0.65	30	6.00	**1010-0.65**	●
0.70	30	6.00	**1010-0.70**	●
0.75	30	8.00	**1010-0.75**	●
0.80	30	8.00	**1010-0.80**	●
0.85	30	9.00	**1010-0.85**	●
0.90	30	9.00	**1010-0.90**	●
0.95	30	10.00	**1010-0.95**	●
1.00	30	10.00	**1010-1.00**	●
1.05	30	10.00	**1010-1.05**	●
1.10	30	10.00	**1010-1.10**	●
1.15	30	12.00	**1010-1.15**	●
1.20	30	12.00	**1010-1.20**	●
1.25	30	12.00	**1010-1.25**	●
1.30	30	12.00	**1010-1.30**	●
1.35	30	12.00	**1010-1.35**	●
1.40	30	12.00	**1010-1.40**	●
1.45	30	12.00	**1010-1.45**	●
1.50	30	12.00	**1010-1.50**	●
1.55	40	16.00	**1010-1.55**	●
1.60	40	16.00	**1010-1.60**	●
1.65	40	16.00	**1010-1.65**	●
1.70	40	16.00	**1010-1.70**	●
1.75	40	16.00	**1010-1.75**	●
1.80	40	16.00	**1010-1.80**	●
1.85	40	16.00	**1010-1.85**	●
1.90	40	16.00	**1010-1.90**	●
1.95	40	16.00	**1010-1.95**	●
2.00	40	16.00	**1010-2.00**	●
2.05	40	18.00	**1010-2.05**	●
2.10	40	18.00	**1010-2.10**	●
2.15	40	18.00	**1010-2.15**	●
2.20	40	18.00	**1010-2.20**	●
2.25	40	18.00	**1010-2.25**	●
2.30	40	18.00	**1010-2.30**	●
2.35	40	18.00	**1010-2.35**	●
2.40	40	18.00	**1010-2.40**	●
2.45	40	18.00	**1010-2.45**	●
2.50	40	18.00	**1010-2.50**	●

D1 h6 D2 h6	L1	L2	Art. N°	z
2.55	45	18.00	**1010-2.55**	●
2.60	45	18.00	**1010-2.60**	●
2.65	45	18.00	**1010-2.65**	●
2.70	45	18.00	**1010-2.70**	●
2.75	45	18.00	**1010-2.75**	●
2.80	45	18.00	**1010-2.80**	●
2.85	45	18.00	**1010-2.85**	●
2.90	45	18.00	**1010-2.90**	●
2.95	45	18.00	**1010-2.95**	●
3.00	45	18.00	**1010-3.00**	●
3.10	50	20.00	**1010-3.10**	●
3.20	50	20.00	**1010-3.20**	●
3.30	50	20.00	**1010-3.30**	●
3.40	50	20.00	**1010-3.40**	●
3.50	50	20.00	**1010-3.50**	●
3.60	50	20.00	**1010-3.60**	●
3.70	50	20.00	**1010-3.70**	●
3.80	50	20.00	**1010-3.80**	●
3.90	50	20.00	**1010-3.90**	●
4.00	50	20.00	**1010-4.00**	●
4.10	50	25.00	**1010-4.10**	●
4.20	50	25.00	**1010-4.20**	●
4.30	50	25.00	**1010-4.30**	●
4.40	50	25.00	**1010-4.40**	●
4.50	50	25.00	**1010-4.50**	●
4.60	50	25.00	**1010-4.60**	●
4.70	50	25.00	**1010-4.70**	●
4.80	50	25.00	**1010-4.80**	●
4.90	50	25.00	**1010-4.90**	●
5.00	50	25.00	**1010-5.00**	●
5.10	50	25.00	**1010-5.10**	●
5.20	50	25.00	**1010-5.20**	●
5.30	50	25.00	**1010-5.30**	●
5.40	50	25.00	**1010-5.40**	●
5.50	50	25.00	**1010-5.50**	●
5.60	50	25.00	**1010-5.60**	●
5.70	50	25.00	**1010-5.70**	●
5.80	50	25.00	**1010-5.80**	●
5.90	50	25.00	**1010-5.90**	●
6.00	50	25.00	**1010-6.00**	●

Forets cylindriques
Zylindrische Bohrer
Cylindrical drills

2010



MD
VHM
HM

λ 25°/35°

Z=2

118°

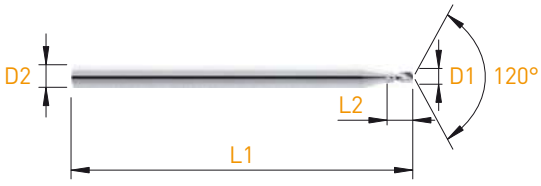
D1 h6 D2 h6	L1	L2	Art. N°	z
0.50	30	5.00	**2010-0.50**	●
0.55	30	5.00	**2010-0.55**	●
0.60	30	5.00	**2010-0.60**	●
0.65	30	6.00	**2010-0.65**	●
0.70	30	6.00	**2010-0.70**	●
0.75	30	8.00	**2010-0.75**	●
0.80	30	8.00	**2010-0.80**	●
0.85	30	9.00	**2010-0.85**	●
0.90	30	9.00	**2010-0.90**	●
0.95	30	10.00	**2010-0.95**	●
1.00	30	10.00	**2010-1.00**	●
1.05	30	10.00	**2010-1.05**	●
1.10	30	10.00	**2010-1.10**	●
1.15	30	12.00	**2010-1.15**	●
1.20	30	12.00	**2010-1.20**	●
1.25	30	12.00	**2010-1.25**	●
1.30	30	12.00	**2010-1.30**	●
1.35	30	12.00	**2010-1.35**	●
1.40	30	12.00	**2010-1.40**	●
1.45	30	12.00	**2010-1.45**	●
1.50	30	12.00	**2010-1.50**	●
1.55	40	16.00	**2010-1.55**	●
1.60	40	16.00	**2010-1.60**	●
1.65	40	16.00	**2010-1.65**	●
1.70	40	16.00	**2010-1.70**	●
1.75	40	16.00	**2010-1.75**	●
1.80	40	16.00	**2010-1.80**	●
1.85	40	16.00	**2010-1.85**	●
1.90	40	16.00	**2010-1.90**	●
1.95	40	16.00	**2010-1.95**	●
2.00	40	16.00	**2010-2.00**	●
2.05	40	18.00	**2010-2.05**	●
2.10	40	18.00	**2010-2.10**	●
2.15	40	18.00	**2010-2.15**	●
2.20	40	18.00	**2010-2.20**	●
2.25	40	18.00	**2010-2.25**	●
2.30	40	18.00	**2010-2.30**	●
2.35	40	18.00	**2010-2.35**	●
2.40	40	18.00	**2010-2.40**	●
2.45	40	18.00	**2010-2.45**	●
2.50	40	18.00	**2010-2.50**	●

D1 h6 D2 h6	L1	L2	Art. N°	z
2.55	45	18.00	**2010-2.55**	●
2.60	45	18.00	**2010-2.60**	●
2.65	45	18.00	**2010-2.65**	●
2.70	45	18.00	**2010-2.70**	●
2.75	45	18.00	**2010-2.75**	●
2.80	45	18.00	**2010-2.80**	●
2.85	45	18.00	**2010-2.85**	●
2.90	45	18.00	**2010-2.90**	●
2.95	45	18.00	**2010-2.95**	●
3.00	45	18.00	**2010-3.00**	●
3.10	50	20.00	**2010-3.10**	●
3.20	50	20.00	**2010-3.20**	●
3.30	50	20.00	**2010-3.30**	●
3.40	50	20.00	**2010-3.40**	●
3.50	50	20.00	**2010-3.50**	●
3.60	50	20.00	**2010-3.60**	●
3.70	50	20.00	**2010-3.70**	●
3.80	50	20.00	**2010-3.80**	●
3.90	50	20.00	**2010-3.90**	●
4.00	50	20.00	**2010-4.00**	●
4.10	50	25.00	**2010-4.10**	●
4.20	50	25.00	**2010-4.20**	●
4.30	50	25.00	**2010-4.30**	●
4.40	50	25.00	**2010-4.40**	●
4.50	50	25.00	**2010-4.50**	●
4.60	50	25.00	**2010-4.60**	●
4.70	50	25.00	**2010-4.70**	●
4.80	50	25.00	**2010-4.80**	●
4.90	50	25.00	**2010-4.90**	●
5.00	50	25.00	**2010-5.00**	●
5.10	50	25.00	**2010-5.10**	●
5.20	50	25.00	**2010-5.20**	●
5.30	50	25.00	**2010-5.30**	●
5.40	50	25.00	**2010-5.40**	●
5.50	50	25.00	**2010-5.50**	●
5.60	50	25.00	**2010-5.60**	●
5.70	50	25.00	**2010-5.70**	●
5.80	50	25.00	**2010-5.80**	●
5.90	50	25.00	**2010-5.90**	●
6.00	50	25.00	**2010-6.00**	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

2011 / 2012

Micro-forets
Mikrobohrer
Micro drills





MD
VHM
HM

λ 30°

Z=2

120°

D1 h6	L2	D2 h6	L1	Art. N°	Z
0.80	2.50	2.00	30	**2011-0.80**	●
0.90	2.50	2.00	30	**2011-0.90**	●
1.00	2.50	2.00	30	**2011-1.00**	●
1.10	2.50	2.00	30	**2011-1.10**	●
1.20	2.50	2.00	30	**2011-1.20**	●
1.30	2.50	2.00	30	**2011-1.30**	●
1.40	2.50	2.00	30	**2011-1.40**	●
1.50	2.50	2.00	30	**2011-1.50**	●
2.00	2.50	2.00	30	**2011-2.00**	●

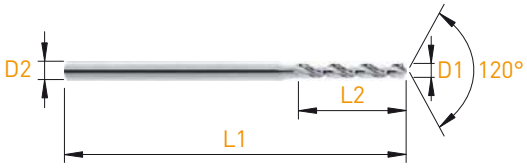
MD
VHM
HM

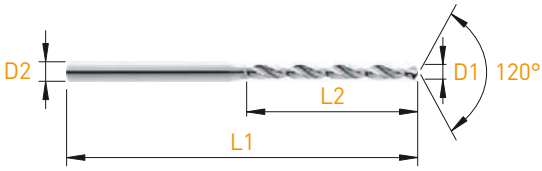
λ 24°

Z=2

120°

D1 h6	L2	D2 Ø1.5h6 Ø2h6 Ø3h5	L1	Art. N°	Z
0.50	1.70	1.50	30	**2012-0.50**	●
0.55	1.90	1.50	30	**2012-0.55**	●
0.60	1.90	1.50	30	**2012-0.60**	●
0.65	1.90	1.50	30	**2012-0.65**	●
0.70	2.40	1.50	30	**2012-0.70**	●
0.75	2.40	1.50	30	**2012-0.75**	●
0.80	2.60	1.50	30	**2012-0.80**	●
0.85	2.60	1.50	30	**2012-0.85**	●
0.90	3.00	1.50	30	**2012-0.90**	●
0.95	3.00	1.50	30	**2012-0.95**	●
1.00	3.40	1.50	30	**2012-1.00**	●
1.10	3.80	1.50	30	**2012-1.10**	●
1.20	4.20	1.50	30	**2012-1.20**	●
1.30	4.20	1.50	30	**2012-1.30**	●
1.40	4.70	1.50	30	**2012-1.40**	●
1.50	4.70	2.00	38	**2012-1.50**	●
1.60	5.40	2.00	38	**2012-1.60**	●
1.70	5.40	2.00	38	**2012-1.70**	●
1.80	6.50	2.00	38	**2012-1.80**	●
1.90	6.50	2.00	38	**2012-1.90**	●
2.00	6.50	3.00	38	**2012-2.00**	●
2.10	6.50	3.00	38	**2012-2.10**	●
2.20	6.50	3.00	38	**2012-2.20**	●
2.30	6.50	3.00	38	**2012-2.30**	●
2.40	6.50	3.00	38	**2012-2.40**	●





MD VHM HM | λ 35° | Z=2 | 120°

D1 h6	L2	D2 h6	L1	Art. N°	N
0.40	3.60	1.00	25	**2013-0.40**	●
0.45	3.60	1.00	25	**2013-0.45**	●
0.50	4.00	1.00	25	**2013-0.50**	●
0.55	4.50	1.00	25	**2013-0.55**	●
0.60	4.50	1.50	30	**2013-0.60**	●
0.65	5.00	1.50	30	**2013-0.65**	●
0.70	5.60	1.50	30	**2013-0.70**	●
0.75	5.60	1.50	30	**2013-0.75**	●
0.80	6.30	1.50	30	**2013-0.80**	●
0.85	6.30	1.50	30	**2013-0.85**	●
0.90	7.10	1.50	30	**2013-0.90**	●
0.95	7.10	1.50	30	**2013-0.95**	●
1.00	8.00	1.50	30	**2013-1.00**	●
1.05	8.00	1.50	30	**2013-1.05**	●
1.10	9.00	1.50	30	**2013-1.10**	●
1.15	9.00	1.50	30	**2013-1.15**	●
1.20	10.00	1.50	30	**2013-1.20**	●
1.25	10.00	1.50	30	**2013-1.25**	●
1.30	10.00	1.50	30	**2013-1.30**	●
1.35	11.20	1.50	30	**2013-1.35**	●
1.40	11.20	1.50	30	**2013-1.40**	●
1.45	11.20	1.50	30	**2013-1.45**	●
1.50	12.00	2.00	38	**2013-1.50**	●
1.60	12.00	2.00	38	**2013-1.60**	●
1.70	12.00	2.00	38	**2013-1.70**	●
1.80	12.00	2.00	38	**2013-1.80**	●
1.90	12.00	2.00	38	**2013-1.90**	●

MD VHM HM | λ 30° | Z=2 | 120°

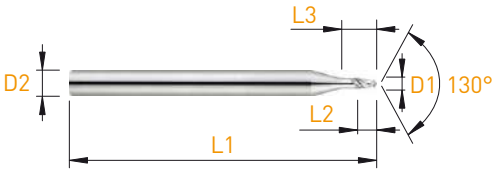
D1 h6	L2	D2 h6	L1	Art. N°	N
0.50	6.00	1.50	30	**2014-0.50**	●
0.55	6.50	1.50	30	**2014-0.55**	●
0.60	6.50	1.50	30	**2014-0.60**	●
0.65	7.50	1.50	30	**2014-0.65**	●
0.70	8.50	1.50	30	**2014-0.70**	●
0.75	8.50	1.50	30	**2014-0.75**	●
0.80	9.50	1.50	30	**2014-0.80**	●
0.85	9.50	1.50	30	**2014-0.85**	●
0.90	10.50	1.50	30	**2014-0.90**	●
0.95	10.50	1.50	30	**2014-0.95**	●
1.00	12.00	1.50	38	**2014-1.00**	●
1.05	12.00	1.50	38	**2014-1.05**	●
1.10	13.50	1.50	38	**2014-1.10**	●
1.15	13.50	1.50	38	**2014-1.15**	●
1.20	15.00	1.50	38	**2014-1.20**	●
1.25	15.00	1.50	38	**2014-1.25**	●
1.30	17.00	1.50	38	**2014-1.30**	●
1.35	17.00	1.50	38	**2014-1.35**	●
1.40	17.00	1.50	38	**2014-1.40**	●
1.45	17.00	1.50	38	**2014-1.45**	●
1.50	18.00	2.00	38	**2014-1.50**	●
1.55	18.00	2.00	38	**2014-1.55**	●
1.60	18.00	2.00	38	**2014-1.60**	●
1.65	18.00	2.00	38	**2014-1.65**	●
1.70	18.00	2.00	38	**2014-1.70**	●
1.75	18.00	2.00	38	**2014-1.75**	●
1.80	18.00	2.00	38	**2014-1.80**	●
1.85	18.00	2.00	38	**2014-1.85**	●
1.90	18.00	2.00	38	**2014-1.90**	●
1.95	18.00	2.00	38	**2014-1.95**	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

2020

Ø 0.10 - Ø 0.99 mm

Micro-forets de préperçage
Mikro Pilotbohrer
Micro pilot drills



MD VHM HM	λ 30°	2xD1	Z=2	130°	

D1 +0.005 / 0	L2	L3	D2 h6	L1	Art. N°	z
0.10	0.35	0.55	3.00	38	**2020-0.10**	●
0.11	0.35	0.55	3.00	38	**2020-0.11**	●
0.12	0.35	0.55	3.00	38	**2020-0.12**	●
0.13	0.40	0.60	3.00	38	**2020-0.13**	●
0.14	0.40	0.60	3.00	38	**2020-0.14**	●
0.15	0.40	0.60	3.00	38	**2020-0.15**	●
0.16	0.40	0.60	3.00	38	**2020-0.16**	●
0.17	0.50	0.70	3.00	38	**2020-0.17**	●
0.18	0.50	0.70	3.00	38	**2020-0.18**	●
0.19	0.50	0.70	3.00	38	**2020-0.19**	●
0.20	0.55	0.75	3.00	38	**2020-0.20**	●
0.21	0.55	0.75	3.00	38	**2020-0.21**	●
0.22	0.60	0.80	3.00	38	**2020-0.22**	●
0.23	0.60	0.80	3.00	38	**2020-0.23**	●
0.24	0.60	0.80	3.00	38	**2020-0.24**	●
0.25	0.70	0.90	3.00	38	**2020-0.25**	●
0.26	0.70	0.90	3.00	38	**2020-0.26**	●
0.27	0.70	0.90	3.00	38	**2020-0.27**	●
0.28	0.80	1.00	3.00	38	**2020-0.28**	●
0.29	0.80	1.00	3.00	38	**2020-0.29**	●
0.30	0.90	1.20	3.00	38	**2020-0.30**	●
0.31	0.90	1.20	3.00	38	**2020-0.31**	●
0.32	0.90	1.20	3.00	38	**2020-0.32**	●
0.33	0.90	1.20	3.00	38	**2020-0.33**	●
0.34	0.90	1.35	3.00	38	**2020-0.34**	●
0.35	0.90	1.35	3.00	38	**2020-0.35**	●
0.36	0.95	1.35	3.00	38	**2020-0.36**	●
0.37	0.95	1.35	3.00	38	**2020-0.37**	●
0.38	0.95	1.50	3.00	38	**2020-0.38**	●
0.39	0.95	1.50	3.00	38	**2020-0.39**	●
0.40	0.80	1.60	3.00	38	**2020-0.40**	●
0.41	0.82	1.60	3.00	38	**2020-0.41**	●
0.42	0.84	1.60	3.00	38	**2020-0.42**	●
0.43	0.86	1.60	3.00	38	**2020-0.43**	●
0.44	0.88	1.60	3.00	38	**2020-0.44**	●
0.45	0.90	1.60	3.00	38	**2020-0.45**	●
0.46	0.92	1.70	3.00	38	**2020-0.46**	●
0.47	0.94	1.70	3.00	38	**2020-0.47**	●
0.48	0.96	1.70	3.00	38	**2020-0.48**	●
0.49	0.98	1.70	3.00	38	**2020-0.49**	●
0.50	1.00	1.70	3.00	38	**2020-0.50**	●
0.51	1.02	1.80	3.00	38	**2020-0.51**	●
0.52	1.04	1.80	3.00	38	**2020-0.52**	●
0.53	1.06	1.80	3.00	38	**2020-0.53**	●
0.54	1.08	1.80	3.00	38	**2020-0.54**	●
0.55	1.10	1.80	3.00	38	**2020-0.55**	●
0.56	1.12	1.90	3.00	38	**2020-0.56**	●
0.57	1.14	1.90	3.00	38	**2020-0.57**	●
0.58	1.16	1.90	3.00	38	**2020-0.58**	●
0.59	1.18	1.90	3.00	38	**2020-0.59**	●
0.60	1.20	1.90	3.00	38	**2020-0.60**	●
0.61	1.22	2.00	3.00	38	**2020-0.61**	●
0.62	1.24	2.00	3.00	38	**2020-0.62**	●
0.63	1.26	2.00	3.00	38	**2020-0.63**	●
0.64	1.28	2.00	3.00	38	**2020-0.64**	●
0.65	1.30	2.00	3.00	38	**2020-0.65**	●
0.66	1.32	2.10	3.00	38	**2020-0.66**	●
0.67	1.34	2.10	3.00	38	**2020-0.67**	●
0.68	1.36	2.10	3.00	38	**2020-0.68**	●
0.69	1.38	2.10	3.00	38	**2020-0.69**	●
0.70	1.40	2.10	3.00	38	**2020-0.70**	●
0.71	1.42	2.20	3.00	38	**2020-0.71**	●
0.72	1.44	2.20	3.00	38	**2020-0.72**	●
0.73	1.46	2.20	3.00	38	**2020-0.73**	●
0.74	1.48	2.20	3.00	38	**2020-0.74**	●
0.75	1.50	2.20	3.00	38	**2020-0.75**	●
0.76	1.52	2.30	3.00	38	**2020-0.76**	●
0.77	1.54	2.30	3.00	38	**2020-0.77**	●
0.78	1.56	2.30	3.00	38	**2020-0.78**	●
0.79	1.58	2.30	3.00	38	**2020-0.79**	●
0.80	1.60	2.30	3.00	38	**2020-0.80**	●
0.81	1.62	2.40	3.00	38	**2020-0.81**	●
0.82	1.64	2.40	3.00	38	**2020-0.82**	●
0.83	1.66	2.40	3.00	38	**2020-0.83**	●
0.84	1.68	2.40	3.00	38	**2020-0.84**	●
0.85	1.70	2.40	3.00	38	**2020-0.85**	●
0.86	1.72	2.50	3.00	38	**2020-0.86**	●
0.87	1.74	2.50	3.00	38	**2020-0.87**	●
0.88	1.76	2.50	3.00	38	**2020-0.88**	●
0.89	1.78	2.50	3.00	38	**2020-0.89**	●
0.90	1.80	2.50	3.00	38	**2020-0.90**	●
0.91	1.82	2.60	3.00	38	**2020-0.91**	●
0.92	1.84	2.60	3.00	38	**2020-0.92**	●
0.93	1.86	2.60	3.00	38	**2020-0.93**	●
0.94	1.88	2.60	3.00	38	**2020-0.94**	●
0.95	1.90	2.60	3.00	38	**2020-0.95**	●
0.96	1.92	2.70	3.00	38	**2020-0.96**	●
0.97	1.94	2.70	3.00	38	**2020-0.97**	●
0.98	1.96	2.70	3.00	38	**2020-0.98**	●
0.99	1.98	2.70	3.00	38	**2020-0.99**	●

Micro-forets de préperçage
Mikro Pilotbohrer
Micro pilot drills

Ø 1.00 - Ø 2.00 mm

2020

D1 +0.005 / 0	L2	L3	D2 h6	L1	Art. N°	z
1.00	2.00	2.70	3.00	38	**2020-1.00**	●
1.01	2.02	3.50	3.00	38	**2020-1.01**	●
1.02	2.04	3.50	3.00	38	**2020-1.02**	●
1.03	2.06	3.50	3.00	38	**2020-1.03**	●
1.04	2.08	3.50	3.00	38	**2020-1.04**	●
1.05	2.10	3.50	3.00	38	**2020-1.05**	●
1.06	2.12	3.60	3.00	38	**2020-1.06**	●
1.07	2.14	3.60	3.00	38	**2020-1.07**	●
1.08	2.16	3.60	3.00	38	**2020-1.08**	●
1.09	2.18	3.60	3.00	38	**2020-1.09**	●
1.10	2.20	3.60	3.00	38	**2020-1.10**	●
1.11	2.22	3.70	3.00	38	**2020-1.11**	●
1.12	2.24	3.70	3.00	38	**2020-1.12**	●
1.13	2.26	3.70	3.00	38	**2020-1.13**	●
1.14	2.28	3.70	3.00	38	**2020-1.14**	●
1.15	2.30	3.70	3.00	38	**2020-1.15**	●
1.16	2.32	3.80	3.00	38	**2020-1.16**	●
1.17	2.34	3.80	3.00	38	**2020-1.17**	●
1.18	2.36	3.80	3.00	38	**2020-1.18**	●
1.19	2.38	3.80	3.00	38	**2020-1.19**	●
1.20	2.40	3.80	3.00	38	**2020-1.20**	●
1.21	2.42	4.20	3.00	38	**2020-1.21**	●
1.22	2.44	4.20	3.00	38	**2020-1.22**	●
1.23	2.46	4.20	3.00	38	**2020-1.23**	●
1.24	2.48	4.20	3.00	38	**2020-1.24**	●
1.25	2.50	4.20	3.00	38	**2020-1.25**	●
1.26	2.52	4.30	3.00	38	**2020-1.26**	●
1.27	2.54	4.30	3.00	38	**2020-1.27**	●
1.28	2.56	4.30	3.00	38	**2020-1.28**	●
1.29	2.58	4.30	3.00	38	**2020-1.29**	●
1.30	2.60	4.30	3.00	38	**2020-1.30**	●
1.31	2.62	4.40	3.00	38	**2020-1.31**	●
1.32	2.64	4.40	3.00	38	**2020-1.32**	●
1.33	2.66	4.40	3.00	38	**2020-1.33**	●
1.34	2.68	4.40	3.00	38	**2020-1.34**	●
1.35	2.70	4.40	3.00	38	**2020-1.35**	●
1.36	2.72	4.50	3.00	38	**2020-1.36**	●
1.37	2.74	4.50	3.00	38	**2020-1.37**	●
1.38	2.76	4.50	3.00	38	**2020-1.38**	●
1.39	2.78	4.50	3.00	38	**2020-1.39**	●
1.40	2.80	4.50	3.00	38	**2020-1.40**	●
1.41	2.82	4.60	3.00	38	**2020-1.41**	●
1.42	2.84	4.60	3.00	38	**2020-1.42**	●
1.43	2.86	4.60	3.00	38	**2020-1.43**	●
1.44	2.88	4.60	3.00	38	**2020-1.44**	●
1.45	2.90	4.60	3.00	38	**2020-1.45**	●
1.46	2.92	4.70	3.00	38	**2020-1.46**	●
1.47	2.94	4.70	3.00	38	**2020-1.47**	●
1.48	2.96	4.70	3.00	38	**2020-1.48**	●
1.49	2.98	4.70	3.00	38	**2020-1.49**	●
1.50	3.00	4.70	3.00	38	**2020-1.50**	●

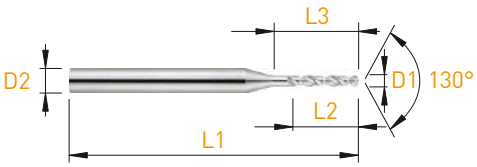
D1 +0.005 / 0	L2	L3	D2 h6	L1	Art. N°	z
1.51	3.02	5.10	3.00	38	**2020-1.51**	●
1.52	3.04	5.10	3.00	38	**2020-1.52**	●
1.53	3.06	5.10	3.00	38	**2020-1.53**	●
1.54	3.08	5.10	3.00	38	**2020-1.54**	●
1.55	3.10	5.10	3.00	38	**2020-1.55**	●
1.56	3.12	5.20	3.00	38	**2020-1.56**	●
1.57	3.14	5.20	3.00	38	**2020-1.57**	●
1.58	3.16	5.20	3.00	38	**2020-1.58**	●
1.59	3.18	5.20	3.00	38	**2020-1.59**	●
1.60	3.20	5.20	3.00	38	**2020-1.60**	●
1.61	3.22	5.30	3.00	38	**2020-1.61**	●
1.62	3.24	5.30	3.00	38	**2020-1.62**	●
1.63	3.26	5.30	3.00	38	**2020-1.63**	●
1.64	3.28	5.30	3.00	38	**2020-1.64**	●
1.65	3.30	5.30	3.00	38	**2020-1.65**	●
1.66	3.32	5.40	3.00	38	**2020-1.66**	●
1.67	3.34	5.40	3.00	38	**2020-1.67**	●
1.68	3.36	5.40	3.00	38	**2020-1.68**	●
1.69	3.38	5.40	3.00	38	**2020-1.69**	●
1.70	3.40	5.40	3.00	38	**2020-1.70**	●
1.71	3.42	5.50	3.00	38	**2020-1.71**	●
1.72	3.44	5.50	3.00	38	**2020-1.72**	●
1.73	3.46	5.50	3.00	38	**2020-1.73**	●
1.74	3.48	5.50	3.00	38	**2020-1.74**	●
1.75	3.50	5.50	3.00	38	**2020-1.75**	●
1.76	3.52	5.60	3.00	38	**2020-1.76**	●
1.77	3.54	5.60	3.00	38	**2020-1.77**	●
1.78	3.56	5.60	3.00	38	**2020-1.78**	●
1.79	3.58	5.60	3.00	38	**2020-1.79**	●
1.80	3.60	5.60	3.00	38	**2020-1.80**	●
1.81	3.62	5.70	3.00	38	**2020-1.81**	●
1.82	3.64	5.70	3.00	38	**2020-1.82**	●
1.83	3.66	5.70	3.00	38	**2020-1.83**	●
1.84	3.68	5.70	3.00	38	**2020-1.84**	●
1.85	3.70	5.70	3.00	38	**2020-1.85**	●
1.86	3.72	5.80	3.00	38	**2020-1.86**	●
1.87	3.74	5.80	3.00	38	**2020-1.87**	●
1.88	3.76	5.80	3.00	38	**2020-1.88**	●
1.89	3.78	5.80	3.00	38	**2020-1.89**	●
1.90	3.80	5.80	3.00	38	**2020-1.90**	●
1.91	3.82	5.90	3.00	38	**2020-1.91**	●
1.92	3.84	5.90	3.00	38	**2020-1.92**	●
1.93	3.86	5.90	3.00	38	**2020-1.93**	●
1.94	3.88	5.90	3.00	38	**2020-1.94**	●
1.95	3.90	5.90	3.00	38	**2020-1.95**	●
1.96	3.92	6.00	3.00	38	**2020-1.96**	●
1.97	3.94	6.00	3.00	38	**2020-1.97**	●
1.98	3.96	6.00	3.00	38	**2020-1.98**	●
1.99	3.98	6.00	3.00	38	**2020-1.99**	●
2.00	4.00	6.00	3.00	38	**2020-2.00**	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

2023

Ø 0.10 - Ø 0.99 mm

Micro-forets
Mikrobohrer
Micro drills



MD VHM HM	λ 35°	6xD1	Z=2	130°	

D1 0 / -0.004	L2	L3	D2 h6	L1	Art. N°	z
0.10	0.50	0.70	3.00	38	**2023-0.10**	●
0.11	0.50	0.70	3.00	38	**2023-0.11**	●
0.12	0.50	0.70	3.00	38	**2023-0.12**	●
0.13	0.80	1.00	3.00	38	**2023-0.13**	●
0.14	0.80	1.00	3.00	38	**2023-0.14**	●
0.15	0.80	1.00	3.00	38	**2023-0.15**	●
0.16	1.10	1.40	3.00	38	**2023-0.16**	●
0.17	1.10	1.40	3.00	38	**2023-0.17**	●
0.18	1.10	1.40	3.00	38	**2023-0.18**	●
0.19	1.10	1.40	3.00	38	**2023-0.19**	●
0.20	1.50	1.80	3.00	38	**2023-0.20**	●
0.21	1.50	1.80	3.00	38	**2023-0.21**	●
0.22	1.50	1.80	3.00	38	**2023-0.22**	●
0.23	1.50	1.80	3.00	38	**2023-0.23**	●
0.24	1.50	1.80	3.00	38	**2023-0.24**	●
0.25	1.90	2.20	3.00	38	**2023-0.25**	●
0.26	1.90	2.20	3.00	38	**2023-0.26**	●
0.27	1.90	2.20	3.00	38	**2023-0.27**	●
0.28	1.90	2.20	3.00	38	**2023-0.28**	●
0.29	1.90	2.20	3.00	38	**2023-0.29**	●
0.30	1.80	2.40	3.00	38	**2023-0.30**	●
0.31	1.80	2.40	3.00	38	**2023-0.31**	●
0.32	1.80	2.40	3.00	38	**2023-0.32**	●
0.33	1.80	2.40	3.00	38	**2023-0.33**	●
0.34	1.80	2.40	3.00	38	**2023-0.34**	●
0.35	2.20	2.80	3.00	38	**2023-0.35**	●
0.36	2.20	2.80	3.00	38	**2023-0.36**	●
0.37	2.20	2.80	3.00	38	**2023-0.37**	●
0.38	2.20	2.80	3.00	38	**2023-0.38**	●
0.39	2.70	3.60	3.00	38	**2023-0.39**	●
0.40	2.70	3.60	3.00	38	**2023-0.40**	●
0.41	2.70	3.60	3.00	38	**2023-0.41**	●
0.42	2.70	3.60	3.00	38	**2023-0.42**	●
0.43	2.70	3.60	3.00	38	**2023-0.43**	●
0.44	2.70	3.60	3.00	38	**2023-0.44**	●
0.45	2.70	3.60	3.00	38	**2023-0.45**	●
0.46	2.70	3.60	3.00	38	**2023-0.46**	●
0.47	2.70	3.60	3.00	38	**2023-0.47**	●
0.48	2.70	3.60	3.00	38	**2023-0.48**	●

D1 0 / -0.004	L2	L3	D2 h6	L1	Art. N°	z
0.49	3.20	4.00	3.00	38	**2023-0.49**	●
0.50	3.20	4.00	3.00	38	**2023-0.50**	●
0.51	3.20	4.00	3.00	38	**2023-0.51**	●
0.52	3.20	4.00	3.00	38	**2023-0.52**	●
0.53	3.20	4.00	3.00	38	**2023-0.53**	●
0.54	3.60	4.50	3.00	38	**2023-0.54**	●
0.55	3.60	4.50	3.00	38	**2023-0.55**	●
0.56	3.60	4.50	3.00	38	**2023-0.56**	●
0.57	3.60	4.50	3.00	38	**2023-0.57**	●
0.58	3.60	4.50	3.00	38	**2023-0.58**	●
0.59	3.60	4.50	3.00	38	**2023-0.59**	●
0.60	3.60	4.50	3.00	38	**2023-0.60**	●
0.61	3.90	5.00	3.00	38	**2023-0.61**	●
0.62	3.90	5.00	3.00	38	**2023-0.62**	●
0.63	3.90	5.00	3.00	38	**2023-0.63**	●
0.64	3.90	5.00	3.00	38	**2023-0.64**	●
0.65	3.90	5.00	3.00	38	**2023-0.65**	●
0.66	3.90	5.00	3.00	38	**2023-0.66**	●
0.67	3.90	5.00	3.00	38	**2023-0.67**	●
0.68	4.50	5.60	3.00	38	**2023-0.68**	●
0.69	4.50	5.60	3.00	38	**2023-0.69**	●
0.70	4.50	5.60	3.00	38	**2023-0.70**	●
0.71	4.50	5.60	3.00	38	**2023-0.71**	●
0.72	4.50	5.60	3.00	38	**2023-0.72**	●
0.73	4.50	5.60	3.00	38	**2023-0.73**	●
0.74	4.50	5.60	3.00	38	**2023-0.74**	●
0.75	4.50	5.60	3.00	38	**2023-0.75**	●
0.76	5.00	6.30	3.00	38	**2023-0.76**	●
0.77	5.00	6.30	3.00	38	**2023-0.77**	●
0.78	5.00	6.30	3.00	38	**2023-0.78**	●
0.79	5.00	6.30	3.00	38	**2023-0.79**	●
0.80	5.00	6.30	3.00	38	**2023-0.80**	●
0.81	5.00	6.30	3.00	38	**2023-0.81**	●
0.82	5.00	6.30	3.00	38	**2023-0.82**	●
0.83	5.00	6.30	3.00	38	**2023-0.83**	●
0.84	5.00	6.30	3.00	38	**2023-0.84**	●
0.85	5.00	6.30	3.00	38	**2023-0.85**	●
0.86	5.70	7.10	3.00	38	**2023-0.86**	●
0.87	5.70	7.10	3.00	38	**2023-0.87**	●
0.88	5.70	7.10	3.00	38	**2023-0.88**	●
0.89	5.70	7.10	3.00	38	**2023-0.89**	●
0.90	5.70	7.10	3.00	38	**2023-0.90**	●
0.91	5.70	7.10	3.00	38	**2023-0.91**	●
0.92	5.70	7.10	3.00	38	**2023-0.92**	●
0.93	5.70	7.10	3.00	38	**2023-0.93**	●
0.94	5.70	7.10	3.00	38	**2023-0.94**	●
0.95	5.70	7.10	3.00	38	**2023-0.95**	●
0.96	6.50	8.00	3.00	38	**2023-0.96**	●
0.97	6.50	8.00	3.00	38	**2023-0.97**	●
0.98	6.50	8.00	3.00	38	**2023-0.98**	●
0.99	6.50	8.00	3.00	38	**2023-0.99**	●

Micro-forets
Mikrobohrer
Micro drills

Ø 1.00 - Ø 2.00 mm

D1 0 / -0.004	L2	L3	D2 h6	L1	Art. N°	z
1.00	6.50	8.00	3.00	38	**2023-1.00**	●
1.01	6.50	8.00	3.00	38	**2023-1.01**	●
1.02	6.50	8.00	3.00	38	**2023-1.02**	●
1.03	6.50	8.00	3.00	38	**2023-1.03**	●
1.04	6.50	8.00	3.00	38	**2023-1.04**	●
1.05	6.50	8.00	3.00	38	**2023-1.05**	●
1.06	7.30	9.00	3.00	38	**2023-1.06**	●
1.07	7.30	9.00	3.00	38	**2023-1.07**	●
1.08	7.30	9.00	3.00	38	**2023-1.08**	●
1.09	7.30	9.00	3.00	38	**2023-1.09**	●
1.10	7.30	9.00	3.00	38	**2023-1.10**	●
1.11	7.30	9.00	3.00	38	**2023-1.11**	●
1.12	7.30	9.00	3.00	38	**2023-1.12**	●
1.13	7.30	9.00	3.00	38	**2023-1.13**	●
1.14	7.30	9.00	3.00	38	**2023-1.14**	●
1.15	7.30	9.00	3.00	38	**2023-1.15**	●
1.16	8.20	10.00	3.00	38	**2023-1.16**	●
1.17	8.20	10.00	3.00	38	**2023-1.17**	●
1.18	8.20	10.00	3.00	38	**2023-1.18**	●
1.19	8.20	10.00	3.00	38	**2023-1.19**	●
1.20	8.20	10.00	3.00	38	**2023-1.20**	●
1.21	8.20	10.00	3.00	38	**2023-1.21**	●
1.22	8.20	10.00	3.00	38	**2023-1.22**	●
1.23	8.20	10.00	3.00	38	**2023-1.23**	●
1.24	8.20	10.00	3.00	38	**2023-1.24**	●
1.25	8.20	10.00	3.00	38	**2023-1.25**	●
1.26	8.20	10.00	3.00	38	**2023-1.26**	●
1.27	8.20	10.00	3.00	38	**2023-1.27**	●
1.28	8.20	10.00	3.00	38	**2023-1.28**	●
1.29	8.20	10.00	3.00	38	**2023-1.29**	●
1.30	8.20	10.00	3.00	38	**2023-1.30**	●
1.31	9.20	11.20	3.00	38	**2023-1.31**	●
1.32	9.20	11.20	3.00	38	**2023-1.32**	●
1.33	9.20	11.20	3.00	38	**2023-1.33**	●
1.34	9.20	11.20	3.00	38	**2023-1.34**	●
1.35	9.20	11.20	3.00	38	**2023-1.35**	●
1.36	9.20	11.20	3.00	38	**2023-1.36**	●
1.37	9.20	11.20	3.00	38	**2023-1.37**	●
1.38	9.20	11.20	3.00	38	**2023-1.38**	●
1.39	9.20	11.20	3.00	38	**2023-1.39**	●
1.40	9.20	11.20	3.00	38	**2023-1.40**	●
1.41	9.20	11.20	3.00	38	**2023-1.41**	●
1.42	9.20	11.20	3.00	38	**2023-1.42**	●
1.43	9.20	11.20	3.00	38	**2023-1.43**	●
1.44	9.20	11.20	3.00	38	**2023-1.44**	●
1.45	9.20	11.20	3.00	38	**2023-1.45**	●
1.46	9.20	11.20	3.00	38	**2023-1.46**	●
1.47	9.20	11.20	3.00	38	**2023-1.47**	●
1.48	9.20	11.20	3.00	38	**2023-1.48**	●
1.49	9.20	11.20	3.00	38	**2023-1.49**	●
1.50	9.20	11.20	3.00	38	**2023-1.50**	●

D1 0 / -0.004	L2	L3	D2 h6	L1	Art. N°	z
1.51	11.20	13.40	3.00	38	**2023-1.51**	●
1.52	11.20	13.40	3.00	38	**2023-1.52**	●
1.53	11.20	13.40	3.00	38	**2023-1.53**	●
1.54	11.20	13.40	3.00	38	**2023-1.54**	●
1.55	11.20	13.40	3.00	38	**2023-1.55**	●
1.56	11.20	13.40	3.00	38	**2023-1.56**	●
1.57	11.20	13.40	3.00	38	**2023-1.57**	●
1.58	11.20	13.40	3.00	38	**2023-1.58**	●
1.59	11.20	13.40	3.00	38	**2023-1.59**	●
1.60	11.20	13.40	3.00	38	**2023-1.60**	●
1.61	11.20	13.40	3.00	38	**2023-1.61**	●
1.62	11.20	13.40	3.00	38	**2023-1.62**	●
1.63	11.20	13.40	3.00	38	**2023-1.63**	●
1.64	11.20	13.40	3.00	38	**2023-1.64**	●
1.65	11.20	13.40	3.00	38	**2023-1.65**	●
1.66	11.20	13.40	3.00	38	**2023-1.66**	●
1.67	11.20	13.40	3.00	38	**2023-1.67**	●
1.68	11.20	13.40	3.00	38	**2023-1.68**	●
1.69	11.20	13.40	3.00	38	**2023-1.69**	●
1.70	11.20	13.40	3.00	38	**2023-1.70**	●
1.71	11.20	13.40	3.00	38	**2023-1.71**	●
1.72	11.20	13.40	3.00	38	**2023-1.72**	●
1.73	11.20	13.40	3.00	38	**2023-1.73**	●
1.74	11.20	13.40	3.00	38	**2023-1.74**	●
1.75	11.20	13.40	3.00	38	**2023-1.75**	●
1.76	11.20	13.40	3.00	38	**2023-1.76**	●
1.77	11.20	13.40	3.00	38	**2023-1.77**	●
1.78	11.20	13.40	3.00	38	**2023-1.78**	●
1.79	11.20	13.40	3.00	38	**2023-1.79**	●
1.80	11.20	13.40	3.00	38	**2023-1.80**	●
1.81	11.20	13.40	3.00	38	**2023-1.81**	●
1.82	11.20	13.40	3.00	38	**2023-1.82**	●
1.83	11.20	13.40	3.00	38	**2023-1.83**	●
1.84	11.20	13.40	3.00	38	**2023-1.84**	●
1.85	11.20	13.40	3.00	38	**2023-1.85**	●
1.86	11.20	13.40	3.00	38	**2023-1.86**	●
1.87	11.20	13.40	3.00	38	**2023-1.87**	●
1.88	11.20	13.40	3.00	38	**2023-1.88**	●
1.89	11.20	13.40	3.00	38	**2023-1.89**	●
1.90	11.20	13.40	3.00	38	**2023-1.90**	●
1.91	11.20	13.40	3.00	38	**2023-1.91**	●
1.92	11.20	13.40	3.00	38	**2023-1.92**	●
1.93	11.20	13.40	3.00	38	**2023-1.93**	●
1.94	11.20	13.40	3.00	38	**2023-1.94**	●
1.95	11.20	13.40	3.00	38	**2023-1.95**	●
1.96	11.20	13.40	3.00	38	**2023-1.96**	●
1.97	11.20	13.40	3.00	38	**2023-1.97**	●
1.98	11.20	13.40	3.00	38	**2023-1.98**	●
1.99	11.20	13.40	3.00	38	**2023-1.99**	●
2.00	11.20	13.40	3.00	38	**2023-2.00**	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

2023

Ø 2.01 - Ø 3.00 mm

Micro-forets
Mikrobohrer
Micro drills

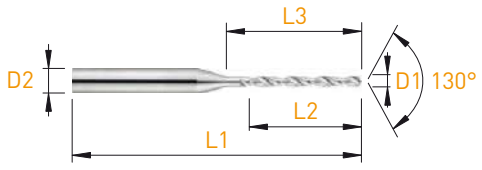
D1 0 / -0.004	L2	L3	D2 h6	L1	Art. N°	z
2.01	12.50	14.00	3.00	38	**2023-2.01**	●
2.02	12.50	14.00	3.00	38	**2023-2.02**	●
2.03	12.50	14.00	3.00	38	**2023-2.03**	●
2.04	12.50	14.00	3.00	38	**2023-2.04**	●
2.05	12.50	14.00	3.00	38	**2023-2.05**	●
2.06	12.50	14.00	3.00	38	**2023-2.06**	●
2.07	12.50	14.00	3.00	38	**2023-2.07**	●
2.08	12.50	14.00	3.00	38	**2023-2.08**	●
2.09	12.50	14.00	3.00	38	**2023-2.09**	●
2.10	12.50	14.00	3.00	38	**2023-2.10**	●
2.11	12.50	14.00	3.00	38	**2023-2.11**	●
2.12	12.50	14.00	3.00	38	**2023-2.12**	●
2.13	12.50	14.00	3.00	38	**2023-2.13**	●
2.14	12.50	14.00	3.00	38	**2023-2.14**	●
2.15	12.50	14.00	3.00	38	**2023-2.15**	●
2.16	12.50	14.00	3.00	38	**2023-2.16**	●
2.17	12.50	14.00	3.00	38	**2023-2.17**	●
2.18	12.50	14.00	3.00	38	**2023-2.18**	●
2.19	12.50	14.00	3.00	38	**2023-2.19**	●
2.20	12.50	14.00	3.00	38	**2023-2.20**	●
2.21	12.50	14.00	3.00	38	**2023-2.21**	●
2.22	12.50	14.00	3.00	38	**2023-2.22**	●
2.23	12.50	14.00	3.00	38	**2023-2.23**	●
2.24	12.50	14.00	3.00	38	**2023-2.24**	●
2.25	12.50	14.00	3.00	38	**2023-2.25**	●
2.26	12.50	14.00	3.00	38	**2023-2.26**	●
2.27	12.50	14.00	3.00	38	**2023-2.27**	●
2.28	12.50	14.00	3.00	38	**2023-2.28**	●
2.29	12.50	14.00	3.00	38	**2023-2.29**	●
2.30	12.50	14.00	3.00	38	**2023-2.30**	●
2.31	12.50	14.00	3.00	38	**2023-2.31**	●
2.32	12.50	14.00	3.00	38	**2023-2.32**	●
2.33	12.50	14.00	3.00	38	**2023-2.33**	●
2.34	12.50	14.00	3.00	38	**2023-2.34**	●
2.35	12.50	14.00	3.00	38	**2023-2.35**	●
2.36	12.50	14.00	3.00	38	**2023-2.36**	●
2.37	12.50	14.00	3.00	38	**2023-2.37**	●
2.38	12.50	14.00	3.00	38	**2023-2.38**	●
2.39	12.50	14.00	3.00	38	**2023-2.39**	●
2.40	12.50	14.00	3.00	38	**2023-2.40**	●
2.41	12.50	14.00	3.00	38	**2023-2.41**	●
2.42	12.50	14.00	3.00	38	**2023-2.42**	●
2.43	12.50	14.00	3.00	38	**2023-2.43**	●
2.44	12.50	14.00	3.00	38	**2023-2.44**	●
2.45	12.50	14.00	3.00	38	**2023-2.45**	●
2.46	12.50	14.00	3.00	38	**2023-2.46**	●
2.47	12.50	14.00	3.00	38	**2023-2.47**	●
2.48	12.50	14.00	3.00	38	**2023-2.48**	●
2.49	12.50	14.00	3.00	38	**2023-2.49**	●
2.50	14.00	17.00	3.00	38	**2023-2.50**	●

D1 0 / -0.004	L2	L3	D2 h6	L1	Art. N°	z
2.51	14.00	17.00	3.00	38	**2023-2.51**	●
2.52	14.00	17.00	3.00	38	**2023-2.52**	●
2.53	14.00	17.00	3.00	38	**2023-2.53**	●
2.54	14.00	17.00	3.00	38	**2023-2.54**	●
2.55	14.00	17.00	3.00	38	**2023-2.55**	●
2.56	14.00	17.00	3.00	38	**2023-2.56**	●
2.57	14.00	17.00	3.00	38	**2023-2.57**	●
2.58	14.00	17.00	3.00	38	**2023-2.58**	●
2.59	14.00	17.00	3.00	38	**2023-2.59**	●
2.60	14.00	17.00	3.00	38	**2023-2.60**	●
2.61	14.00	17.00	3.00	38	**2023-2.61**	●
2.62	14.00	17.00	3.00	38	**2023-2.62**	●
2.63	14.00	17.00	3.00	38	**2023-2.63**	●
2.64	14.00	17.00	3.00	38	**2023-2.64**	●
2.65	14.00	17.00	3.00	38	**2023-2.65**	●
2.66	14.00	17.00	3.00	38	**2023-2.66**	●
2.67	14.00	17.00	3.00	38	**2023-2.67**	●
2.68	14.00	17.00	3.00	38	**2023-2.68**	●
2.69	14.00	17.00	3.00	38	**2023-2.69**	●
2.70	14.00	17.00	3.00	38	**2023-2.70**	●
2.71	14.00	17.00	3.00	38	**2023-2.71**	●
2.72	14.00	17.00	3.00	38	**2023-2.72**	●
2.73	14.00	17.00	3.00	38	**2023-2.73**	●
2.74	14.00	17.00	3.00	38	**2023-2.74**	●
2.75	14.00	17.00	3.00	38	**2023-2.75**	●
2.76	14.00	17.00	3.00	38	**2023-2.76**	●
2.77	14.00	17.00	3.00	38	**2023-2.77**	●
2.78	14.00	17.00	3.00	38	**2023-2.78**	●
2.79	14.00	17.00	3.00	38	**2023-2.79**	●
2.80	14.00	17.00	3.00	38	**2023-2.80**	●
2.81	14.00	17.00	3.00	38	**2023-2.81**	●
2.82	14.00	17.00	3.00	38	**2023-2.82**	●
2.83	14.00	17.00	3.00	38	**2023-2.83**	●
2.84	14.00	17.00	3.00	38	**2023-2.84**	●
2.85	14.00	17.00	3.00	38	**2023-2.85**	●
2.86	14.00	17.00	3.00	38	**2023-2.86**	●
2.87	14.00	17.00	3.00	38	**2023-2.87**	●
2.88	14.00	17.00	3.00	38	**2023-2.88**	●
2.89	14.00	17.00	3.00	38	**2023-2.89**	●
2.90	14.00	17.00	3.00	38	**2023-2.90**	●
2.91	14.00	17.00	3.00	38	**2023-2.91**	●
2.92	14.00	17.00	3.00	38	**2023-2.92**	●
2.93	14.00	17.00	3.00	38	**2023-2.93**	●
2.94	14.00	17.00	3.00	38	**2023-2.94**	●
2.95	14.00	17.00	3.00	38	**2023-2.95**	●
2.96	14.00	17.00	3.00	38	**2023-2.96**	●
2.97	14.00	17.00	3.00	38	**2023-2.97**	●
2.98	14.00	17.00	3.00	38	**2023-2.98**	●
2.99	14.00	17.00	3.00	38	**2023-2.99**	●
3.00	14.00	17.00	3.00	38	**2023-3.00**	●

Micro-forets
Mikrobohrer
Micro drills

Ø 0.20 - Ø 1.09 mm

2026



MD VHM HM	λ 25°	Z=2	12xD1	130°	

D1 h6	L2	L3	D2 h6	L1	Art. N°	Z
0.20	2.40	3.50	3.00	38	**2026-0.20**	●
0.21	2.50	3.50	3.00	38	**2026-0.21**	●
0.22	2.70	3.50	3.00	38	**2026-0.22**	●
0.23	2.80	3.50	3.00	38	**2026-0.23**	●
0.24	2.90	4.00	3.00	38	**2026-0.24**	●
0.25	3.00	4.00	3.00	38	**2026-0.25**	●
0.26	3.10	4.00	3.00	38	**2026-0.26**	●
0.27	3.30	4.00	3.00	38	**2026-0.27**	●
0.28	3.40	4.50	3.00	38	**2026-0.28**	●
0.29	3.50	4.50	3.00	38	**2026-0.29**	●
0.30	3.60	4.50	3.00	38	**2026-0.30**	●
0.31	3.70	4.50	3.00	38	**2026-0.31**	●
0.32	3.90	5.00	3.00	38	**2026-0.32**	●
0.33	4.00	5.00	3.00	38	**2026-0.33**	●
0.34	4.10	5.00	3.00	38	**2026-0.34**	●
0.35	4.20	5.00	3.00	38	**2026-0.35**	●
0.36	4.30	5.50	3.00	38	**2026-0.36**	●
0.37	4.50	5.50	3.00	38	**2026-0.37**	●
0.38	4.60	5.50	3.00	38	**2026-0.38**	●
0.39	4.70	5.50	3.00	38	**2026-0.39**	●
0.40	4.80	6.00	3.00	38	**2026-0.40**	●
0.41	4.90	6.00	3.00	38	**2026-0.41**	●
0.42	5.10	6.00	3.00	38	**2026-0.42**	●
0.43	5.20	6.00	3.00	38	**2026-0.43**	●
0.44	5.30	6.50	3.00	38	**2026-0.44**	●
0.45	5.40	6.50	3.00	38	**2026-0.45**	●
0.46	5.50	6.50	3.00	38	**2026-0.46**	●
0.47	5.70	6.50	3.00	38	**2026-0.47**	●
0.48	5.80	7.00	3.00	38	**2026-0.48**	●
0.49	5.90	7.00	3.00	38	**2026-0.49**	●
0.50	6.00	7.00	3.00	38	**2026-0.50**	●
0.51	6.10	7.00	3.00	38	**2026-0.51**	●
0.52	6.30	7.50	3.00	38	**2026-0.52**	●
0.53	6.40	7.50	3.00	38	**2026-0.53**	●
0.54	6.50	7.50	3.00	38	**2026-0.54**	●
0.55	6.60	7.50	3.00	38	**2026-0.55**	●
0.56	6.70	8.00	3.00	38	**2026-0.56**	●
0.57	6.90	8.00	3.00	38	**2026-0.57**	●
0.58	7.00	8.00	3.00	38	**2026-0.58**	●
0.59	7.10	8.00	3.00	38	**2026-0.59**	●
0.60	7.20	9.00	3.00	38	**2026-0.60**	●
0.61	7.30	9.00	3.00	38	**2026-0.61**	●
0.62	7.50	9.00	3.00	38	**2026-0.62**	●
0.63	7.60	9.00	3.00	38	**2026-0.63**	●
0.64	7.70	9.50	3.00	38	**2026-0.64**	●
0.65	7.80	9.50	3.00	38	**2026-0.65**	●
0.66	7.90	9.50	3.00	38	**2026-0.66**	●
0.67	8.10	9.50	3.00	38	**2026-0.67**	●
0.68	8.20	10.00	3.00	38	**2026-0.68**	●
0.69	8.30	10.00	3.00	38	**2026-0.69**	●
0.70	8.40	10.00	3.00	38	**2026-0.70**	●
0.71	8.50	10.00	3.00	38	**2026-0.71**	●
0.72	8.70	10.50	3.00	38	**2026-0.72**	●
0.73	8.80	10.50	3.00	38	**2026-0.73**	●
0.74	8.90	10.50	3.00	38	**2026-0.74**	●
0.75	9.00	10.50	3.00	38	**2026-0.75**	●
0.76	9.10	11.00	3.00	38	**2026-0.76**	●
0.77	9.30	11.00	3.00	38	**2026-0.77**	●
0.78	9.40	11.00	3.00	38	**2026-0.78**	●
0.79	9.50	11.00	3.00	38	**2026-0.79**	●
0.80	9.60	11.50	3.00	38	**2026-0.80**	●
0.81	9.70	11.50	3.00	38	**2026-0.81**	●
0.82	9.90	11.50	3.00	38	**2026-0.82**	●
0.83	10.00	11.50	3.00	38	**2026-0.83**	●
0.84	10.10	12.00	3.00	38	**2026-0.84**	●
0.85	10.20	12.00	3.00	38	**2026-0.85**	●
0.86	10.30	12.00	3.00	38	**2026-0.86**	●
0.87	10.50	12.00	3.00	38	**2026-0.87**	●
0.88	10.60	12.50	3.00	38	**2026-0.88**	●
0.89	10.70	12.50	3.00	38	**2026-0.89**	●
0.90	10.80	12.50	3.00	38	**2026-0.90**	●
0.91	10.90	12.50	3.00	38	**2026-0.91**	●
0.92	11.10	13.00	3.00	38	**2026-0.92**	●
0.93	11.20	13.00	3.00	38	**2026-0.93**	●
0.94	11.30	13.00	3.00	38	**2026-0.94**	●
0.95	11.40	13.00	3.00	38	**2026-0.95**	●
0.96	11.50	13.50	3.00	38	**2026-0.96**	●
0.97	11.70	13.50	3.00	38	**2026-0.97**	●
0.98	11.80	13.50	3.00	38	**2026-0.98**	●
0.99	11.90	13.50	3.00	38	**2026-0.99**	●
1.00	12.00	14.50	3.00	38	**2026-1.00**	●
1.01	12.10	14.50	3.00	38	**2026-1.01**	●
1.02	12.30	14.50	3.00	38	**2026-1.02**	●
1.03	12.40	14.50	3.00	38	**2026-1.03**	●
1.04	12.50	15.00	3.00	38	**2026-1.04**	●
1.05	12.60	15.00	3.00	38	**2026-1.05**	●
1.06	12.70	15.00	3.00	38	**2026-1.06**	●
1.07	12.90	15.00	3.00	38	**2026-1.07**	●
1.08	13.00	15.50	3.00	38	**2026-1.08**	●
1.09	13.10	15.50	3.00	38	**2026-1.09**	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

2026

Ø 1.10 - Ø 2.00 mm

Micro-forets
Mikrobohrer
Micro drills

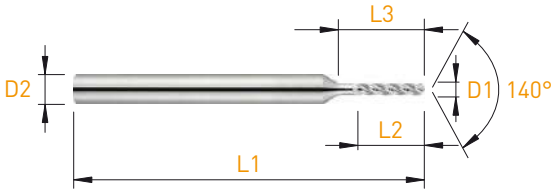
D1 h6	L2	L3	D2 h6	L1	Art. N°	z
1.10	13.20	15.50	3.00	38	**2026-1.10**	●
1.11	13.30	15.50	3.00	38	**2026-1.11**	●
1.12	13.50	16.00	3.00	38	**2026-1.12**	●
1.13	13.60	16.00	3.00	38	**2026-1.13**	●
1.14	13.70	16.00	3.00	38	**2026-1.14**	●
1.15	13.80	16.00	3.00	38	**2026-1.15**	●
1.16	13.90	16.50	3.00	38	**2026-1.16**	●
1.17	14.10	16.50	3.00	38	**2026-1.17**	●
1.18	14.20	16.50	3.00	38	**2026-1.18**	●
1.19	14.30	16.50	3.00	38	**2026-1.19**	●
1.20	14.40	17.00	3.00	38	**2026-1.20**	●
1.21	14.50	17.00	3.00	38	**2026-1.21**	●
1.22	14.70	17.00	3.00	38	**2026-1.22**	●
1.23	14.80	17.00	3.00	38	**2026-1.23**	●
1.24	14.90	17.50	3.00	38	**2026-1.24**	●
1.25	15.00	17.50	3.00	38	**2026-1.25**	●
1.26	15.10	17.50	3.00	50	**2026-1.26**	●
1.27	15.30	17.50	3.00	50	**2026-1.27**	●
1.28	15.40	18.00	3.00	50	**2026-1.28**	●
1.29	15.50	18.00	3.00	50	**2026-1.29**	●
1.30	15.60	18.00	3.00	50	**2026-1.30**	●
1.31	15.70	18.00	3.00	50	**2026-1.31**	●
1.32	15.90	18.50	3.00	50	**2026-1.32**	●
1.33	16.00	18.50	3.00	50	**2026-1.33**	●
1.34	16.10	18.50	3.00	50	**2026-1.34**	●
1.35	16.20	18.50	3.00	50	**2026-1.35**	●
1.36	16.30	19.00	3.00	50	**2026-1.36**	●
1.37	16.50	19.00	3.00	50	**2026-1.37**	●
1.38	16.60	19.00	3.00	50	**2026-1.38**	●
1.39	16.70	19.00	3.00	50	**2026-1.39**	●
1.40	16.80	19.50	3.00	50	**2026-1.40**	●
1.41	16.90	19.50	3.00	50	**2026-1.41**	●
1.42	17.10	19.50	3.00	50	**2026-1.42**	●
1.43	17.20	19.50	3.00	50	**2026-1.43**	●
1.44	17.30	20.00	3.00	50	**2026-1.44**	●
1.45	17.40	20.00	3.00	50	**2026-1.45**	●
1.46	17.50	20.00	3.00	50	**2026-1.46**	●
1.47	17.70	20.00	3.00	50	**2026-1.47**	●
1.48	17.80	20.50	3.00	50	**2026-1.48**	●
1.49	17.90	20.50	3.00	50	**2026-1.49**	●
1.50	18.00	21.00	3.00	50	**2026-1.50**	●
1.51	18.10	21.00	3.00	50	**2026-1.51**	●
1.52	18.30	21.00	3.00	50	**2026-1.52**	●
1.53	18.40	21.00	3.00	50	**2026-1.53**	●
1.54	18.50	21.50	3.00	50	**2026-1.54**	●
1.55	18.60	21.50	3.00	50	**2026-1.55**	●
1.56	18.70	21.50	3.00	50	**2026-1.56**	●
1.57	18.90	21.50	3.00	50	**2026-1.57**	●
1.58	19.00	22.00	3.00	50	**2026-1.58**	●
1.59	19.10	22.00	3.00	50	**2026-1.59**	●
1.60	19.20	22.00	3.00	50	**2026-1.60**	●

D1 h6	L2	L3	D2 h6	L1	Art. N°	z
1.61	19.30	22.00	3.00	50	**2026-1.61**	●
1.62	19.40	22.50	3.00	50	**2026-1.62**	●
1.63	19.60	22.50	3.00	50	**2026-1.63**	●
1.64	19.70	22.50	3.00	50	**2026-1.64**	●
1.65	19.80	22.50	3.00	50	**2026-1.65**	●
1.66	19.90	23.00	3.00	50	**2026-1.66**	●
1.67	20.10	23.00	3.00	50	**2026-1.67**	●
1.68	20.20	23.00	3.00	50	**2026-1.68**	●
1.69	20.30	23.00	3.00	50	**2026-1.69**	●
1.70	20.40	23.50	3.00	50	**2026-1.70**	●
1.71	20.50	23.50	3.00	50	**2026-1.71**	●
1.72	20.70	23.50	3.00	50	**2026-1.72**	●
1.73	20.80	23.50	3.00	50	**2026-1.73**	●
1.74	20.90	24.00	3.00	50	**2026-1.74**	●
1.75	21.00	24.00	3.00	50	**2026-1.75**	●
1.76	21.10	24.00	3.00	50	**2026-1.76**	●
1.77	21.30	24.00	3.00	50	**2026-1.77**	●
1.78	21.40	24.50	3.00	50	**2026-1.78**	●
1.79	21.50	24.50	3.00	50	**2026-1.79**	●
1.80	21.60	25.00	3.00	50	**2026-1.80**	●
1.81	21.70	25.00	3.00	50	**2026-1.81**	●
1.82	21.90	25.00	3.00	50	**2026-1.82**	●
1.83	22.00	25.00	3.00	50	**2026-1.83**	●
1.84	22.10	25.50	3.00	50	**2026-1.84**	●
1.85	22.20	25.50	3.00	50	**2026-1.85**	●
1.86	22.30	25.50	3.00	50	**2026-1.86**	●
1.87	22.50	25.50	3.00	50	**2026-1.87**	●
1.88	22.60	26.00	3.00	50	**2026-1.88**	●
1.89	22.70	26.00	3.00	50	**2026-1.89**	●
1.90	22.80	26.00	3.00	50	**2026-1.90**	●
1.91	22.90	26.00	3.00	50	**2026-1.91**	●
1.92	23.10	26.50	3.00	50	**2026-1.92**	●
1.93	23.20	26.50	3.00	50	**2026-1.93**	●
1.94	23.30	26.50	3.00	50	**2026-1.94**	●
1.95	23.40	26.50	3.00	50	**2026-1.95**	●
1.96	23.50	27.00	3.00	50	**2026-1.96**	●
1.97	23.70	27.00	3.00	50	**2026-1.97**	●
1.98	23.80	27.00	3.00	50	**2026-1.98**	●
1.99	23.90	27.00	3.00	50	**2026-1.99**	●
2.00	24.00	27.00	3.00	50	**2026-2.00**	●

Micro-forets
Mikrobohrer
Micro drills

Ø 0.20 - Ø 1.09 mm

2030



MD VHM HM	λ 35°	5xD1	Z=3	140°	

D1 h6	L2	L3	D2 h6	L1	Art. N°	z
0.20	1.00	1.50	3.00	38	**2030-0.20**	●
0.21	1.05	1.50	3.00	38	**2030-0.21**	●
0.22	1.10	1.60	3.00	38	**2030-0.22**	●
0.23	1.15	1.60	3.00	38	**2030-0.23**	●
0.24	1.20	1.70	3.00	38	**2030-0.24**	●
0.25	1.25	1.70	3.00	38	**2030-0.25**	●
0.26	1.30	1.80	3.00	38	**2030-0.26**	●
0.27	1.35	1.80	3.00	38	**2030-0.27**	●
0.28	1.40	1.90	3.00	38	**2030-0.28**	●
0.29	1.45	1.90	3.00	38	**2030-0.29**	●
0.30	1.50	2.00	3.00	38	**2030-0.30**	●
0.31	1.55	2.00	3.00	38	**2030-0.31**	●
0.32	1.60	2.10	3.00	38	**2030-0.32**	●
0.33	1.65	2.10	3.00	38	**2030-0.33**	●
0.34	1.70	2.20	3.00	38	**2030-0.34**	●
0.35	1.75	2.20	3.00	38	**2030-0.35**	●
0.36	1.80	2.30	3.00	38	**2030-0.36**	●
0.37	1.85	2.30	3.00	38	**2030-0.37**	●
0.38	1.90	2.40	3.00	38	**2030-0.38**	●
0.39	1.95	2.40	3.00	38	**2030-0.39**	●
0.40	2.00	2.50	3.00	38	**2030-0.40**	●
0.41	2.05	2.50	3.00	38	**2030-0.41**	●
0.42	2.10	2.60	3.00	38	**2030-0.42**	●
0.43	2.15	2.60	3.00	38	**2030-0.43**	●
0.44	2.20	2.70	3.00	38	**2030-0.44**	●
0.45	2.25	2.70	3.00	38	**2030-0.45**	●
0.46	2.30	2.80	3.00	38	**2030-0.46**	●
0.47	2.35	2.80	3.00	38	**2030-0.47**	●
0.48	2.40	2.90	3.00	38	**2030-0.48**	●
0.49	2.45	2.90	3.00	38	**2030-0.49**	●
0.50	2.50	3.00	3.00	38	**2030-0.50**	●
0.51	2.55	3.00	3.00	38	**2030-0.51**	●
0.52	2.60	3.10	3.00	38	**2030-0.52**	●
0.53	2.65	3.10	3.00	38	**2030-0.53**	●
0.54	2.70	3.20	3.00	38	**2030-0.54**	●
0.55	2.75	3.20	3.00	38	**2030-0.55**	●
0.56	2.80	3.30	3.00	38	**2030-0.56**	●
0.57	2.85	3.30	3.00	38	**2030-0.57**	●
0.58	2.90	3.40	3.00	38	**2030-0.58**	●
0.59	2.95	3.40	3.00	38	**2030-0.59**	●
0.60	3.00	3.50	3.00	38	**2030-0.60**	●
0.61	3.05	3.50	3.00	38	**2030-0.61**	●
0.62	3.10	3.60	3.00	38	**2030-0.62**	●
0.63	3.15	3.60	3.00	38	**2030-0.63**	●
0.64	3.20	3.70	3.00	38	**2030-0.64**	●
0.65	3.25	3.70	3.00	38	**2030-0.65**	●
0.66	3.30	3.80	3.00	38	**2030-0.66**	●
0.67	3.35	3.80	3.00	38	**2030-0.67**	●
0.68	3.40	3.90	3.00	38	**2030-0.68**	●
0.69	3.45	3.90	3.00	38	**2030-0.69**	●
0.70	3.50	4.00	3.00	38	**2030-0.70**	●
0.71	3.55	4.00	3.00	38	**2030-0.71**	●
0.72	3.60	4.10	3.00	38	**2030-0.72**	●
0.73	3.65	4.10	3.00	38	**2030-0.73**	●
0.74	3.70	4.20	3.00	38	**2030-0.74**	●
0.75	3.75	4.20	3.00	38	**2030-0.75**	●
0.76	3.80	4.30	3.00	38	**2030-0.76**	●
0.77	3.85	4.30	3.00	38	**2030-0.77**	●
0.78	3.90	4.40	3.00	38	**2030-0.78**	●
0.79	3.95	4.40	3.00	38	**2030-0.79**	●
0.80	4.00	4.50	3.00	38	**2030-0.80**	●
0.81	4.05	4.50	3.00	38	**2030-0.81**	●
0.82	4.10	4.60	3.00	38	**2030-0.82**	●
0.83	4.15	4.60	3.00	38	**2030-0.83**	●
0.84	4.20	4.70	3.00	38	**2030-0.84**	●
0.85	4.25	4.70	3.00	38	**2030-0.85**	●
0.86	4.30	4.80	3.00	38	**2030-0.86**	●
0.87	4.35	4.80	3.00	38	**2030-0.87**	●
0.88	4.40	4.90	3.00	38	**2030-0.88**	●
0.89	4.45	4.90	3.00	38	**2030-0.89**	●
0.90	4.50	5.00	3.00	38	**2030-0.90**	●
0.91	4.55	5.00	3.00	38	**2030-0.91**	●
0.92	4.60	5.10	3.00	38	**2030-0.92**	●
0.93	4.65	5.10	3.00	38	**2030-0.93**	●
0.94	4.70	5.20	3.00	38	**2030-0.94**	●
0.95	4.75	5.20	3.00	38	**2030-0.95**	●
0.96	4.80	5.30	3.00	38	**2030-0.96**	●
0.97	4.85	5.30	3.00	38	**2030-0.97**	●
0.98	4.90	5.40	3.00	38	**2030-0.98**	●
0.99	4.95	5.40	3.00	38	**2030-0.99**	●
1.00	5.00	6.50	3.00	38	**2030-1.00**	●
1.01	5.05	6.50	3.00	38	**2030-1.01**	●
1.02	5.10	6.50	3.00	38	**2030-1.02**	●
1.03	5.15	6.50	3.00	38	**2030-1.03**	●
1.04	5.20	6.50	3.00	38	**2030-1.04**	●
1.05	5.25	6.50	3.00	38	**2030-1.05**	●
1.06	5.30	6.50	3.00	38	**2030-1.06**	●
1.07	5.35	7.50	3.00	38	**2030-1.07**	●
1.08	5.40	7.50	3.00	38	**2030-1.08**	●
1.09	5.45	7.50	3.00	38	**2030-1.09**	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

2030

Ø 1.10 - Ø 2.11 mm

Micro-forets
Mikrobohrer
Micro drills

D1 h6	L2	L3	D2 h6	L1	Art. N°	z
1.10	5.50	7.50	3.00	38	**2030-1.10**	●
1.11	5.55	7.50	3.00	38	**2030-1.11**	●
1.12	5.60	7.50	3.00	38	**2030-1.12**	●
1.13	5.65	7.50	3.00	38	**2030-1.13**	●
1.14	5.70	7.50	3.00	38	**2030-1.14**	●
1.15	5.75	7.50	3.00	38	**2030-1.15**	●
1.16	5.80	7.50	3.00	38	**2030-1.16**	●
1.17	5.85	7.50	3.00	38	**2030-1.17**	●
1.18	5.90	8.50	3.00	38	**2030-1.18**	●
1.19	5.95	8.50	3.00	38	**2030-1.19**	●
1.20	6.00	8.50	3.00	38	**2030-1.20**	●
1.21	6.05	8.50	3.00	38	**2030-1.21**	●
1.22	6.10	8.50	3.00	38	**2030-1.22**	●
1.23	6.15	8.50	3.00	38	**2030-1.23**	●
1.24	6.20	8.50	3.00	38	**2030-1.24**	●
1.25	6.25	8.50	3.00	38	**2030-1.25**	●
1.26	6.30	8.50	3.00	38	**2030-1.26**	●
1.27	6.35	8.50	3.00	38	**2030-1.27**	●
1.28	6.40	8.50	3.00	38	**2030-1.28**	●
1.29	6.45	8.50	3.00	38	**2030-1.29**	●
1.30	6.50	8.50	3.00	38	**2030-1.30**	●
1.31	6.55	8.50	3.00	38	**2030-1.31**	●
1.32	6.60	8.50	3.00	38	**2030-1.32**	●
1.33	6.65	9.50	3.00	38	**2030-1.33**	●
1.34	6.70	9.50	3.00	38	**2030-1.34**	●
1.35	6.75	9.50	3.00	38	**2030-1.35**	●
1.36	6.80	9.50	3.00	38	**2030-1.36**	●
1.37	6.85	9.50	3.00	38	**2030-1.37**	●
1.38	6.90	9.50	3.00	38	**2030-1.38**	●
1.39	6.95	9.50	3.00	38	**2030-1.39**	●
1.40	7.00	9.50	3.00	38	**2030-1.40**	●
1.41	7.05	9.50	3.00	38	**2030-1.41**	●
1.42	7.10	9.50	3.00	38	**2030-1.42**	●
1.43	7.15	9.50	3.00	38	**2030-1.43**	●
1.44	7.20	9.50	3.00	38	**2030-1.44**	●
1.45	7.25	9.50	3.00	38	**2030-1.45**	●
1.46	7.30	9.50	3.00	38	**2030-1.46**	●
1.47	7.35	9.50	3.00	38	**2030-1.47**	●
1.48	7.40	9.50	3.00	38	**2030-1.48**	●
1.49	7.45	9.50	3.00	38	**2030-1.49**	●
1.50	7.50	9.50	3.00	38	**2030-1.50**	●
1.51	7.55	10.50	3.00	38	**2030-1.51**	●
1.52	7.60	10.50	3.00	38	**2030-1.52**	●
1.53	7.65	10.50	3.00	38	**2030-1.53**	●
1.54	7.70	10.50	3.00	38	**2030-1.54**	●
1.55	7.75	10.50	3.00	38	**2030-1.55**	●
1.56	7.80	10.50	3.00	38	**2030-1.56**	●
1.57	7.85	10.50	3.00	38	**2030-1.57**	●
1.58	7.90	10.50	3.00	38	**2030-1.58**	●
1.59	7.95	10.50	3.00	38	**2030-1.59**	●
1.60	8.00	10.50	3.00	38	**2030-1.60**	●

D1 h6	L2	L3	D2 h6	L1	Art. N°	z
1.61	8.05	10.50	3.00	38	**2030-1.61**	●
1.62	8.10	10.50	3.00	38	**2030-1.62**	●
1.63	8.15	10.50	3.00	38	**2030-1.63**	●
1.64	8.20	10.50	3.00	38	**2030-1.64**	●
1.65	8.25	10.50	3.00	38	**2030-1.65**	●
1.66	8.30	10.50	3.00	38	**2030-1.66**	●
1.67	8.35	10.50	3.00	38	**2030-1.67**	●
1.68	8.40	10.50	3.00	38	**2030-1.68**	●
1.69	8.45	10.50	3.00	38	**2030-1.69**	●
1.70	8.50	10.50	3.00	38	**2030-1.70**	●
1.71	8.55	11.50	3.00	38	**2030-1.71**	●
1.72	8.60	11.50	3.00	38	**2030-1.72**	●
1.73	8.65	11.50	3.00	38	**2030-1.73**	●
1.74	8.70	11.50	3.00	38	**2030-1.74**	●
1.75	8.75	11.50	3.00	38	**2030-1.75**	●
1.76	8.80	11.50	3.00	38	**2030-1.76**	●
1.77	8.85	11.50	3.00	38	**2030-1.77**	●
1.78	8.90	11.50	3.00	38	**2030-1.78**	●
1.79	8.95	11.50	3.00	38	**2030-1.79**	●
1.80	9.00	11.50	3.00	38	**2030-1.80**	●
1.81	9.05	11.50	3.00	38	**2030-1.81**	●
1.82	9.10	11.50	3.00	38	**2030-1.82**	●
1.83	9.15	11.50	3.00	38	**2030-1.83**	●
1.84	9.20	11.50	3.00	38	**2030-1.84**	●
1.85	9.25	11.50	3.00	38	**2030-1.85**	●
1.86	9.30	11.50	3.00	38	**2030-1.86**	●
1.87	9.35	11.50	3.00	38	**2030-1.87**	●
1.88	9.40	11.50	3.00	38	**2030-1.88**	●
1.89	9.45	11.50	3.00	38	**2030-1.89**	●
1.90	9.50	11.50	3.00	38	**2030-1.90**	●
1.91	9.55	12.50	3.00	38	**2030-1.91**	●
1.92	9.60	12.50	3.00	38	**2030-1.92**	●
1.93	9.65	12.50	3.00	38	**2030-1.93**	●
1.94	9.70	12.50	3.00	38	**2030-1.94**	●
1.95	9.75	12.50	3.00	38	**2030-1.95**	●
1.96	9.80	12.50	3.00	38	**2030-1.96**	●
1.97	9.85	12.50	3.00	38	**2030-1.97**	●
1.98	9.90	12.50	3.00	38	**2030-1.98**	●
1.99	9.95	12.50	3.00	38	**2030-1.99**	●
2.00	10.00	12.50	3.00	38	**2030-2.00**	●
2.01	10.05	12.50	3.00	38	**2030-2.01**	●
2.02	10.10	12.50	3.00	38	**2030-2.02**	●
2.03	10.15	12.50	3.00	38	**2030-2.03**	●
2.04	10.20	12.50	3.00	38	**2030-2.04**	●
2.05	10.25	12.50	3.00	38	**2030-2.05**	●
2.06	10.30	12.50	3.00	38	**2030-2.06**	●
2.07	10.35	12.50	3.00	38	**2030-2.07**	●
2.08	10.40	12.50	3.00	38	**2030-2.08**	●
2.09	10.45	12.50	3.00	38	**2030-2.09**	●
2.10	10.50	12.50	3.00	38	**2030-2.10**	●
2.11	10.55	12.50	3.00	38	**2030-2.11**	●

Micro-forets
Mikrobohrer
Micro drills

Ø 2.12 - Ø 2.99 mm

2030

D1 h6	L2	L3	D2 h6	L1	Art. N°	z
2.12	10.60	12.50	3.00	38	**2030-2.12**	●
2.13	10.65	13.50	3.00	38	**2030-2.13**	●
2.14	10.70	13.50	3.00	38	**2030-2.14**	●
2.15	10.75	13.50	3.00	38	**2030-2.15**	●
2.16	10.80	13.50	3.00	38	**2030-2.16**	●
2.17	10.85	13.50	3.00	38	**2030-2.17**	●
2.18	10.90	13.50	3.00	38	**2030-2.18**	●
2.19	10.95	13.50	3.00	38	**2030-2.19**	●
2.20	11.00	13.50	3.00	38	**2030-2.20**	●
2.21	11.05	13.50	3.00	38	**2030-2.21**	●
2.22	11.10	13.50	3.00	38	**2030-2.22**	●
2.23	11.15	13.50	3.00	38	**2030-2.23**	●
2.24	11.20	13.50	3.00	38	**2030-2.24**	●
2.25	11.25	13.50	3.00	38	**2030-2.25**	●
2.26	11.30	13.50	3.00	38	**2030-2.26**	●
2.27	11.35	13.50	3.00	38	**2030-2.27**	●
2.28	11.40	13.50	3.00	38	**2030-2.28**	●
2.29	11.45	13.50	3.00	38	**2030-2.29**	●
2.30	11.50	13.50	3.00	38	**2030-2.30**	●
2.31	11.55	13.50	3.00	38	**2030-2.31**	●
2.32	11.60	13.50	3.00	38	**2030-2.32**	●
2.33	11.65	13.50	3.00	38	**2030-2.33**	●
2.34	11.70	13.50	3.00	38	**2030-2.34**	●
2.35	11.75	13.50	3.00	38	**2030-2.35**	●
2.36	11.80	13.50	3.00	38	**2030-2.36**	●
2.37	11.85	14.50	3.00	38	**2030-2.37**	●
2.38	11.90	14.50	3.00	38	**2030-2.38**	●
2.39	11.95	14.50	3.00	38	**2030-2.39**	●
2.40	12.00	14.50	3.00	38	**2030-2.40**	●
2.41	12.05	14.50	3.00	38	**2030-2.41**	●
2.42	12.10	14.50	3.00	38	**2030-2.42**	●
2.43	12.15	14.50	3.00	38	**2030-2.43**	●
2.44	12.20	14.50	3.00	38	**2030-2.44**	●
2.45	12.25	14.50	3.00	38	**2030-2.45**	●
2.46	12.30	14.50	3.00	38	**2030-2.46**	●
2.47	12.35	14.50	3.00	38	**2030-2.47**	●
2.48	12.40	14.50	3.00	38	**2030-2.48**	●
2.49	12.45	14.50	3.00	38	**2030-2.49**	●
2.50	12.50	14.50	3.00	38	**2030-2.50**	●
2.51	12.55	14.50	3.00	38	**2030-2.51**	●
2.52	12.60	14.50	3.00	38	**2030-2.52**	●
2.53	12.65	14.50	3.00	38	**2030-2.53**	●
2.54	12.70	14.50	3.00	38	**2030-2.54**	●
2.55	12.75	14.50	3.00	38	**2030-2.55**	●
2.56	12.80	14.50	3.00	38	**2030-2.56**	●
2.57	12.85	14.50	3.00	38	**2030-2.57**	●
2.58	12.90	14.50	3.00	38	**2030-2.58**	●
2.59	12.95	14.50	3.00	38	**2030-2.59**	●
2.60	13.00	14.50	3.00	38	**2030-2.60**	●
2.61	13.05	14.50	3.00	38	**2030-2.61**	●
2.62	13.10	14.50	3.00	38	**2030-2.62**	●

D1 h6	L2	L3	D2 h6	L1	Art. N°	z
2.63	13.15	14.50	3.00	38	**2030-2.63**	●
2.64	13.20	14.50	3.00	38	**2030-2.64**	●
2.65	13.25	14.50	3.00	38	**2030-2.65**	●
2.66	13.30	16.50	3.00	38	**2030-2.66**	●
2.67	13.35	16.50	3.00	38	**2030-2.67**	●
2.68	13.40	16.50	3.00	38	**2030-2.68**	●
2.69	13.45	16.50	3.00	38	**2030-2.69**	●
2.70	13.50	16.50	3.00	38	**2030-2.70**	●
2.71	13.55	16.55	3.00	38	**2030-2.71**	●
2.72	13.60	16.50	3.00	38	**2030-2.72**	●
2.73	13.65	16.50	3.00	38	**2030-2.73**	●
2.74	13.70	16.50	3.00	38	**2030-2.74**	●
2.75	13.75	16.50	3.00	38	**2030-2.75**	●
2.76	13.80	16.50	3.00	38	**2030-2.76**	●
2.77	13.85	16.50	3.00	38	**2030-2.77**	●
2.78	13.90	16.50	3.00	38	**2030-2.78**	●
2.79	13.95	16.50	3.00	38	**2030-2.79**	●
2.80	14.00	16.50	3.00	38	**2030-2.80**	●
2.81	14.05	16.50	3.00	38	**2030-2.81**	●
2.82	14.10	16.50	3.00	38	**2030-2.82**	●
2.83	14.15	16.50	3.00	38	**2030-2.83**	●
2.84	14.20	16.50	3.00	38	**2030-2.84**	●
2.85	14.25	16.50	3.00	38	**2030-2.85**	●
2.86	14.30	16.50	3.00	38	**2030-2.86**	●
2.87	14.35	16.50	3.00	38	**2030-2.87**	●
2.88	14.40	16.50	3.00	38	**2030-2.88**	●
2.89	14.45	16.50	3.00	38	**2030-2.89**	●
2.90	14.50	16.50	3.00	38	**2030-2.90**	●
2.91	14.55	16.50	3.00	38	**2030-2.91**	●
2.92	14.60	16.50	3.00	38	**2030-2.92**	●
2.93	14.65	16.50	3.00	38	**2030-2.93**	●
2.94	14.70	16.50	3.00	38	**2030-2.94**	●
2.95	14.75	16.50	3.00	38	**2030-2.95**	●
2.96	14.80	16.50	3.00	38	**2030-2.96**	●
2.97	14.85	16.50	3.00	38	**2030-2.97**	●
2.98	14.90	16.50	3.00	38	**2030-2.98**	●
2.99	14.95	16.50	3.00	38	**2030-2.99**	●

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Informations techniques et symboles
Technische Informationen und Symbole
Technical information and symbols

60°
90°
120°
Angle
Winkel
Angle

λ 25°
Angle d'hélice
Spiralwinkel
Helix angle

λ 36°
λ 38°
λ 40°
Hélice différente
Unterschiedliche Spirale
Different helix

λ 35°/38°
Hélice progressive
Progressive Spirale
Progressive helix

Z
Nombre de dents
Anzahl der Zähne
Number of teeth

2xD1
Rapport longueur-diamètre
Länge-Durchmesser Verhältnis
Length to diameter ratio


Lèvres, affûtage à facettes
Schneiden, Facettenschärfen
Flutes, sharpening with facets


Taillage demi-lune
Kanonenbohrer Spitze
Gundrills tip


Taillage renforcé 3/4
3/4 genuteter Fräser
3/4 straight fluted


Usinage radial, diagonal et axial
Radiale, diagonale und axiale Bearbeitung
Radial, diagonal and axial machining


Usinage radial et axial
Radiale und axiale Bearbeitung
Radial and axial machining



Chanfrein
Fase
Chamfer



Coin vif
Scharfkantige Ecke
Sharp corner


Fraises hémisphériques
Radiusfräser
End mills with ball nose



Rayon de coin
Eckradius
Corner radius


Dents avec coupe centrale
Zähne Zentrumschnitt
Teeth center cutting


Denture décalée
Versetzte Verzahnung
Alterned teeth

DHD
Denture à pas irrégulier, hélice différente
Ungleiche Teilung, unterschiedliche Spirale
Uneven tooth pitch, different helix

DHP
Denture à pas irrégulier, hélice progressive
Ungleiche Teilung, progressive Spirale
Uneven tooth pitch, progressive helix


Usinage torique
Torusbearbeitung
Toroidal machining

MD
VHM
HM
Métal dur
Vollhartmetall
Hard metal

Diamètre outil Werkzeugdurchmesser Tool diametre	D (mm)		
Nombre de dents Zähnezahl Number of teeth	Z		
Profondeur de coupe Schnitttiefe Cutting depth	ap (mm)		
Largeur de coupe Schnittbreite Cutting width	ae (mm)		
Vitesse de coupe Schnittgeschwindigkeit Cutting speed	(m/min)	**Vc =**	$\frac{D \times \pi \times n}{1000}$
Nombre de tours Umdrehungen Rotations	(U/min)	**n =**	$\frac{Vc \times 1000}{\pi \times D}$
Avance par dent Vorschub pro Zahn Cutting feed per teeth	(mm/tooth)	**fz =**	$\frac{Vf}{n \times Z}$
Vitesse d'avance Vorschubgeschwindigkeit Feed rate	(mm/min)	**Vf =**	**fz x Z x n**
Débit d'enlèvement de copeaux Spanvolumen Chip flow rate	(mm^3/min)	**Q =**	**ap x ae x Vf**
Avance par tour Vorschub pro Umdrehung Cutting feed per rotation	(mm/U)	**f =**	$\frac{Vf}{n}$

Nos propositions techniques s'appliquent à la plupart des utilisations courantes.
N'hésitez pas à nous contacter pour des conseils plus précis.

Diese technische Empfehlungen gelten für die Mehrzahl der Standardanwendungen.
Unsere Techniker beraten Sie gerne für spezifische Anliegen.

These technical propositions apply to the majority of standard usages.
Do not hesitate to contact us for more specific advices.

CIRCO-Line



APPLITEC
CUTTING TOOLS

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1101 - 15 / 5 - 0.25 Z20 - CW

ou / oder / or

Nombre de dents
Zähnezahl
Number of teeth

Aucun biais
Ohne Fase
No angle

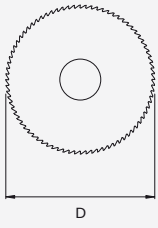
CW / CCW

CW

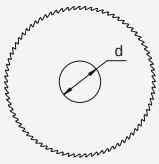
ou / oder / or

CCW

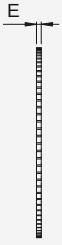
Diamètre extérieur
Aussendurchmesser
Outer diameter



Diamètre intérieur
Innendurchmesser
Inner diameter

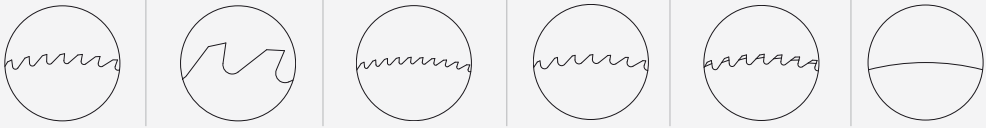


Épaisseur
Dicke
Thickness



Types de dentures
Verzahnungsarten
Types of toothings

1101	1102	1103	1104	1105	1106
Denture fine	**Denture grossière**	**Denture extra-fine**	**Denture INOX**	**Denture avec biais**	**Disque rectifié**
Feine Verzahnung	Grobe Verzahnung	Extra feine Verzahnung	INOX Verzahnung	Schrägverzahnung	Geschliffene
Fine teeth	Large teeth	Extra fine teeth	INOX teeth	Angled toothing	Ground disc



Applitec série 1100 Gamme de fraises circulaires de haute qualité
Applitec 1100 Serie Hochwertige Kreissägeblätter-Serie
Applitec 1100 series High quality slitting saws series

Définition du nombre de dents
Empfohlene Zähnezahl
Recommended number of teeth

Idéalement 2-3 dents en contact

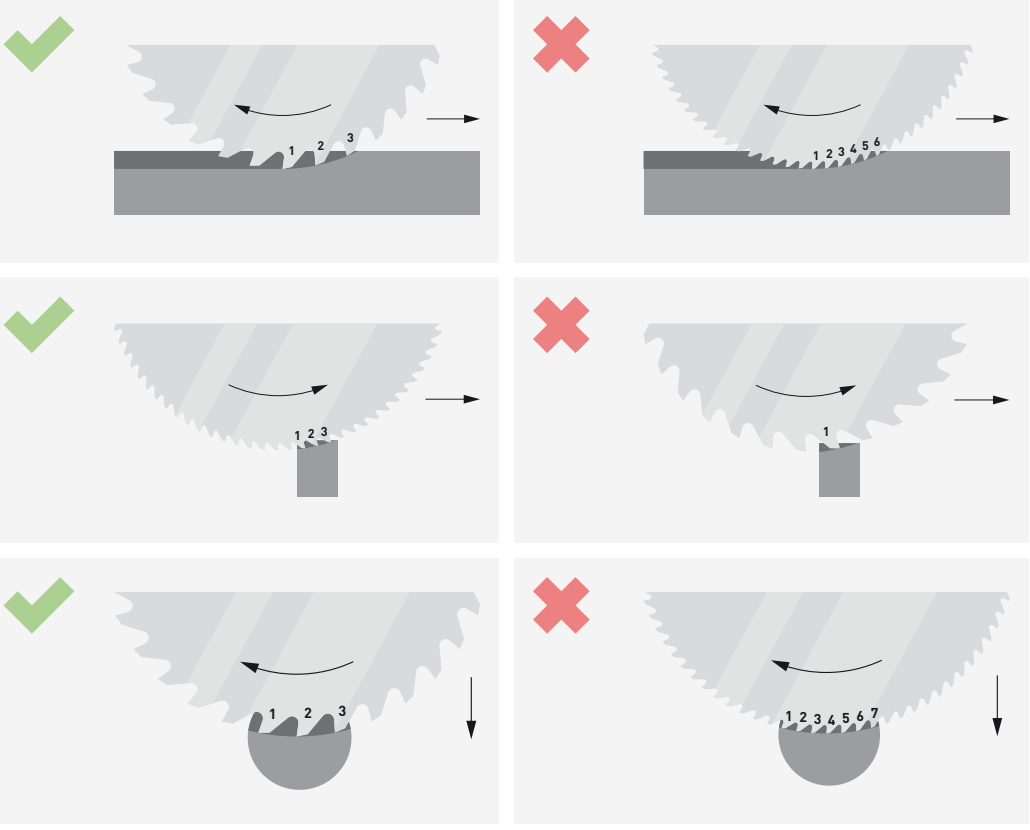
Im Idealfall 2-3 Zähne im Einsatz

Ideally 2-3 teeth in contact

Trop de dents = avance trop faible par dent / pas assez de place pour le copeau
Trop peu de dents = risque de vibration / usure prématurée

Zu viele Zähne = zu geringer Vorschub pro Zahn / zu kleiner Spanraum
Zu wenig Zähne = Vibrationen / Verschleissrisiko

Too many teeth = feed too low per tooth / not enough place for the chips
Not enough teeth = vibration / risk of quick wearout



En complément de l'offre présentée dans le catalogue, des réalisations spéciales peuvent également être effectuées sur demande.

Ergänzend zu unserem Katalogsortiment sind auf Anfrage auch Sonderanfertigungen möglich.

In addition to our catalog range, special executions can also be carried out upon request.

Alésage avec entrée de clavette

Bohrung mit Keilnute

Bore with keyway



Train de fraises

Spezielle Kreissägeblätter im Satz

Special slitting saws in set



Denture à rayon

Radiusfräser

Radius tooth



Denture forme B

Zahnform B

Tooth form B



Denture alternée forme W

Wechselverzahnung Form W

Alternate teeth form W



Denture isocèle

Prismenfräser

Biconical slitting saws



Denture hélicoïdale

Schrägverzahnung

Helical teeth



Revêtement sur demande

Beschichtung auf Anfrage

Coating on request



Denture conique 1 taille

Winkelfräser 1 Schnitt

Conical single cut saw



Denture conique 2 tailles

Winkelfräser 2 Schnitt

Conical double cut saw



Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations

Matière Werkstoff Material		Fraises circulaires en métal dur VHM-Kreissägeblätter Solid carbide slitting saws Lubrifiant* Kühlung* Coolant*	VC (m/min)	Choix de la denture / avance Verzahnungswahl / Vorschub Teeth selection / cutting feed
Acier de décolletage Automatenstahl Free-cutting steel	P	O / E	120 - 240	**Type 1101 / 1104 / 1105** • Pour usinage peu profond ou longueur à fendre faible. Avance par dent : 0.005 - 0.05** • Für geringe Bearbeitungstiefen oder kurze Schlitzlängen. Vorschub pro Zahn : 0.005 - 0.05** • For low machining depth or short slots. Feed per tooth : 0.005 - 0.05**
Acier Stahl Steel	< 600 N/mm² P	O / E	100 - 200	
Acier Stahl Steel	< 800 N/mm² P	O / E	80 - 160	
Acier Stahl Steel	< 1000 N/mm² P	O / E	60 - 120	
Acier Stahl Steel	> 1000 N/mm² P	O / E	40 - 80	**Type 1102** • Pour usinage profond ou grande longueur à fendre. Avance par dent : 0.01 - 0.1** • Für grosse Bearbeitungstiefen oder grosse Schlitzlängen. Vorschub pro Zahn : 0.01 - 0.1** • For deep machining or long slots. Feed per tooth : 0.01 - 0.1**
Fonte Gusseisen Cast iron	K	A / E	60 - 120	
Acier inoxydable Rostfreistahl Stainless steel	M	O / E	50 - 100	
Aluminium Si < 12 %	N	O / E	150 - 600	**Type 1103** • Pour usinage de pièces fragiles ou fines. Avance par dent : 0.002 - 0.02** • Für die Bearbeitung von empfindlichen oder dünnwandigen Werkstücken. Vorschub pro Zahn : 0.002 - 0.02** • For machining of fragile or thin workpieces. Feed per tooth : 0.002 - 0.02**
Aluminium Si > 12 %	N	O /E	80 - 300	
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	A / O / E	80 - 300	
Thermoplastique Thermoplaste Thermoplastics	N	A	200 - 700	
Duroplastique Duroplaste Duroplastics	N	A	150 - 600	** selon la matière, l'épaisseur ainsi que la rigidité globale ** je nach Werkstoff, Dicke und Gesamtstarrheit ** according to material, thickness and global rigidity
Acier réfractaire Warmfester Stahl Heat resistant steel	S	O / E	25 - 60	
Titane Titan Titanium	S	O / E	30 - 60	

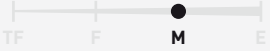
* O = huile de coupe / Schneidöl / cutting oil
* E = Emulsion
* A = sec (air comprimé) / Trocken (Pressluft) / dry (air)

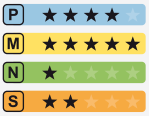
avec revêtement, augmenter les valeurs de 20 %
mit Beschichtung, Daten um 20 % erhöhen
with coating, increase data by 20 %

MAXINOX



Revêtement PVD
PVD Beschichtung
PVD coating





- 1er choix pour l'usinage des aciers inoxydables
- recommandé également pour les aciers alliés contenant : chrome nickel, vanadium, molybdène, ...

- erste Wahl für die Bearbeitung von rostfreiem Stahl
- auch empfohlen für legierte Stähle mit Chrom-Nickel, Vanadium, Molybdän, ...

- first choice for stainless machining
- also recommended for alloy steels with : Chrome-Nickel, Vanadium, Molybdenum, ...

Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible
- Avance par dent : 0.005 - 0.05 mm
- Revêtement sur demande

- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen
- Vorschub pro Zahn : 0.005 - 0.05 mm
- Beschichtung auf Anfrage

- For low machining depth or short slots
- Feed per tooth : 0.005 - 0.05 mm
- Coating on request



MD
VHM
HM

Art. N° ex :
1101-20/5-1.7 Z32

Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

D js12	**15**	**20**	**25**	**30**	**40**	**50**	**63**	**80**	**100**	**125**	**160**	**D js12**
d H7	5	5	8	8	10	13	16	22	22	22	32	d H7
Epaisseur Dicke Thickness E ±0.01	Z = Nombre de dents Zähnezahl Number of teeth											**Epaisseur** Dicke Thickness E ±0.01
0.10	64	80	80	100	128							**0.10**
0.15	64	80	80	100	128							**0.15**
0.20	64	80	80	100	128	128	160					**0.20**
0.25	64	64	80	100	100	128	128					**0.25**
0.30	64	64	80	80	100	128	128	160				**0.30**
0.35	64	64	64	80	100	100	128	160				**0.35**
0.40	64	64	64	80	100	100	128	160				**0.40**
0.45	48	48	64	80	80	100	128	128				**0.45**
0.50	48	48	64	80	80	100	128	128	160			**0.50**
0.60	48	48	64	64	80	100	100	128	160	160		**0.60**
0.70	48	48	48	64	80	80	100	128	128	160		**0.70**
0.80	40	40	48	64	80	80	100	128	128	160		**0.80**
0.90	40	40	48	64	64	80	100	100	128	160		**0.90**
1.00	40	40	48	64	64	80	100	100	128	160	160	**1.00**
1.10	40	40	48	48	64	80	80	100	128	128		**1.10**
1.20	40	40	48	48	64	80	80	100	128	128	160	**1.20**
1.30	40	40	40	48	64	64	80	100	100			**1.30**
1.40	40	40	40	48	64	64	80	100	100	128		**1.40**
1.50	40	40	40	48	64	64	80	100	100	128	160	**1.50**
1.60	40	40	40	48	64	64	80	100	100	128	160	**1.60**
1.70	40	32	40	48	48	64	80	80	100			**1.70**
1.80	40	32	40	48	48	64	80	80	100	128	128	**1.80**
1.90	40	32	40	48	48	64	80	80	100			**1.90**
2.00	40	32	40	48	48	64	80	80	100	128	128	**2.00**
2.50	40	32	40	40	48	64	64	80	100	100	128	**2.50**
3.00	40	32	32	40	48	48	64	80	80	100	128	**3.00**
3.50	24	24	32	40	40	48	64	64	80	100		**3.50**
4.00	24	24	32	40	40	48	64	64	80	100		**4.00**
5.00	24	24	32	32	40	48	48	64	80	100		**5.00**
6.00	24	24	24	32	40	40	48	64	64	100		**6.00**

Denture grossière
Grobe Verzahnung
Large teeth

DIN 1838

- Pour usinage profond ou grande longueur à fendre
- Avance par dent : 0.01 - 0.1 mm
- Revêtement sur demande

- Für grosse Bearbeitungstiefen oder grosse Schlitzlängen
- Vorschub pro Zahn : 0.01 - 0.1 mm
- Beschichtung auf Anfrage

- For deep machining or long slots
- Feed per tooth : 0.01 - 0.1 mm
- Coating on request



MD
VHM
HM

Art. N° ex :
1102-40/10-0.8 Z32

Denture grossière
Grobe Verzahnung
Large teeth

DIN 1838

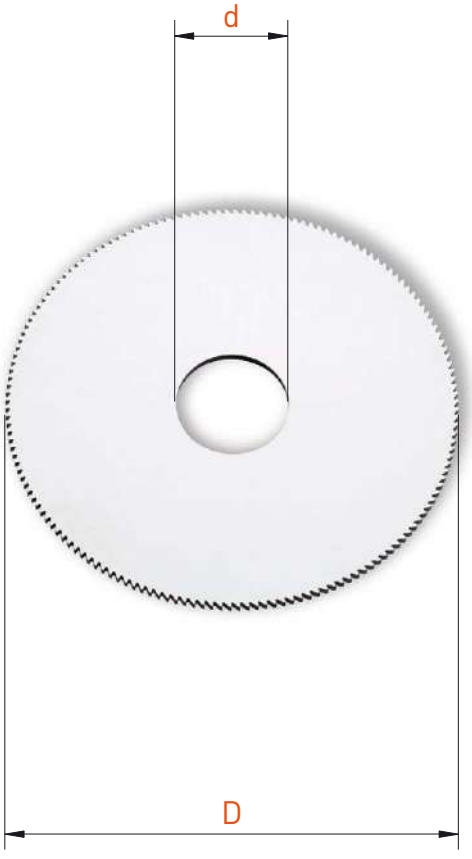
D js12	**15**	**20**	**25**	**30**	**40**	**50**	**63**	**80**	**100**	**125**	**160**	**D js12**
d H7	5	5	8	8	10	13	16	22	22	22	32	d H7
Epaisseur Dicke Thickness E ±0.01	Z = Nombre de dents Zähnezahl Number of teeth											**Epaisseur** Dicke Thickness E ±0.01
0.20	20	20	20	30	40							**0.20**
0.25	20	20	20	30	40							**0.25**
0.30	20	20	20	30	40		64					**0.30**
0.40	20	20	20	30	40	48	64					**0.40**
0.50	20	20	20	30	40	48	64					**0.50**
0.60	20	20	20	30	40	48	48	64	80			**0.60**
0.70	20	20	20	30	40	40	48	64	64			**0.70**
0.80	20	20	20	24	32	40	48	64	64	80		**0.80**
0.90	20	20	20	24	32	40	48	48	64	80		**0.90**
1.00	20	20	20	24	32	40	48	48	64	80	80	**1.00**
1.20	20	20	20	24	32	40	40	48	64	64	80	**1.20**
1.50	20	20	20	24	32	32	40	48	48	64	80	**1.50**
1.60	20	20	20	24	32	32	40	48	48	64		**1.60**
1.80	20	20	20	24	24	32	40	40	48	64		**1.80**
2.00	20	20	20	24	24	32	40	40	48	64	80	**2.00**
2.50	20	20	20	24	24	32	32	40	48	48	80	**2.50**
3.00	20	20	20	24	24	24	32	40	40	48	64	**3.00**
4.00	20	20	20	24	20	24	32	32	40	48		**4.00**
5.00	20	20	20	24	20	24	24	32	40	40		**5.00**
6.00	20	20	20	24	20	20	24	32	32	40		**6.00**

Denture extra-fine
Extra feine Verzahnung
Extra fine teeth

- Pour usinage de pièces fragiles ou fines
- Avance par dent : 0.002 - 0.03 mm
- Idéal pour le décolletage
- Revêtement sur demande

- Für die Bearbeitung von empfindlichen oder dünnwandigen Werkstücken
- Vorschub pro Zahn : 0.002 - 0.03 mm
- Für Langdrehautomaten besonders empfehlenswert
- Beschichtung auf Anfrage

- For machining of fragile or thin workpieces
- Feed per tooth : 0.002 - 0.03 mm
- Recommended on automatic lathes
- Coating on request



MD
VHM
HM

Art. N° ex :
1103-15/5-0.2 Z80

Denture extra-fine
Extra feine Verzahnung
Extra fine teeth

D js12	**8**	**10**	**12**	**15**	**D js12**
d H7	3	3	5	5	d H7
Epaisseur Dicke Thickness E ±0.005	Z = Nombre de dents Zähnezahl Number of teeth				**Epaisseur** Dicke Thickness E ±0.005
0.10	48	64	64	80	**0.10**
0.11	48	64	64	80	**0.11**
0.12	48	64	64	80	**0.12**
0.13	48	64	64	80	**0.13**
0.14	48	64	64	80	**0.14**
0.15	48	64	64	80	**0.15**
0.16	48	64	64	80	**0.16**
0.17	48	64	64	80	**0.17**
0.18	48	64	64	80	**0.18**
0.19	48	64	64	80	**0.19**
0.20	48	64	64	80	**0.20**

Denture extra-fine
Extra feine Verzahnung
Extra fine teeth

D js12	**8**	**10**	**12**	**15**	**20**	**20**	**20**	**25**	**25**	**25**	**30**	**32**	**D** js12
d H7	3	3	5	5	5	5	6	5	6	8	8	8	d H7
Epaisseur Dicke Thickness E ±0.01	Z = Nombre de dents Zähnezahl Number of teeth												**Epaisseur** Dicke Thickness E ±0.01
0.10	**	**	**	**	*	100	80	80			*		**0.10**
0.15	**	**	**	**	*	100	80	80	100	100	*	80	**0.15**
0.20	**	**	**	**	*	100	80	80	100	100	*	80	**0.20**
0.25	48	64	64	80	80	100	80	80	100	100	*	80	**0.25**
0.30	48	64	64	80	80	100	80	80	100	100	100	80	**0.30**
0.35	48	64	64	80	80		80	80	100	100	100	80	**0.35**
0.40	48	64	64	80	80	100	80	80	100	100	100	80	**0.40**
0.50	48	64	64	80	80	100	80	80	100	100	100	80	**0.50**
0.60	48	64	64	80	80		80	80	100	100	100	80	**0.60**
0.70	48	64	64	80	80		80	80	100	100	100	80	**0.70**
0.80	48	64	64	80	80		80	80	100	100	100	80	**0.80**
0.90	48	64	64	80	80		80	80	100	100	100	80	**0.90**
1.00	48	64	64	80	80		80	80	100	100	100	80	**1.00**
1.20				80	80		80	80	100	100	100	80	**1.20**
1.50				80	80		80	80	100	100	100	80	**1.50**
2.00				80	80		80	80	100	100	100	80	**2.00**
2.50				80	80		80	80	100	100	100	80	**2.50**
3.00				80	80		80	80	100	100	100	80	**3.00**

D js12	**35**	**40**	**40**	**40**	**40**	**45**	**45**	**50**	**50**	**63**	**80**	**D** js12
d H7	8	8	8	10	10	8	8	10	13	16	16	d H7
0.10												**0.10**
0.15	96	100	160	100	160	100	160					**0.15**
0.20	96	100	160	100	160	100	160	100				**0.20**
0.25	96	100	160	*	160	100	160	100	120	120		**0.25**
0.30	96	100	160	*	160	100	160	100	120	120		**0.30**
0.35	96	100	160	*	160	100	160	100	120	120		**0.35**
0.40	96	100	160	*	160	100	160	100	120	120		**0.40**
0.50	96	100	160	100	160	100	160	100	120	120	128	**0.50**
0.60	96	100	160	100	160	100	160	100	120	120	128	**0.60**
0.70	96	100	160	100	160	100	160	100	120	120	128	**0.70**
0.80	96	100	160	100	160	100	160	100	120	120	128	**0.80**
0.90	96	100	160	100	160	100	160	100	120	120	128	**0.90**
1.00	96	100	160	100	160	100	160	100	120	120	128	**1.00**
1.20	96	100	160	100	160	100	160	100	120	120	128	**1.20**
1.50	96	100	160	100	160	100	160	100	120	120	128	**1.50**
2.00	96	100	160	100	160	100	160	100	120	120	128	**2.00**
2.50	96	100	160	100	160	100	160	100	120	120	128	**2.50**
3.00	96	100	160	100	160	100	160	100	120	120	128	**3.00**

** voir page 17.12 / siehe Seite 17.12 / see page 17.12
* voir type 1101 / siehe Typ 1101 / see type 1101

1104

Fraises circulaires en métal dur optimisées pour INOX
VHM-Kreissägeblätter mit optimierter INOX-Verzahnung
Solid carbide slitting saws with optimized INOX teeth

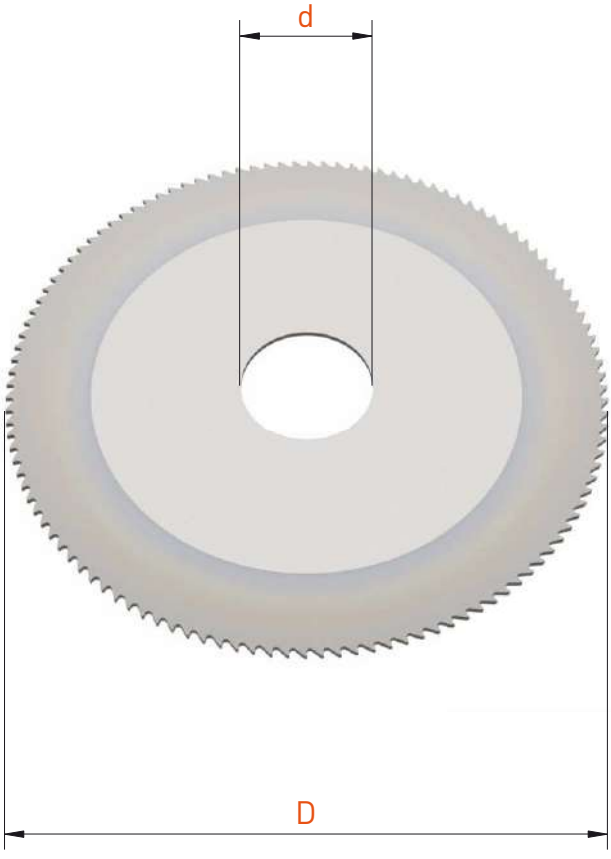
Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible
- Avance par dent : 0.005 - 0.05 mm

- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen
- Vorschub pro Zahn : 0.005 - 0.05 mm

- For low machining depth or short slots
- Feed per tooth : 0.005 - 0.05 mm



MD
VHM
HM

Art. N° ex :
1104-63/16-0.8 Z80-MAXINOX

		Denture fine Feine Verzahnung Fine teeth		DIN 1837	
D js12	**63**	**80**	**100**	**D js12**	
d H7	16	22	22	d H7	
Epaisseur Dicke Thickness E ±0.01	Z = Nombre de dents Zähnezahl Number of teeth			**Epaisseur** Dicke Thickness E ±0.01	MAXINOX
0.80	80	100	120	**0.80**	●
1.00	80	100	120	**1.00**	●

1105

Fraises circulaires en métal dur avec un biais - CW-CCW
VHM-Kreissägeblätter mit Schräge - CW-CCW
Solid carbide angled slitting saws - CW-CCW

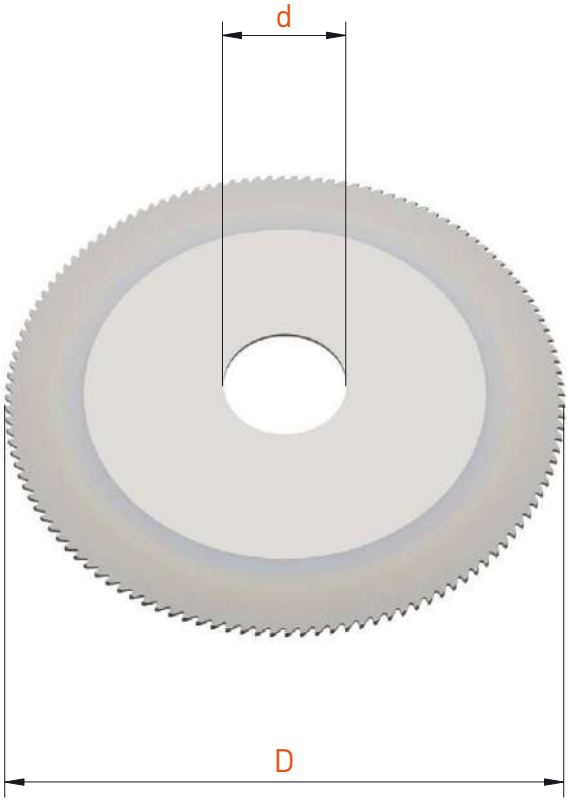
Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible
- Avance par dent : 0.005 - 0.05 mm
- Autre revêtement sur demande

- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen
- Vorschub pro Zahn : 0.005 - 0.05 mm
- Andere Beschichtung auf Anfrage

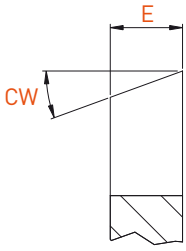
- For low machining depth or short slots
- Feed per tooth : 0.005 - 0.05 mm
- Other coating on request



MD
VHM
HM

CW

Art. N° ex :
1105-100/22-0.6-CW20 Z160-N

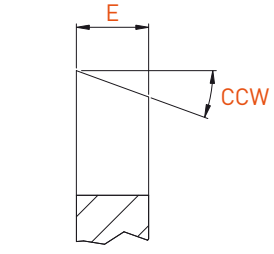


	Denture fine Feine Verzahnung Fine teeth		DIN 1837		
D js12	**63**	**80**	**100**	**N**	**MAXINOX**
d H7	16	22	22		
CW	20°	20°	20°		
Epaisseur Dicke E ±0.01 Thickness	Z = Nombre de dents Zähnezahl Number of teeth				
0.60	100	128	160	●	●
0.80	100	128	128	●	●
1.00	100	100	128	●	●
1.20	80	100	128	●	●

MD
VHM
HM

CCW

Art. N° ex :
1105-100/22-0.6-CCW20 Z160-N



	Denture fine Feine Verzahnung Fine teeth		DIN 1837		
D js12	**63**	**80**	**100**	**N**	**MAXINOX**
d H7	16	22	22		
CCW	20°	20°	20°		
Epaisseur Dicke E ±0.01 Thickness	Z = Nombre de dents Zähnezahl Number of teeth				
0.60	100	128	160	●	●
0.80	100	128	128	●	●
1.00	100	100	128	●	●
1.20	80	100	128	●	●

1106

Disques en métal dur rectifiés
Fertig geschliffene VHM-Ronden
Fully ground solid carbide discs

Prêt pour le taillage de la denture
Bereit zum Verzahnen
Ready for teeth grinding

- Finition poli miroir des deux faces avec dépouille
- Alésage tolérance H7
- Diamètre surdimensionné ~0.15 mm

- Hochglanzpoliert beidseitig mit Hohlschliff
- H7 Bohrung Toleranz
- Aussendurchmesser mit ~0.15 mm Übermass

- Mirror finish on both sides with clearance
- Bore with H7 tolerance
- Outside diameter with ~0.15 mm oversize



Disques en métal dur rectifiés
Fertig geschliffene VHM-Ronden
Fully ground solid carbide discs

Ø 8-35 mm

1106

MD
VHM
HM

Art. N° ex :
1106-20/6-0.8

Prêt pour le taillage de la denture
Bereit zum Verzahnen
Ready for teeth grinding

D +0.20/+0.10	8	10	12	15	20	20	25	25	25	30	32	35	D +0.20/+0.10
d H7	3	3	5	5	5	6	5	6	8	8	8	8	d H7
Epaisseur Dicke Thickness E ±0.01	**Epaisseurs et alésages spéciaux sur demande** Andere Dicken und Bohrungen auf Anfrage Other thicknesses and bores on request												**Epaisseur** Dicke Thickness E ±0.01
0.10	●	●	●	●	●	●	●	●	●	●			**0.10**
0.15	●	●	●	●	●	●	●	●	●	●	●	●	**0.15**
0.20	●	●	●	●	●	●	●	●	●	●	●	●	**0.20**
0.25	●	●	●	●	●	●	●	●	●	●	●	●	**0.25**
0.30	●	●	●	●	●	●	●	●	●	●	●	●	**0.30**
0.35	●	●	●	●	●	●	●	●	●	●	●	●	**0.35**
0.40	●	●	●	●	●	●	●	●	●	●	●	●	**0.40**
0.45				●	●	●	●	●	●	●		●	**0.45**
0.50	●	●	●	●	●	●	●	●	●	●	●	●	**0.50**
0.60	●	●	●	●	●	●	●	●	●	●	●	●	**0.60**
0.70	●	●	●	●	●	●	●	●	●	●	●	●	**0.70**
0.80	●	●	●	●	●	●	●	●	●	●	●	●	**0.80**
0.90	●	●	●	●	●	●	●	●	●	●	●	●	**0.90**
1.00	●	●	●	●	●	●	●	●	●	●	●	●	**1.00**
1.10				●	●				●	●			**1.10**
1.20				●	●	●	●	●	●	●	●	●	**1.20**
1.30				●	●				●	●			**1.30**
1.40				●	●				●	●			**1.40**
1.50			●	●	●	●	●	●	●	●	●	●	**1.50**
1.60				●	●				●	●			**1.60**
1.70				●	●				●	●			**1.70**
1.80				●	●				●	●			**1.80**
1.90				●	●				●	●			**1.90**
2.00				●	●	●	●	●	●	●	●	●	**2.00**
2.50				●	●	●	●	●	●	●	●	●	**2.50**
3.00				●	●	●	●	●	●	●	●	●	**3.00**
3.50													**3.50**
4.00													**4.00**
5.00													**5.00**
6.00													**6.00**

1106

Disques en métal dur rectifiés
Fertig geschliffene VHM-Ronden
Fully ground solid carbide discs

Prêt pour le taillage de la denture
Bereit zum Verzahnen
Ready for teeth grinding

- Finition poli miroir des deux faces avec dépouille
- Alésage tolérance H7
- Diamètre surdimensionné ~0.15 mm

- Hochglanzpoliert beidseitig mit Hohlschliff
- H7 Bohrung Toleranz
- Aussendurchmesser mit ~0.15 mm Übermass

- Mirror finish on both sides with clearance
- Bore with H7 tolerance
- Outside diameter with ~0.15 mm oversize



Disques en métal dur rectifiés
Fertig geschliffene VHM-Ronden
Fully ground solid carbide discs

Ø 40-160 mm

1106

MD
VHM
HM

Art. N° ex :
1106-63/16-0.35

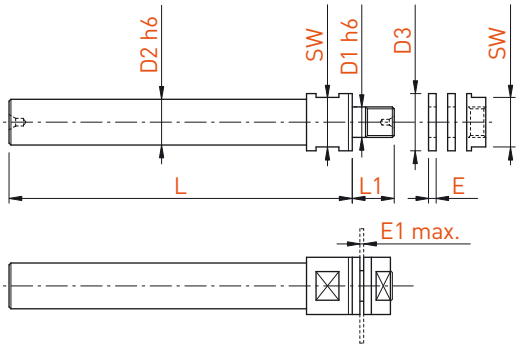
Prêt pour le taillage de la denture
Bereit zum Verzahnen
Ready for teeth grinding

D +0.20/+0.10	40	40	45	50	50	63	80	80	100	125	160	160	D +0.20/+0.10
d H7	8	10	8	10	13	16	16	22	22	22	22	32	d H7
Epaisseur Dicke Thickness E ±0.01	**Epaisseurs et alésages spéciaux sur demande** Andere Dicken und Bohrungen auf Anfrage Other thicknesses and bores on request												**Epaisseur** Dicke Thickness E ±0.01
0.10		●											**0.10**
0.15	●	●	●										**0.15**
0.20	●	●	●	●	●	●							**0.20**
0.25	●	●	●	●	●	●							**0.25**
0.30	●	●	●	●	●	●		●					**0.30**
0.35	●	●	●	●	●	●		●					**0.35**
0.40	●	●	●	●	●	●		●					**0.40**
0.45	●	●		●	●	●		●					**0.45**
0.50	●	●	●	●	●	●	●	●					**0.50**
0.60	●	●	●	●	●	●	●	●					**0.60**
0.70	●	●	●	●	●	●	●	●					**0.70**
0.80	●	●	●	●	●	●	●	●					**0.80**
0.90	●	●	●	●	●	●	●	●					**0.90**
1.00	●	●	●	●	●	●	●	●					**1.00**
1.10		●			●	●		●					**1.10**
1.20	●	●	●	●	●	●	●	●					**1.20**
1.30	●	●			●	●		●					**1.30**
1.40	●	●			●	●		●					**1.40**
1.50	●	●	●	●	●	●	●	●					**1.50**
1.60		●			●	●							**1.60**
1.70		●			●	●							**1.70**
1.80		●			●	●							**1.80**
1.90		●			●	●							**1.90**
2.00	●	●	●	●	●	●							**2.00**
2.50	●	●	●	●	●	●							**2.50**
3.00	●	●	●	●	●	●							**3.00**
3.50													**3.50**
4.00													**4.00**
5.00													**5.00**
6.00													**6.00**

2810 / 2811 / 2815

Tasseaux porte-fraise avec serrage avant
Fräsdorne mit vorderer Klemmung
Milling arbors with front clamping





Type 2810	Rotation à droite (filet à droite) Drehrichtung rechts (Rechtsgewinde) Right hand rotation (right hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
5.0	6.0	10.0	70	9.0	2.0	8.0	6.0	**2810-5-6**
5.0	10.0	10.0	80	9.0	2.0	8.0	6.0	**2810-5-10**
6.0	10.0	12.0	80	9.5	2.0	10.0	6.0	**2810-6-10**
8.0	10.0	15.0	80	10.0	2.0	13.0	6.0	**2810-8-10**
8.0	12.0	15.0	90	10.0	2.0	13.0	6.0	**2810-8-12**
10.0	6.0	18.0	80	10.5	2.0	15.0	6.0	**2810-10-6**
10.0	10.0	18.0	80	10.5	2.0	15.0	6.0	**2810-10-10**
10.0	16.0	18.0	100	10.5	2.0	15.0	6.0	**2810-10-16**
13.0	16.0	22.0	110	11.0	2.0	19.0	6.0	**2810-13-16**
16.0	20.0	26.0	120	12.0	2.0	22.0	6.0	**2810-16-20**
22.0	16.0	32.0	120	12.0	2.0	27.0	6.0	**2810-22-16**

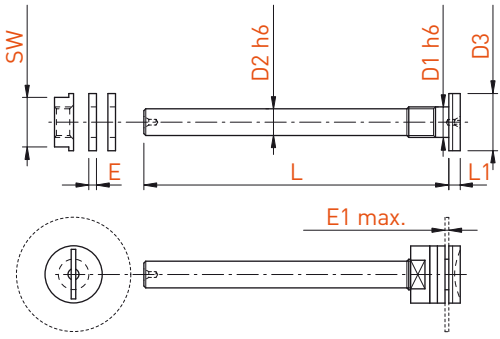
Type 2811	Rotation à droite (filet à droite) Drehrichtung rechts (Rechtsgewinde) Right hand rotation (right hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
16.0	10.0	22.0	80	8.0	2.0	19.0	3.0	**2811-16-10**

Type 2815	Pour petites fraises circulaires (filet à droite) Für kleine Kreissägeblätter (Rechtsgewinde) For small slitting saws (right hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
3.0	5.0	5.0	60	7.0	1.0	4.0	3.0	**2815-3-5**
5.0	6.0	7.5	70	7.0	1.0	6.0	3.0	**2815-5-6**

Tasseaux porte-fraise avec serrage arrière
Fräsdorne mit rückseitiger Klemmung
Milling arbors with rear clamping

2820 / 1820



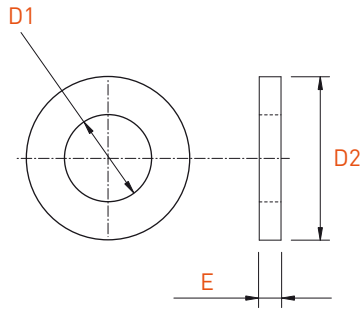


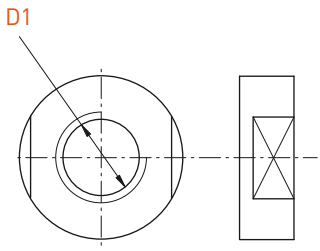
Type 2820	Rotation à droite (filet à gauche) Drehrichtung rechts (Linksgewinde) Right hand rotation (left hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
5.0	4.0	10.0	50	3.0	2.0	8.0	6.0	**2820-5-4**
6.0	5.0	12.0	60	3.0	2.0	10.0	6.0	**2820-6-5**
8.0	6.0	15.0	80	3.0	2.0	13.0	6.0	**2820-8-6**
8.0	7.0	15.0	80	3.0	2.0	13.0	6.0	**2820-8-7**
10.0	6.0	18.0	70	3.5	2.0	15.0	6.0	**2820-10-6**
10.0	8.0	18.0	90	3.5	2.0	15.0	6.0	**2820-10-8**
13.0	10.0	22.0	110	3.5	2.0	19.0	6.0	**2820-13-10**
16.0	12.0	26.0	120	3.5	2.0	22.0	6.0	**2820-16-12**

Type 1820	Rotation à gauche (filet à droite) Drehrichtung links (Rechtsgewinde) Left hand rotation (right hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
5.0	4.0	10.0	50	3.0	2.0	8.0	6.0	**1820-5-4**
6.0	5.0	12.0	60	3.0	2.0	10.0	6.0	**1820-6-5**
8.0	6.0	15.0	70	3.0	2.0	13.0	6.0	**1820-8-6**
10.0	6.0	18.0	70	3.5	2.0	15.0	6.0	**1820-10-6**

Chaque tasseau est livré avec 2 entretoises et 1 écrou
Jeder Fräsdorn wird mit 2 Abstandsringen und 1 Mutter geliefert
2 distance rings and 1 nut are included with each arbor

Entretoise Abstandsring Ring				
Correspondance tasseaux Passende Fräsdorne Matching milling arbors				
Type	D1	E	D2	**Art. N°**
1820	5	1.0	10.0	**1820-5-A1**
		2.0		**1820-5-A2**
	6	1.0	12.0	**1820-6-A1**
		2.0		**1820-6-A2**
	8	1.0	15.0	**1820-8-A1**
		2.0		**1820-8-A2**
	10	1.0	18.0	**1820-10-A1**
		2.0		**1820-10-A2**
2810	5	1.0	10.0	**2810-5-A1**
		2.0		**2810-5-A2**
	6	1.0	12.0	**2810-6-A1**
		2.0		**2810-6-A2**
	8	1.0	15.0	**2810-8-A1**
		2.0		**2810-8-A2**
	10	1.0	18.0	**2810-10-A1**
		2.0		**2810-10-A2**
	13	1.0	22.0	**2810-13-A1**
		2.0		**2810-13-A2**
	16	1.0	26.0	**2810-16-A1**
		2.0		**2810-16-A2**
	22	1.0	32.0	**2810-22-A1**
		2.0		**2810-22-A2**
2811	16	1.0	22.0	**2811-16-A1**
		2.0		**2811-16-A2**
2815	3	1.0	5.0	**2815-3-A1**
	5		7.5	**2815-5-A1**
2820	5	1.0	10.0	**2820-5-A1**
		2.0		**2820-5-A2**
	6	1.0	12.0	**2820-6-A1**
		2.0		**2820-6-A2**
	8	1.0	15.0	**2820-8-A1**
		2.0		**2820-8-A2**
	10	1.0	18.0	**2820-10-A1**
		2.0		**2820-10-A2**
	13	1.0	22.0	**2820-13-A1**
		2.0		**2820-13-A2**
	16	1.0	26.0	**2820-16-A1**
		2.0		**2820-16-A2**





Écrou Mutter Nut			
Correspondance tasseaux Passende Fräsdorne Matching milling arbors			
Type	D1	M	**Art. N°**
1820	5.0	M5x0.5	**1820-5-B**
	6.0	M6x0.5	**1820-6-B**
	8.0	M8x0.75	**1820-8-B**
	10.0	M10x0.75	**1820-10-B**
2810	5.0	M5x0.5	**2810-5-B**
	6.0	M6x0.5	**2810-6-B**
	8.0	M8x0.75	**2810-8-B**
	10.0	M10x0.75	**2810-10-B**
	13.0	M13x1	**2810-13-B**
	16.0	M16x1	**2810-16-B**
	22.0	M22x1	**2810-22-B**
2811	16.0	M16x1	**2811-16-B**
2815	3.0	M3x0.5	**2815-3-B**
	5.0	M5x0.5	**2815-5-B**
2820	5.0	M5x0.5	**2820-5-B**
	6.0	M6x0.5	**2820-6-B**
	8.0	M8x0.75	**2820-8-B**
	10.0	M10x0.75	**2820-10-B**
	13.0	M13x1	**2820-13-B**
	16.0	M16x1	**2820-16-B**

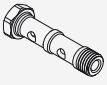
JET-Line



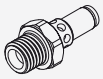
APPLITEC
CUTTING TOOLS

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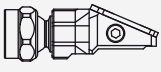
Infos et avantages Infos und Vorteile Infos and advantages			> 18.05
JKIT			> 18.08
STARTER-KIT			> 18.14
JS	Raccords rapides Schnellkupplungen Quick connectors		> 18.16
JSFA	Raccords rapides Banjos avec régulateur de débit Schnellkupplungen-Banjos mit Durchflussregler Banjo quick couplings with flow regulators		> 18.17
JSR	Raccords rapides rotatifs Drehbare Schnellkupplungen Rotating quick couplings		> 18.18
JO	Joints d'étanchéité en cuivre Kupferdichtungsringe Copper sealing gaskets		> 18.19
JTS-AC	Tubes de distribution flexibles en acier avec fiche de connexion rapide Stahlflex-Verteilschläuche mit Schnellkupplungsstecker Flexible distribution tubes of steel with quick connection plug		> 18.20
JTX-AC	Tubes de distribution flexibles en acier inoxydable tressé Rostfreier Stahlflex-Schlauch Flexible distribution tubes of stainless steel braiding		> 18.21
JT-CU	Tubes de distribution en cuivre Kupferrohre Copper distribution tubes		> 18.22
JRMF	Connecteurs mâles/femelles Gewindeadapter Innen und Außengewinde Male/female connectors		> 18.23
JRFF	Connecteurs femelles/femelles Gewindeadapter Innengewinde Female connectors		> 18.25

JRMM	Connecteurs mâles/mâles Gewindeadapter Außengewinde Male connectors		> **18.26**
JN	Écrous d'étanchéité Dichtungsmuttern Sealing nuts		> **18.27**
JNG	Bagues d'étanchéité Dichtungsringe Sealing rings		> **18.28**
JCBF	Banjos courts femelles Kurzer Innengewinde-Banjo Short female Banjo		> **18.29**
JCBM	Banjos courts mâles Kurze Außengewinde-Banjo Short male Banjo		> **18.30**
JABF	Banjos longs droits femelles Lange Innengewinde-Banjo Long straight female Banjo		> **18.31**
JABF-45°	Banjos longs coudés femelles Lange 45° Innengewinde-Banjos Long curved female banjos		> **18.32**
JEB	Vis Banjo Hohlschrauben einfach Banjo screws		> **18.33**
JEB-DUO	Vis Banjo doubles Hohlschrauben doppelt Double banjo screws		> **18.34**
JVB	Fiches de verrouillage Verschlußstecker Sealing connecting plugs		> **18.35**
JVF	Fiches de connexion Innengewindestecker Connecting plugs		> **18.36**
JWF	Fiches de connexion fixes femelles Innengewindestecker mit Verdrehsicherung Female positionning connection plugs		> **18.37**

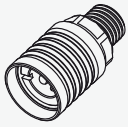
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JWM	Fiches de connexion fixes mâles Aussengewindestecker mit Verdrehsicherung Male positionning connection plugs		> **18.38**
JK	Blocs de distribution Kühlmittelverteiler Distribution blocks		> **18.39**
JBB	Bouchons d'étanchéité Verschlußstopfen Sealing plugs		> **18.40**

Systèmes articulés avec arrosage | Gelenksysteme mit Kühlung | Articulated systems with coolant

JKIT-AR	Kits articulés avec buse d'arrosage Gelenkkits mit Kühlungsdüse Articulated kits with coolant nozzles		> **18.41**
JKIT-CU	Kits tubes en cuivre avec buse d'arrosage Kits Kupferrohr mit Kühlungsdüse Kit copper tubes with coolant nozzle		> **18.43**
JAR	Systèmes articulés Gelenksysteme Articulated systems		> **18.44**
JRMM-AR	Connecteurs mâles/mâles Anschlüsse Außengewinde Male connectors		> **18.45**
JJ-AR	Buses Düse Nozzle		> **18.46**
JJ-AR6	Buses plates Flachdüse Flat nozzle		> **18.47**
Accessoires Zubehöre Accessories			> **18.48**

Changement rapide
Schnellwechselsystem
Quick change



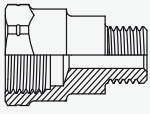
Réduit le temps de préparation et garantit le repositionnement des sorties de liquide de refroidissement
Verkürzung der Rüstzeiten bei gleicher Position der Kühlmittelauslässe
Reduces set-up time and ensures repositioning of coolant outlets

Refroidissement à haute pression
Hochdruckkühlung
High-pressure cooling



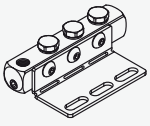
Tuyaux flexibles renforcés garantis jusqu'à 220 bar
Verstärkte Schläuche bis 220 bar garantiert
Reinforced flexible hoses guaranteed up to 220 bar

Facilité d'adaptation
Einfache Anpassungsmöglichkeiten
Easy to adapt



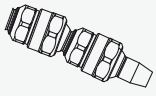
Adaptateurs disponibles pour filetage M5, M6, M8X1 et BSP1/8
Adapter für M5, M6, M8X1 und BSP1/8 erhältlich
Adaptors available for M5, M6, M8X1, and BSP1/8 thread

Multiples possibilités de connexion
Vielfältige Anschlussoptionen
Large range of connection possibilites



Vaste gamme de connecteurs pour tous les types de machines
Grosse Auswahl von Anschlüsse für alle Machinentypen
Huge range of possible coolant connections to suit all machine types

Système articulé
Gelenksystem
Articulated system



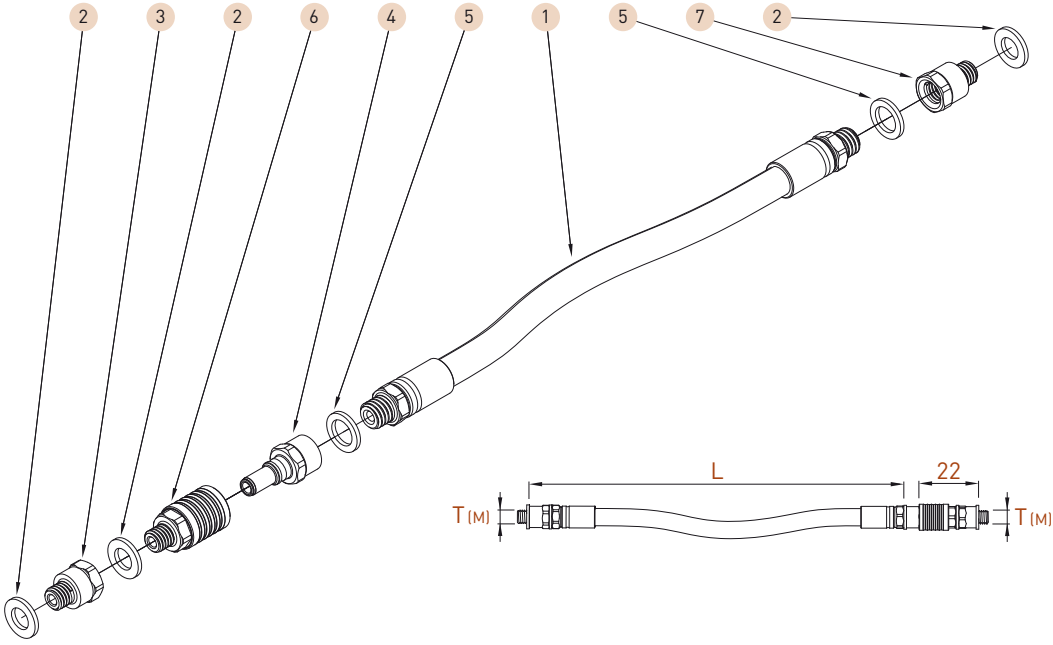
Module flexible d'arrosage en acier pour une meilleure stabilité
Flexibler Stahlkühlmittelmodul für eine bessere Stabilität
Flexible steel coolant unit for better stability

Durée de vie prolongée et performance de coupe optimisée par la maîtrise du flux de copeaux
Verlängerte Werkzeugstandzeit und optimierte Schnittleistung durch kontrollierten Spanflus
Extended tool life and optimized cutting performance through controlled chip flow

JKIT-M5-D4-...-QF

M5
Quick / Fix

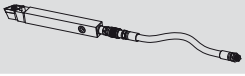
Kits de connexion
Verbindungskits
Connection kits



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M6-L...
2	3	JO-M5
3	1	JRMF-M5-M5-L6.5
4	1	JVF-M6-D4
5	2	JO-M6
6	1	-M5-D4
7	1	JRMF-M5-M6-L7.5

D	T (M)	L	Art. N°
4	M5	102	**JKIT-M5-D4-102-QF**
		203	**JKIT-M5-D4-203-QF**
		305	**JKIT-M5-D4-305-QF**
		406	**JKIT-M5-D4-406-QF**

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M5

ISO-Line 8X10
MODU-Line
TOP-Line 8X10
TURN-Line 8X10

Options



Art. N°

JK-M5-1010-4T

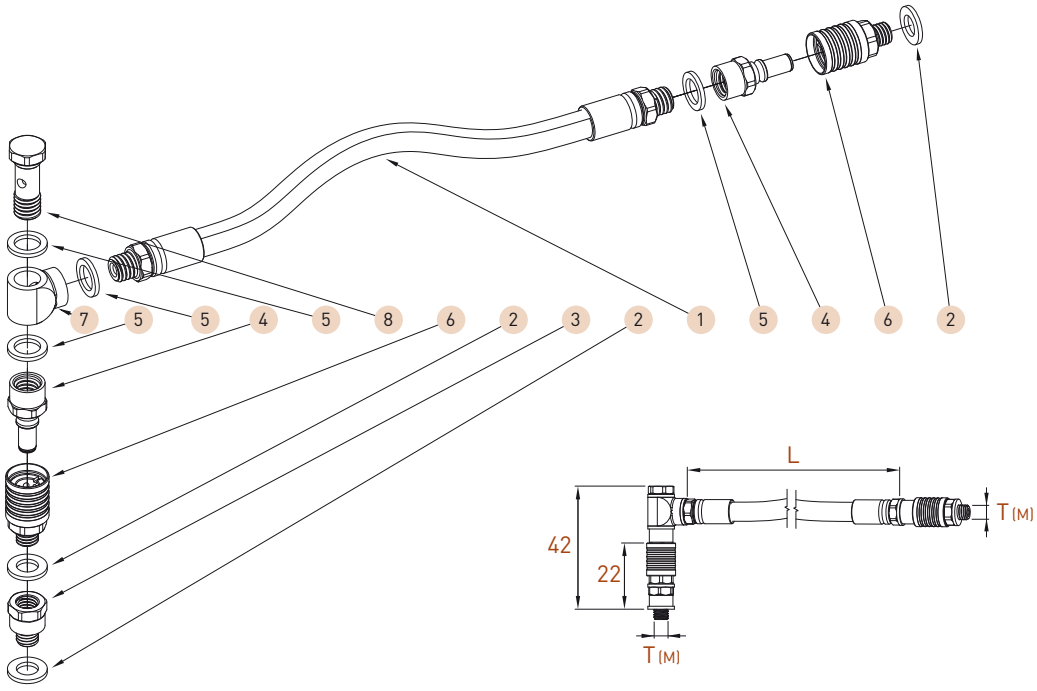
voir page 18.39
siehe Seite 18.39
see page 18.39



Art. N°

C-SW8-E2.5

voir page 18.51
siehe Seite 18.51
see page 18.51



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M6-L...
2	3	JO-M5
3	1	JRMF-M5-M5-L6.5
4	2	JVF-M6-D4
5	4	JO-M6
6	2	JS-M5-D4
7	1	JCBF-Ø6-M6
8	1	JEB-M6-L19

D	T (M)	L	**Art. N°**
4	M5	102	**JKIT-M5-D4-102-QQ**
		203	**JKIT-M5-D4-203-QQ**
		305	**JKIT-M5-D4-305-QQ**
		406	**JKIT-M5-D4-406-QQ**

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M5

ISO-Line 8X10
MODU-Line
TOP-Line 8X10
TURN-Line 8X10

Options



Art. N°

JK-M5-1010-4T

voir page 18.39
siehe Seite 18.39
see page 18.39



Art. N°

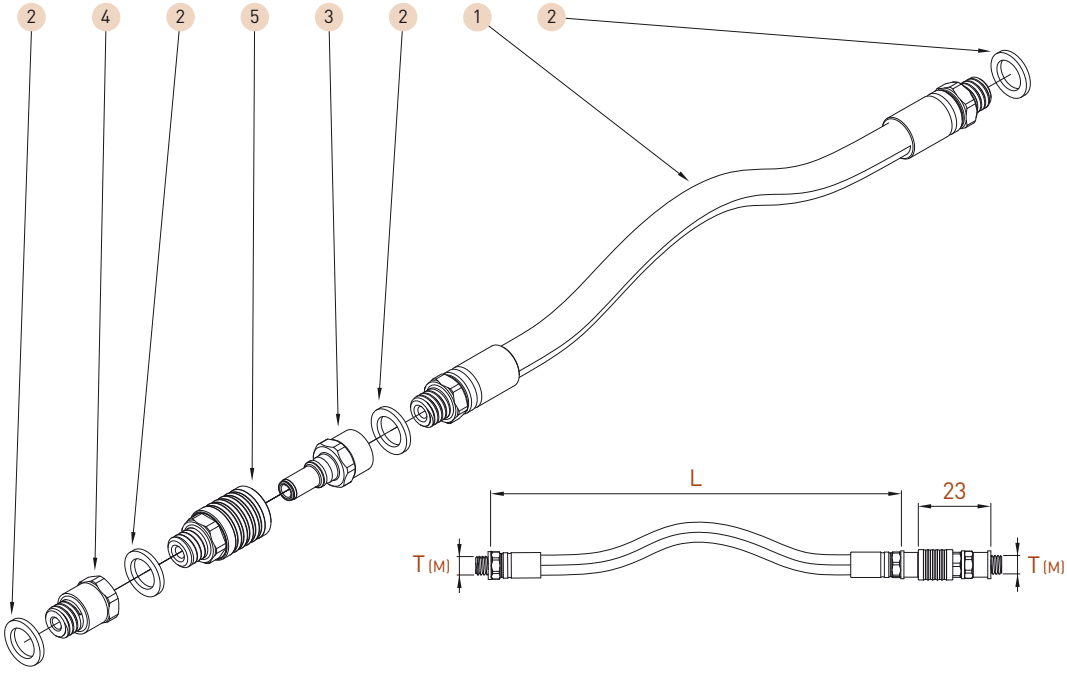
C-SW8-E2.5

voir page 18.51
siehe Seite 18.51
see page 18.51

JKIT-M6-D4-...-QF

M6
Quick / Fix

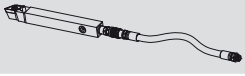
Kits de connexion
Verbindungskits
Connection kits



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M6-L...
2	4	JO-M6
3	1	JVF-M6-D4
4	1	JRMF-M6-M6-L7.5
5	1	JS-M6-D4

D	T (M)	L	Art. N°
4	M6	102	**JKIT-M6-D4-102-QF**
		203	**JKIT-M6-D4-203-QF**
		305	**JKIT-M6-D4-305-QF**
		406	**JKIT-M6-D4-406-QF**

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M6

Options



Art. N°

JK-M6-1010-4T

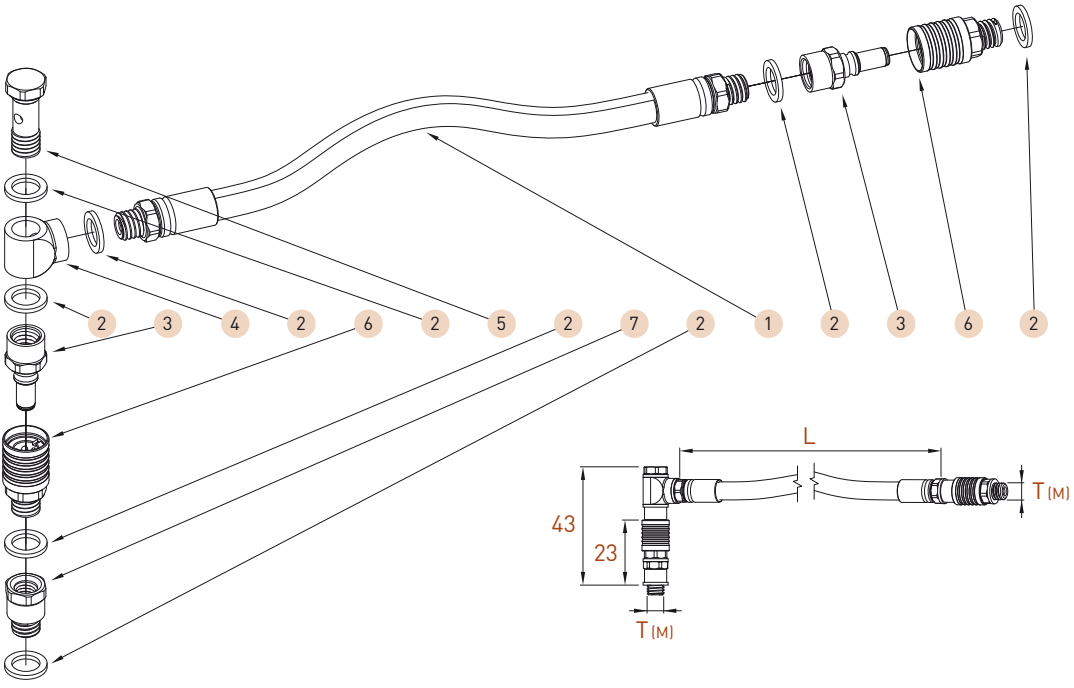
voir page 18.39
siehe Seite 18.39
see page 18.39



Art. N°

C-SW8-E2.5

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siehe Seite 18.51
see page 18.51



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M6-L...
2	7	JO-M6
3	2	JVF-M6-D4
4	1	JCBF-Ø6-M6
5	1	JEB-M6-L19
6	2	JS-M6-D4
7	1	JRMF-M6-M6-L7.5

D	T (M)	L	**Art. N°**
4	M6	102	**JKIT-M6-D4-102-QQ**
		203	**JKIT-M6-D4-203-QQ**
		305	**JKIT-M6-D4-305-QQ**
		406	**JKIT-M6-D4-406-QQ**

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M6

Options



Art. N°

JK-M6-1010-4T

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see page 18.39



Art. N°

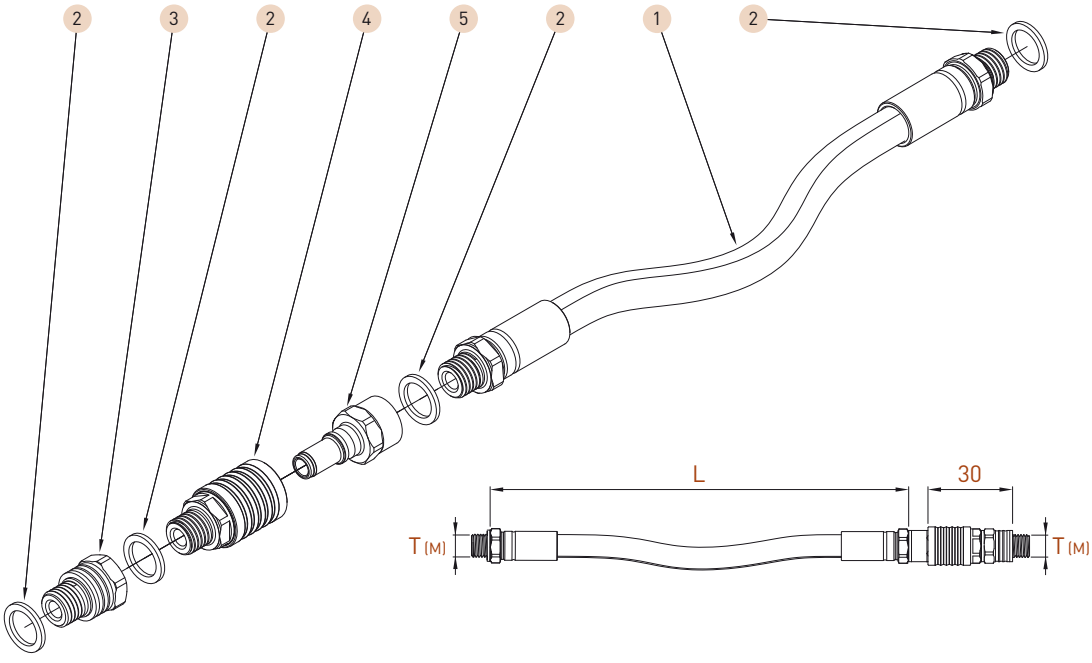
C-SW8-E2.5

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siehe Seite 18.51
see page 18.51

JKIT-M8X1-D6-...-QF

M8X1
Quick / Fix

Kits de connexion
Verbindungskits
Connection kits



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M8X1-L...
2	4	JO-M8X1
3	1	JRMF-M8X1-M8X1-L9.5
4	1	JS-M8X1-D6
5	1	JVF-M8X1-D6

D	T (M)	L	Art. N°
6	M8X1	102	**JKIT-M8X1-D6-102-QF**
		203	**JKIT-M8X1-D6-203-QF**
		305	**JKIT-M8X1-D6-305-QF**
		406	**JKIT-M8X1-D6-406-QF**

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M8X1

CUT-Line 16X16 - 25X25
ECO-Line 10X12 - 20X20
EVOCUT-Line 10X12 - 20X20
IN-Line Ø12 - Ø28
ISO-Line 10X10 - 20X20
MODU-Line
PRO-Line 10X12 - 20X20
TOP-Line 10X12 - 20X20
TURN-Line 10X12 - 20X20

Options



Art. N°

JK-M8X1-1515-4T

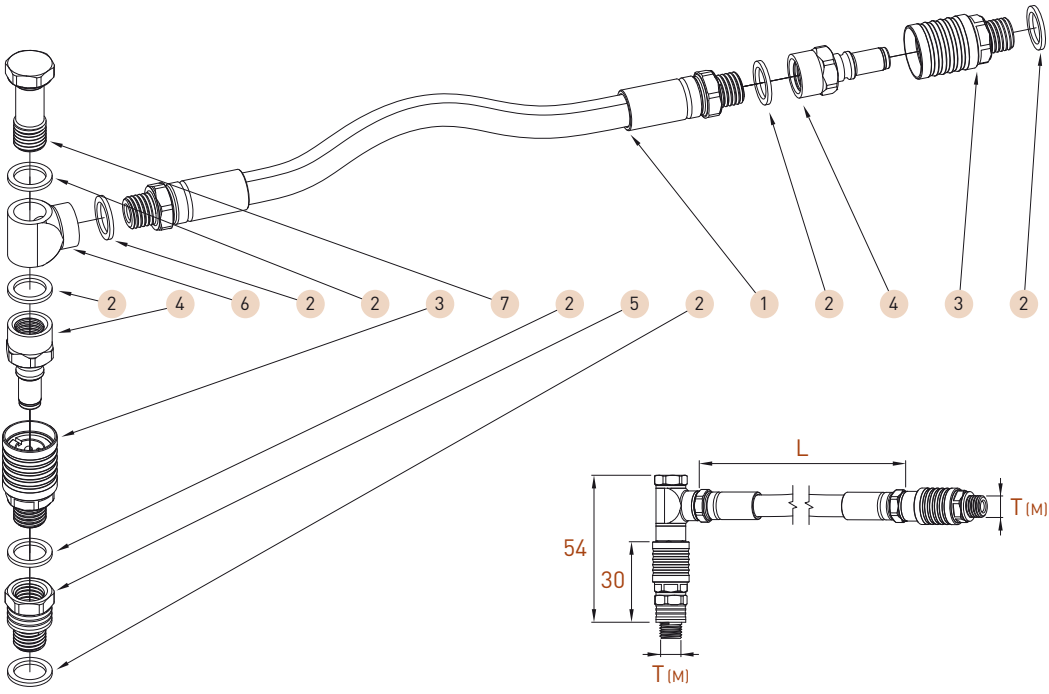
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see page 18.39



Art. N°

C-SW11-E3.7

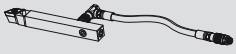
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siehe Seite 18.51
see page 18.51



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M8X1-L...
2	7	JO-M8X1
3	2	JS-M8X1-D6
4	2	JVF-M8X1-D6
5	1	JRMF-M8X1-M8X1-L9.5
6	1	JCBF-Ø8-M8X1
7	1	JEB-M8X1-L24

D	T (M)	L	Art. N°
6	M8X1	102	**JKIT-M8X1-D6-102-QQ**
		203	**JKIT-M8X1-D6-203-QQ**
		305	**JKIT-M8X1-D6-305-QQ**
		406	**JKIT-M8X1-D6-406-QQ**

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M8X1

CUT-Line 16X16 - 25X25
ECO-Line 10X12 - 20X20
EVOCUT-Line 10X12 - 20X20
IN-Line Ø12 - Ø28
ISO-Line 10X10 - 20X20
MODU-Line
PRO-Line 10X12 - 20X20
TOP-Line 10X12 - 20X20
TURN-Line 10X12 - 20X20

Options



Art. N°

JK-M8X1-1515-4T

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siehe Seite 18.39
see page 18.39



Art. N°

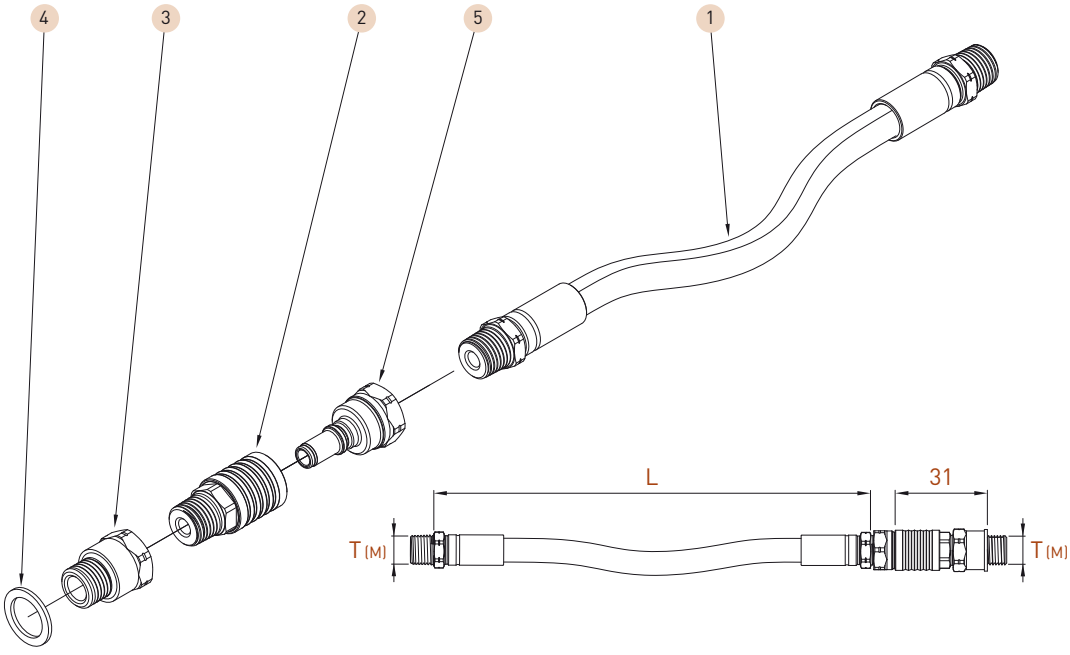
C-SW11-E3.7

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siehe Seite 18.51
see page 18.51

JKIT-BSP1/8-D6-...-QF

BSP1/8
Quick / Fix

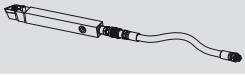
Kits de connexion
Verbindungskits
Connection kits



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-BSPT1/8-L...
2	1	JS-BSPT1/8-D6
3	1	JRMF-BSP1/8-BSP1/8-L10.5
4	1	JO-BSP1/8
5	1	JVF-BSP1/8-D6

D	T (M)	L	Art. N°
6	BSP1/8	102	**JKIT-BSP1/8-D6-102-QF**
		203	**JKIT-BSP1/8-D6-203-QF**
		305	**JKIT-BSP1/8-D6-305-QF**
		406	**JKIT-BSP1/8-D6-406-QF**

Compatibilité
Kompatibilität
Compatibility

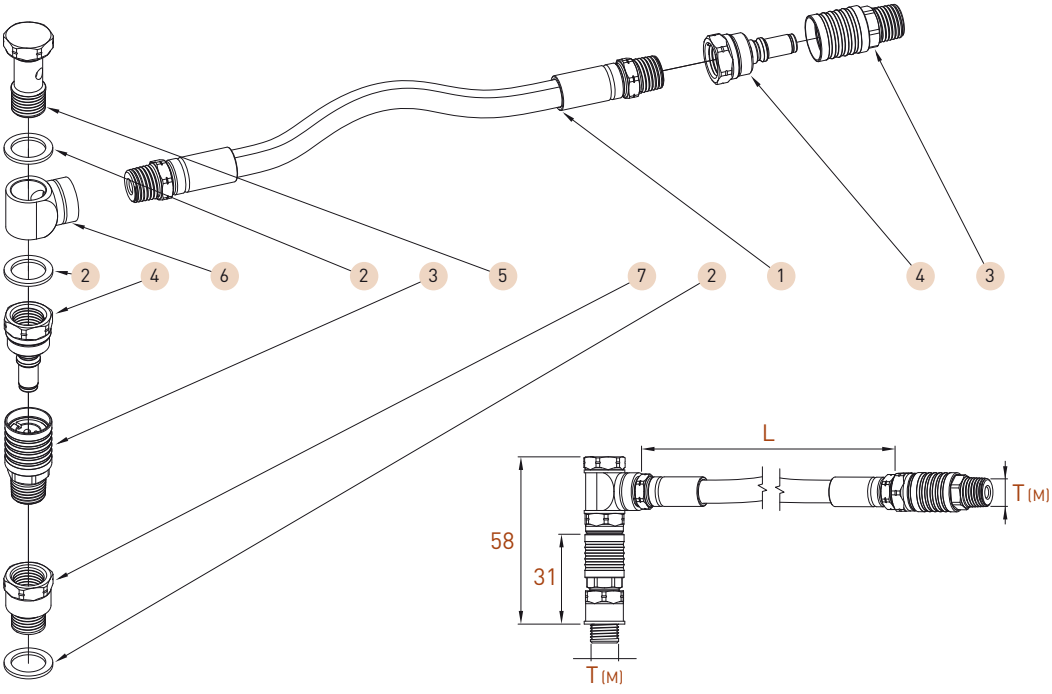


Porte-outil/Halter/Holder BSP1/8

Options



Art. N°	Art. N°
JK-BSP1/8-1515-4T	**C-SW11-E3.7**
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Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-BSPT1/8-L...
2	3	JO-BSP1/8
3	2	JS-BSPT1/8-D6
4	2	JVF-BSP1/8-D6
5	1	JEB-BSP1/8-L26
6	1	JCBF-Ø10-BSP1/8
7	1	JRMF-BSP1/8-BSP1/8-L10.5

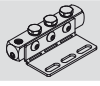
D	T (M)	L	Art. N°
6	BSP1/8	102	**JKIT-BSP1/8-D6-102-QQ**
		203	**JKIT-BSP1/8-D6-203-QQ**
		305	**JKIT-BSP1/8-D6-305-QQ**
		406	**JKIT-BSP1/8-D6-406-QQ**

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder BSP1/8

Options



Art. N°	Art. N°
JK-BSP1/8-1515-4T	**C-SW11-E3.7**
voir page 18.39 siehe Seite 18.39 see page 18.39	voir page 18.51 siehe Seite 18.51 see page 18.51

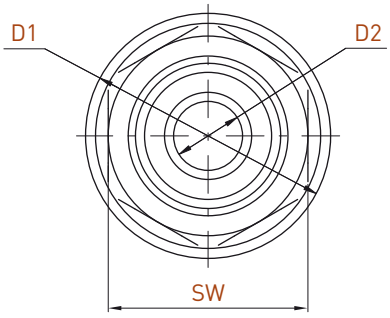
JSTART-D4 | M6 (+ M5) | Starter Kit

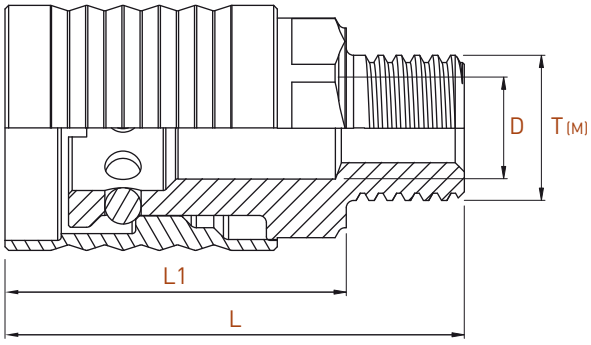


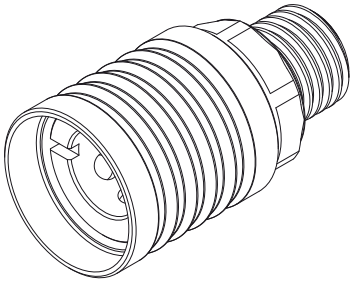
Qty	Composition du kit Zusammensetzung Kit Kit composition	Art. N°
2	C-SW8-E2.5	JSTART-D4
4	JO-M6	
2	JO-M5	
2	JK-M6-1010-4T	
10	JS-M6-D4	
2	JTX-AC-M6-102	
2	JTX-AC-M6-203	
2	JTX-AC-M6-305	
2	JTX-AC-M6-406	
10	JVF-M6-D4	
2	JVB-D4	
2	JWF-M6-D4	
2	JRMF-M6-M6-L7.5	
2	JRMF-M6-M6-L12.5	
2	JRMF-M6-M6-L17.5	
10	JRMF-M5-M6-L7.5	
2	JRFF-M6-L9.0	
5	JCBF-Ø6-M6	
2	JABF-Ø6-M6-45°	
5	JEB-M6-L19	
2	JEB-M6-L30-DUO	
1	JT-CU-M6-102	
1	JT-CU-M6-203	



Qty	Composition du kit Zusammensetzung Kit Kit composition	Art. N°
2	C-SW11-E3.7	JSTART-D6
4	JO-M8X1	
2	JK-M8X1-1515-4T	
10	JS-M8X1-D6	
2	JTX-AC-M8X1-102	
2	JTX-AC-M8X1-203	
2	JTX-AC-M8X1-305	
2	JTX-AC-M8X1-406	
10	JVF-M8X1-D6	
2	JVB-D6	
2	JWF-M8X1-D6	
2	JRMF-M8X1-M8X1-L9.5	
2	JRMF-M8X1-M8X1-L14.5	
2	JRMF-M8X1-M8X1-L19.5	
10	JRMF-BSPT1/8-M8X1-L9.0	
2	JRFF-M8X1-L12.0	
5	JCBF-Ø8-M8X1	
2	JABF-Ø8-M8X1-45°	
5	JEB-M8X1-L24	
2	JEB-M8X1-L38-DUO	
1	JT-CU-M8X1-102	
1	JT-CU-M8X1-203	





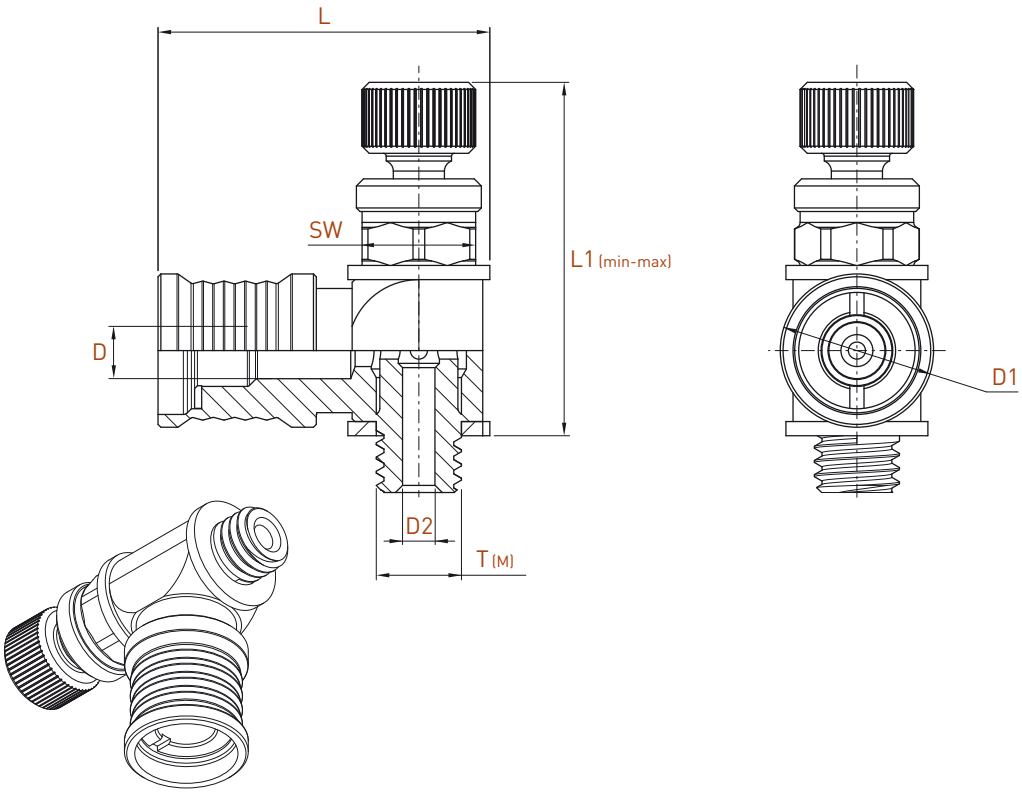


T (M)	L	L1	SW	D	D1	D2	Art. N°
M5	18	14	8	4	9.8	2.3	**JS-M5-D4**
M6	18	14	8	4	9.8	2.3	**JS-M6-D4**
M8X1KEG	20	14	8	4	9.8	2.3	**JS-M8X1KEG-D4**
M8X1	25	19	11	6	13.5	3.8	**JS-M8X1-D6**
BSPT1/8	29.3	19	11	6	13.5	3.8	**JS-BSPT1/8-D6**

Pression max Max. Druck Max. pressure	KEG =	BSPT =
= 220 Bar (3.190 PSI)	filetage conique konisches Gewinde conical thread	filetage conique konisches Gewinde conical thread

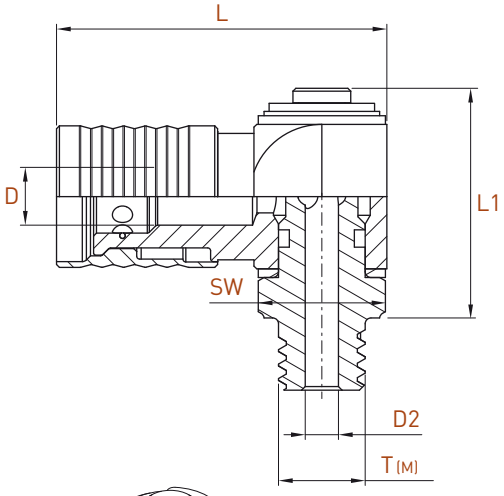
Raccords rapides Banjos avec régulateur de débit
Schnellkupplungen-Banjos mit Durchflussregler
Banjo quick couplings with flow regulators

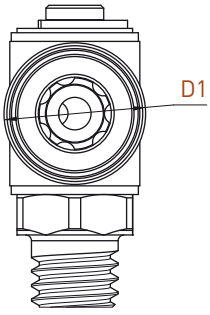
JSFA

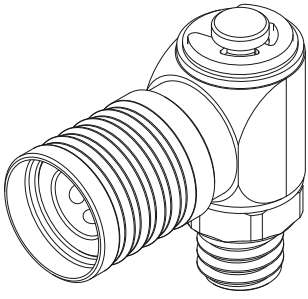


T (M)	L	L1 (min-max)	SW	D	D1	D2	Art. N°
M6	23.4	23.1-24.9	8	4	10.8	2.3	**JSFA-M6-D4**
M8x1	30.5	29.4-32.1	11	6	14.5	3.8	**JSFA-M8x1-D6**

Pression max Max. Druck Max. pressure
= 220 Bar (3.190 PSI)

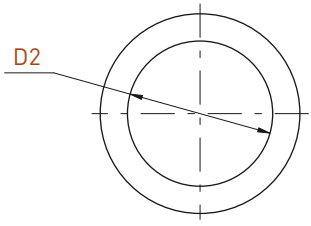


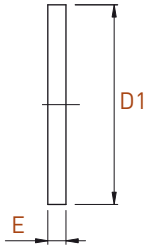


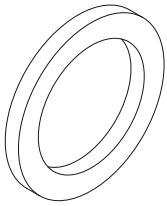


T (M)	L	L1	SW	D	D1	D2	Art. N°
M5	22.9	15.2	8	4	9.8	2.3	**JSR-M5-D4**
M6	22.9	15.9	8	4	9.8	2.3	**JSR-M6-D4**
M8x1	29.9	21	11	6	13.5	3.8	**JSR-M8x1-D6**
BSP1/8"	29.9	22	13	6	13.5	3.8	**JSR-BSP1/8"-D6**

Pression max Max. Druck Max. pressure
= 220 Bar (3.190 PSI)





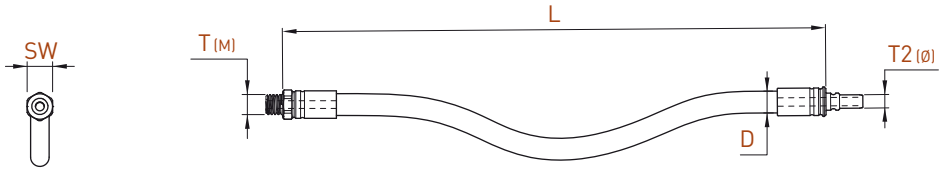


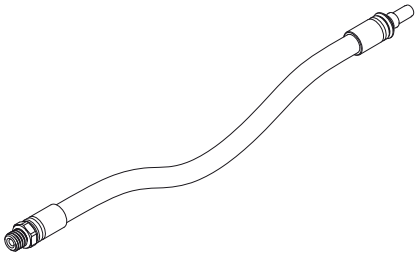
D1	D2	E	Art. N°
9	5	1	**J0-M5***
9	6	1	**J0-M6***
11	8	1	**J0-M8X1***
14	10	1	**J0-BSP1/8***

* vendu par 10 pièces
verkauft in 10 Stück
sold by 10 pieces

JTS-AC

Tubes de distribution flexibles en acier avec fiche de connexion rapide
Stahlflex-Verteilschläuche mit Schnellkupplungsstecker
Flexible distribution tubes of steel with quick connection plug





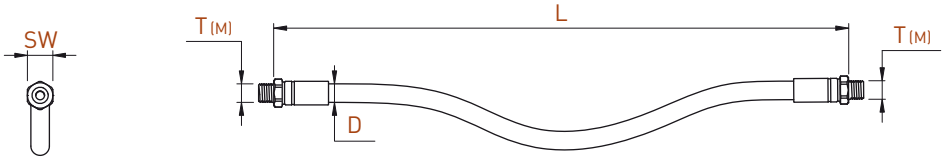
T (M)	T2 (Ø)	L*	SW	D	Art. N°
M6	4	102	8	6.5	**JTS-AC-M6-102**
		152			**JTS-AC-M6-152**
		203			**JTS-AC-M6-203**
		305			**JTS-AC-M6-305**
		406			**JTS-AC-M6-406**
M8x1	6	102	11	8	**JTS-AC-M8x1-102**
		152			**JTS-AC-M8x1-152**
		203			**JTS-AC-M8x1-203**
		305			**JTS-AC-M8x1-305**
		406			**JTS-AC-M8x1-406**

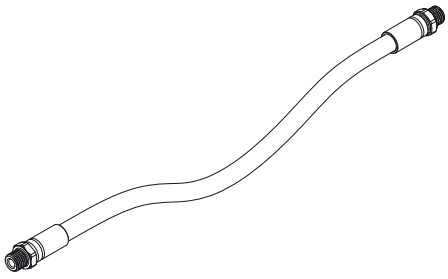
* Longueur spécifique possible sur demande
Spezifische Länge auf Anfrage möglich
Specific length possible on request

Pression max Max. Druck Max. pressure	Couple de serrage Anzugsmoment Torque setting
= 150 Bar (2.175 PSI)	**1.8 Nm**

Tubes de distribution flexibles en acier inoxydable tressé
Rostfreier Stahlflex-Schlauch
Flexible distribution tubes of stainless steel braiding

JTX-AC





T (M)	L*	SW	D	Art. N°
M6	102	8	Ø6.5	**JTX-AC-M6-102**
	203	8	Ø6.5	**JTX-AC-M6-203**
	305	8	Ø6.5	**JTX-AC-M6-305**
	406	8	Ø6.5	**JTX-AC-M6-406**
M8X1	102	11	Ø8	**JTX-AC-M8X1-102**
	203	11	Ø8	**JTX-AC-M8X1-203**
	305	11	Ø8	**JTX-AC-M8X1-305**
	406	11	Ø8	**JTX-AC-M8X1-406**
BSPT1/8	102	11	Ø8	**JTX-AC-BSPT1/8-102**
	203	11	Ø8	**JTX-AC-BSPT1/8-203**
	305	11	Ø8	**JTX-AC-BSPT1/8-305**
	406	11	Ø8	**JTX-AC-BSPT1/8-406**

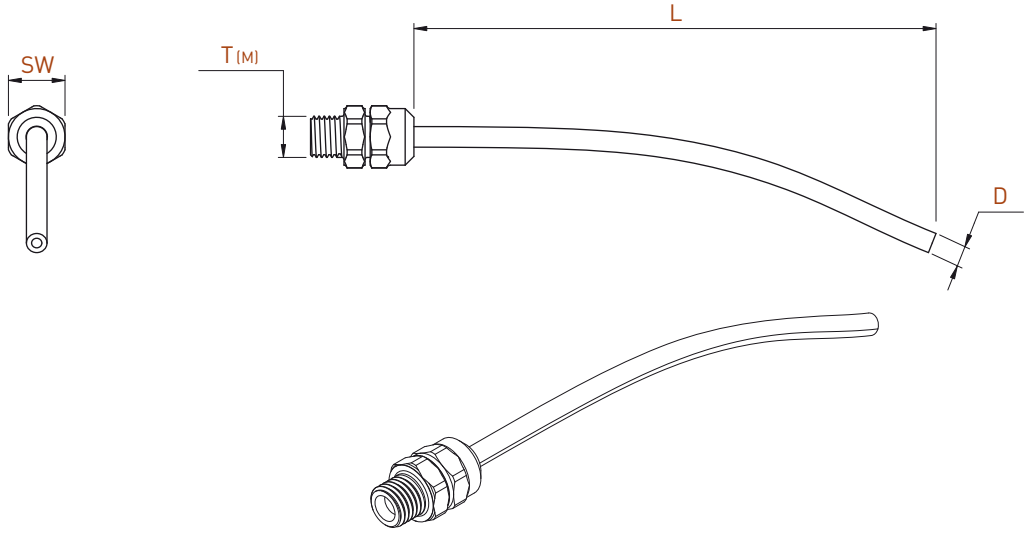
* Longueur spécifique possible sur demande
Spezifische Länge auf Anfrage möglich
Specific length possible on request

Pression max Max. Druck Max. pressure	KEG =	BSPT =
= 220 Bar (3.190 PSI)	filetage conique konisches Gewinde conical thread	filetage conique konisches Gewinde conical thread

Pression (bar)	Ø 6.5 (l/min)	Ø 8 (l/min)
2	3.5	9.5
8	7.0	19.0
15	9.6	26.0
20	11.0	30.1
30	13.5	36.9
50	17.5	47.6
80	22.1	60.3
100	24.7	67.4
150	30.2	82.5

JT-CU

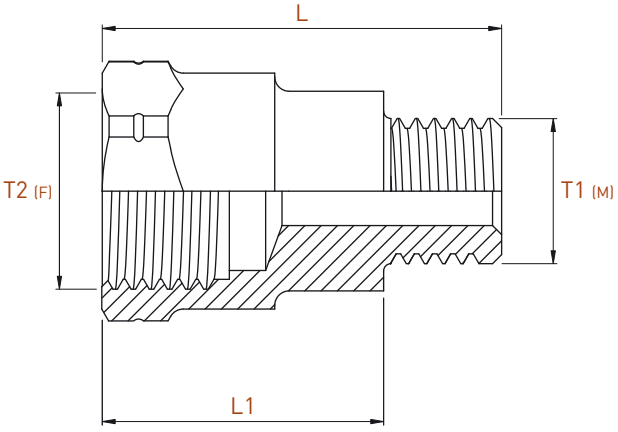
Tubes de distribution en cuivre
Kupferrohre
Copper distribution tubes

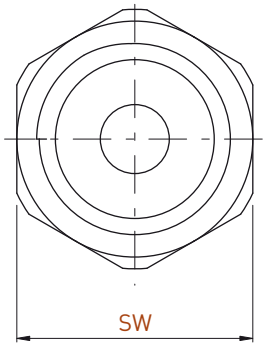


T (M)	L*	SW	D	Art. N°
M6	102	8	Ø3	**JT-CU-M6-102**
	203	8	Ø3	**JT-CU-M6-203**
	305	8	Ø3	**JT-CU-M6-305**
	406	8	Ø3	**JT-CU-M6-406**
M8X1	102	11	Ø4	**JT-CU-M8X1-102**
	203	11	Ø4	**JT-CU-M8X1-203**
	305	11	Ø4	**JT-CU-M8X1-305**
	406	11	Ø4	**JT-CU-M8X1-406**

* Longueur spécifique possible sur demande
Spezifische Länge auf Anfrage möglich
Specific length possible on request

Pression max Max. Druck Max. pressure
= 220 Bar (3.190 PSI)

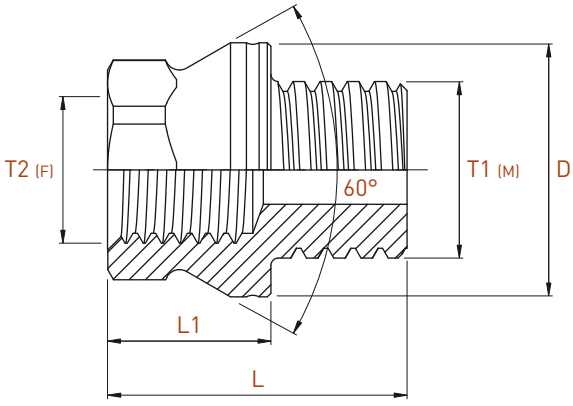


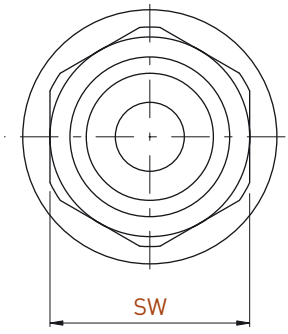


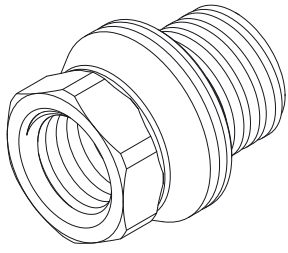
T1 (M)	T2 (F)	L1	L	SW	Art. N°
M5	M5	6.5	11	8	**JRMF-M5-M5-L6.5**
		11.5	16	8	**JRMF-M5-M5-L11.5**
		16.5	21	8	**JRMF-M5-M5-L16.5**
	M6	7.5	12	8	**JRMF-M5-M6-L7.5**
	M8X1	9.5	14	11	**JRMF-M5-M8X1-L9.5**
M6	M6	7.5	12.5	8	**JRMF-M6-M6-L7.5**
		12.5	17.5	8	**JRMF-M6-M6-L12.5**
		17.5	22.5	8	**JRMF-M6-M6-L17.5**
	M8X1	9.5	14.5	11	**JRMF-M6-M8X1-L9.5**
M8X1KEG	M6	6	12	8	**JRMF-M8X1KEG-M6-L6.0**
	M8X1	9.5	16.5	11	**JRMF-M8X1KEG-M8X1-L9.5**
M8X1	M5	5.5	12	11	**JRMF-M8X1-M5-L5.5**
	M6	7	13.5	11	**JRMF-M8X1-M6-L7.0**
	M8X1	9.5	16	11	**JRMF-M8X1-M8X1-L9.5**
		14.5	21	11	**JRMF-M8X1-M8X1-L14.5**
		19.5	26	11	**JRMF-M8X1-M8X1-L19.5**
	BSP1/8	10.5	17	13	**JRMF-M8X1-BSP1/8-L10.5**
		15.5	22	13	**JRMF-M8X1-BSP1/8-L15.5**
		20.5	27	13	**JRMF-M8X1-BSP1/8-L20.5**
	NPT1/8	11	17.5	13	**JRMF-M8X1-NPT1/8-L11**
M8X1.25	M8X1	9.5	16	11	**JRMF-M8X1.25-M8X1-L9.5**
BSPT1/8	M5	3.5	14.6	11	**JRMF-BSPT1/8-M5-L3.5**
	M6	3.5	14.6	11	**JRMF-BSPT1/8-M6-L3.5**
	M8X1	9	20.3	11	**JRMF-BSPT1/8-M8X1-L9.0**
BSP1/8	BSP1/8	10.5	18	13	**JRMF-BSP1/8-BSP1/8-L10.5**
		15.5	23	13	**JRMF-BSP1/8-BSP1/8-L15.5**
		20.5	28	13	**JRMF-BSP1/8-BSP1/8-L20.5**
NPT1/8	M8X1	7	17	13	**JRMF-NPT1/8-M8X1-L7.0**
	BSP1/8	9	20.3	13	**JRMF-NPT1/8-BSP1/8-L9.0**
NTP1/16	M6	6	15	11	**JRMF-NPT1/16-M6-L6.0**
	M8X1	9	18	13	**JRMF-NPT1/16-M8X1-L9.0**
SAE7/16-20	M6	4.5	12	13	**JRMF-SAE7/16-20-M6-L4.5**
	M8X1	7	14.5	13	**JRMF-SAE7/16-20-M8X1-L7**

JRMF-A60°

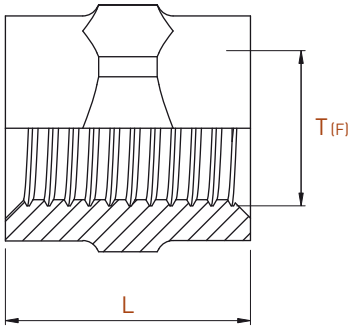
Connecteurs mâles/femelles avec cône 60°
Gewindeadapter Innen und Außengewinde mit 60°-Kegel
Male/female connectors with cone 60°

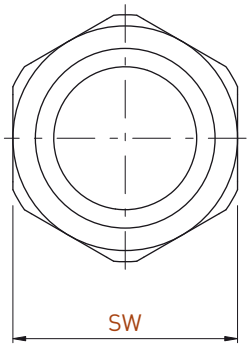


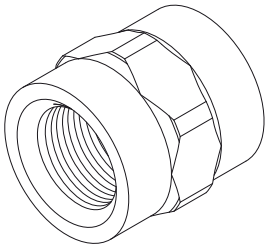




T1 (M)	T2 (F)	L1	L	D	SW	Art. N°
BSP1/8	M8X1	9	16.5	14	11	**JRMF-BSP1/8-M8X1-A60°-L9.0**



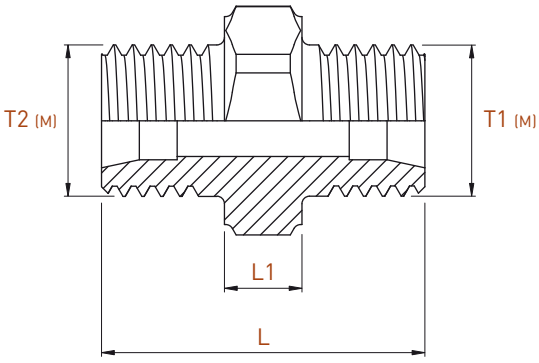


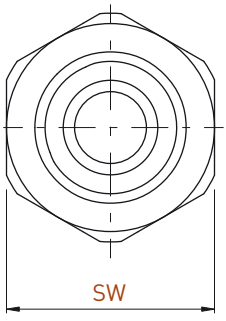


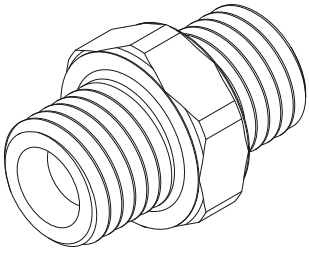
T (F)	L	SW	Art. N°
M6	9	8	**JRFF-M6-L9.0**
M8X1	12	11	**JRFF-M8X1-L12.0**

JRMM

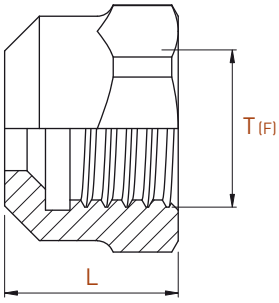
Connecteurs mâles/mâles
Gewindeadapter Außengewinde
Male connectors

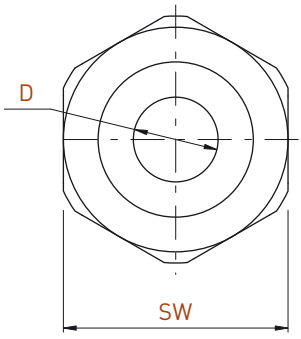


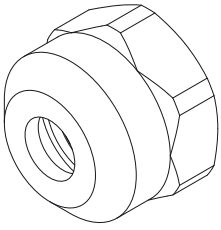




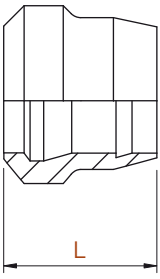
T1 (M)	T2 (M)	L1	L	SW	Art. N°
M6	M6	3	13	8	**JRMM-M6-M6-L3.0**
M8X1	M8X1	4	17	11	**JRMM-M8X1-M8X1-L4.0**
M10	M8X1	3.5	17.5	11	**JRMM-M10-M8X1-3.5**

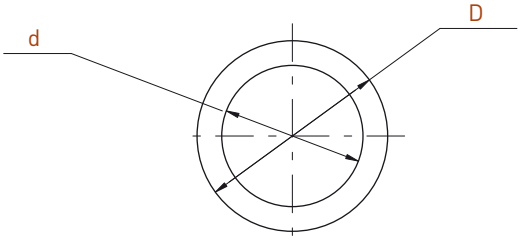


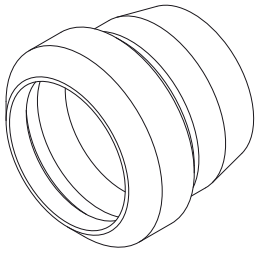




T (F)	L	D	SW	Art. N°
M6	6.5	3	8	**JN-M6-D3**
M8X1	8.5	4	11	**JN-M8X1-D4**
M10	11.5	6	12	**JN-M10-D6**



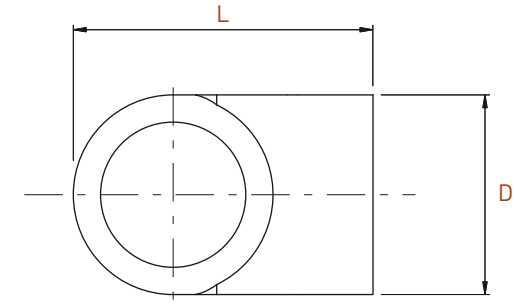


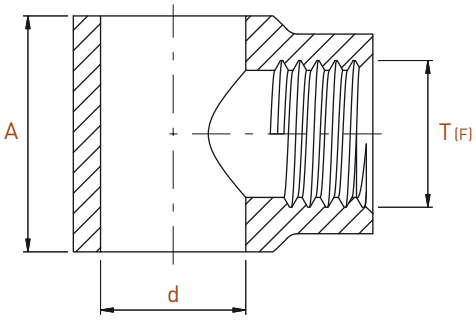


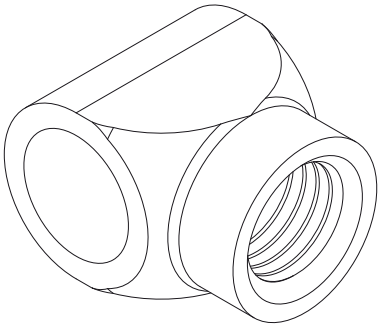
d	D	L	Art. N°
3	4	3.3	**JNG-D3**
4	5.5	4.5	**JNG-D4**
6	8.5	7	**JNG-D6**

Banjos courts femelles
Kurzer Innengewinde-Banjo
Short female Banjo

JCBF



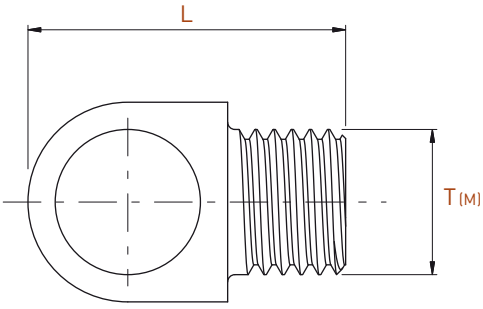


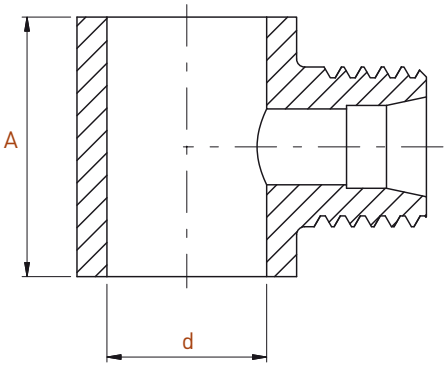


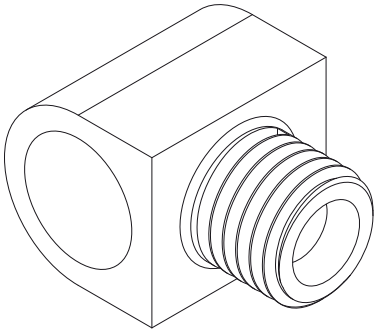
T (F)	A	L	d	D	Art. N°
M6	10	12.5	6	9	**JCBF-Ø6-M6**
M8X1	13	16.5	8	11	**JCBF-Ø8-M8X1**
	13	18.5	10	11	**JCBF-Ø10-M8X1**
BSP1/8	13	19.5	10	13	**JCBF-Ø10-BSP1/8**

JCBM

Banjos courts mâles
Kurze Außengewinde-Banjo
Short male Banjo



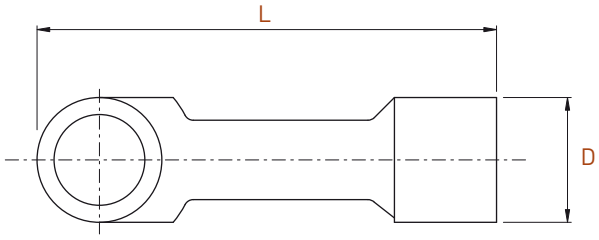


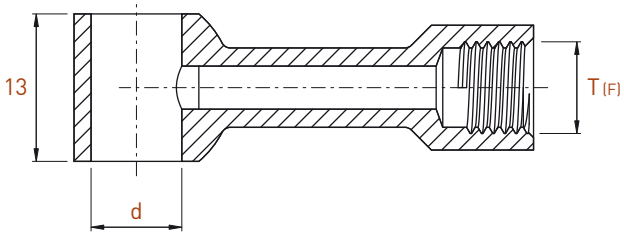


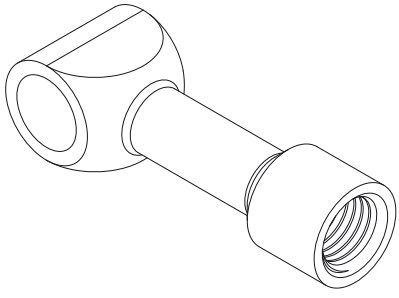
T (M)	A	L	d	Art. N°
M6	10	14	6	**JCBM-Ø6-M6**
M8X1	13	17.5	8	**JCBM-Ø8-M8X1**
	13	19.5	10	**JCBM-Ø10-M8X1**

Banjos longs droits femelles
Lange Innengewinde-Banjo
Long straight female Banjo

JABF



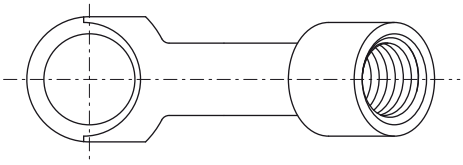


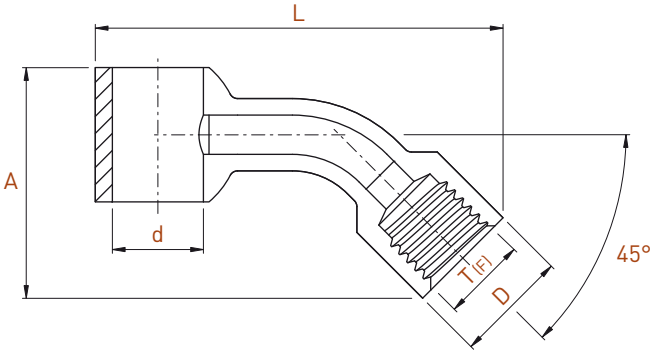


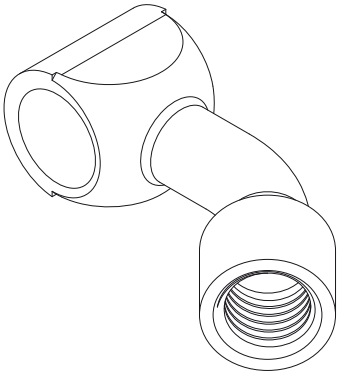
T (F)	A	L	d	D	Art. N°
M6	10	31.5	6	9	**JABF-Ø6-M6**
M8X1	13	40.5	8	11	**JABF-Ø8-M8X1**
	13	42.5	10	11	**JABF-Ø10-M8X1**
BSP1/8	13	42.5	10	13	**JABF-Ø10-BSP1/8**

JABF-45°

Banjos longs coudés femelles
Lange 45° Innengewinde-Banjos
Long curved female banjos



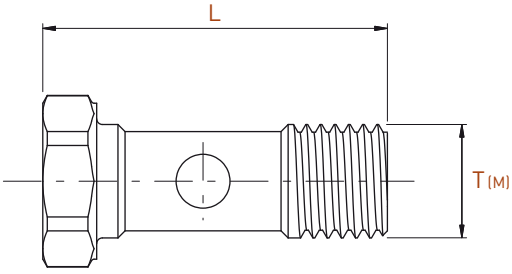


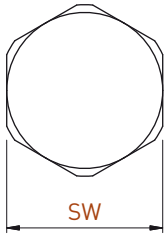


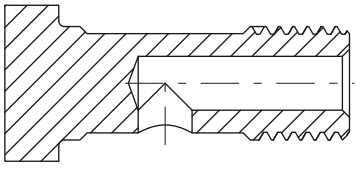
T (F)	A	L	d	D	Art. N°
M6	10	33	6	9	**JABF-Ø6-M6-45°**
M8X1	11.8	40	8	11	**JABF-Ø8-M8X1-45°**
	13	40.5	10	11	**JABF-Ø10-M8X1-45°**

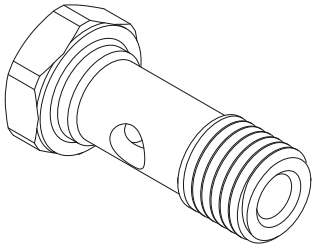
Vis Banjo
Hohlschrauben einfach
Banjo screws

JEB





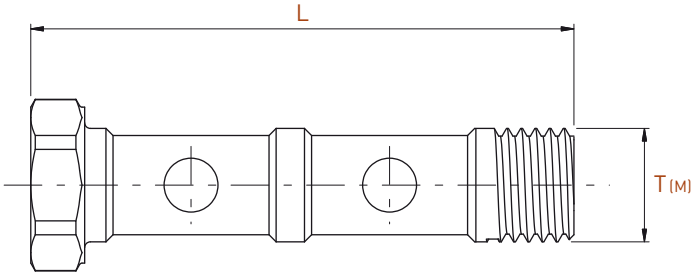


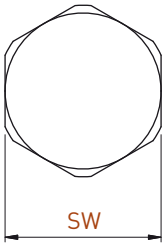


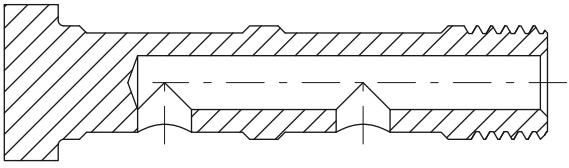
T (M)	L	SW	Art. N°
M5	18.3	8	**JEB-M5-L18**
M6	18.8	8	**JEB-M6-L19**
M8X1	24.3	11	**JEB-M8X1-L24**
BSP1/8	26	13	**JEB-BSP1/8-L26**

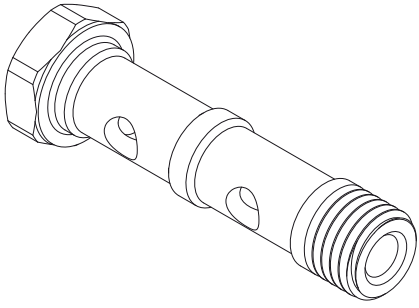
JEB-DUO

Vis Banjo doubles
Hohlschrauben doppelt
Double banjo screws

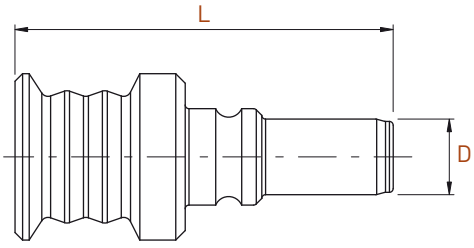


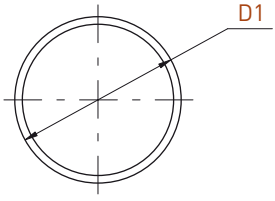


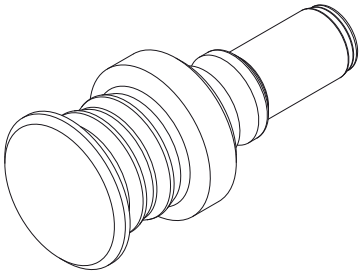




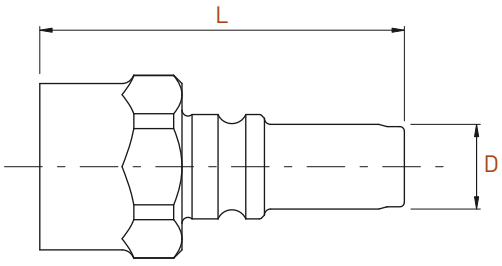
T (M)	L	SW	Art. N°
M6	29.8	8	**JEB-M6-L30-DUO**
M8X1	38.3	11	**JEB-M8X1-L38-DUO**
BSP1/8	40	13	**JEB-BSP1/8-L40-DUO**

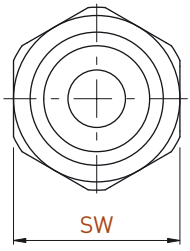


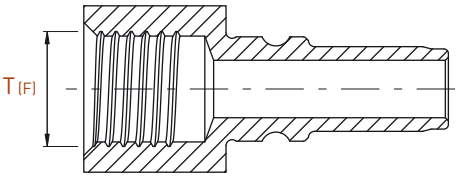


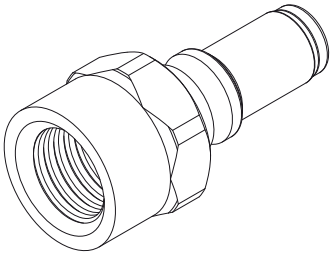


D	D1	L	Art. N°
4	8.8	20	**JVB-D4**
6	12	27	**JVB-D6**

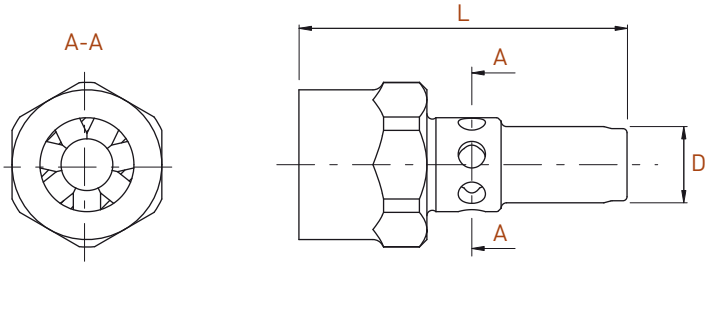


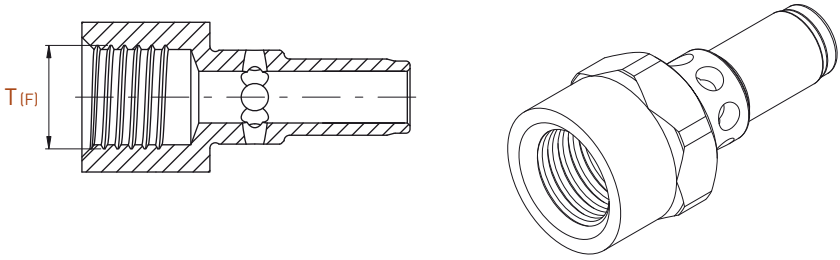






D	T (F)	L	SW	Art. N°
4	M6	18.3	8	**JVF-M6-D4**
6	M8X1	24	11	**JVF-M8X1-D6**
6	BSP1/8	25.5	11	**JVF-BSP1/8-D6**

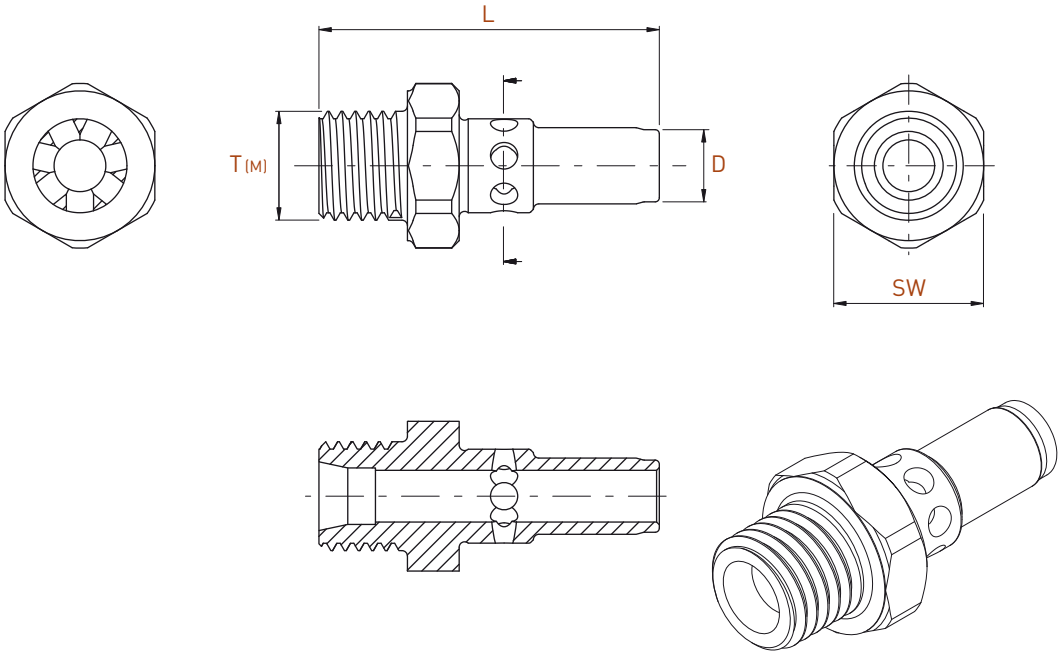




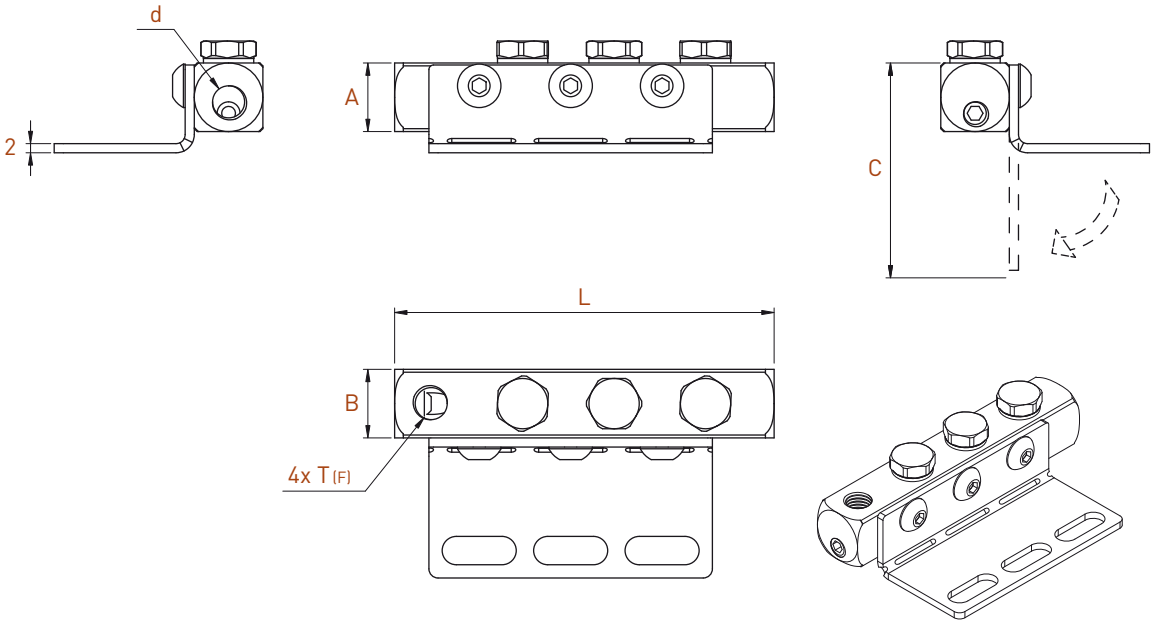
D	T (F)	L	SW	Art. N°
4	M6	18.3	8	**JWF-M6-D4**
6	M8X1	24	11	**JWF-M8X1-D6**

JWM

Fiches de connexion fixes mâles
Aussengewindestecker mit Verdrehsicherung
Male positionning connection plugs



D	T (M)	L	SW	Art. N°
4	M6	18.3	8	**JWM-M6-D4**
6	M8X1	25	11	**JWM-M8X1-D6**

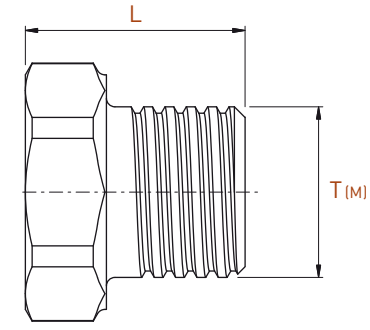


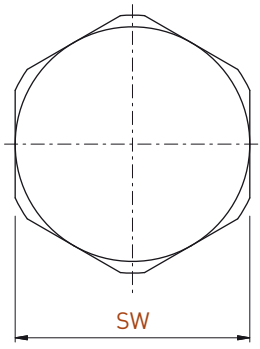
T (F)	A	B	C	d	L	Art. N°
M5	10	10	37	M5	62	**JK-M5-1010-4T**
M6	10	10	37	M6	62	**JK-M6-1010-4T**
M8X1	15	15	47	M8X1	83	**JK-M8X1-1515-4T**
BSP1/8	15	15	47	BSP1/8	83	**JK-BSP1/8-1515-4T**

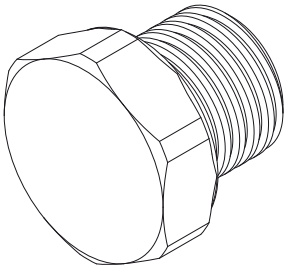
Qty	Livré avec	Mitgeliefert	Supplied with
1	Plaque de serrage pliable	Faltbare Klemmplatte	Foldable clamping plate
3	Vis bombée	Linsenkopfschraube	Domed clamping screw
3	Vis sans tête bouchon	Dichtungsschraube	Sealing screw
3	Joint d'étanchéité en cuivre	Kupferdichtungsringe	Copper sealing basket
1	Vis sans tête bouchon	Dichtungsschraube	Sealing screw

JBB

Bouchons d'étanchéité
Verschlußstopfen
Sealing plugs



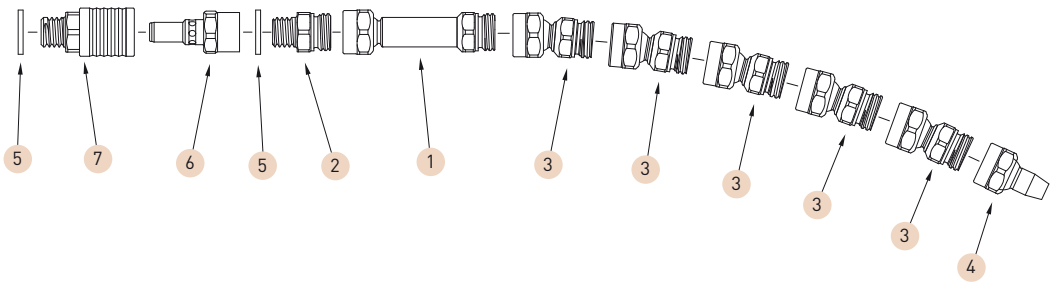


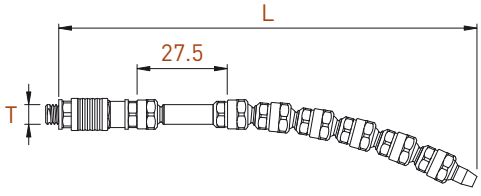


SW	T (M)	L	Art. N°
8	M5	7.3	**JBB-M5-L7.0**
8	M6	7.8	**JBB-M6-L8.0**
11	M8X1	10.3	**JBB-M8X1-L10.0**
11	BSP1/8	10.3	**JBB-BSP1/8-L10.0**

Kit articulé avec buse d'arrosage
Gelenkkit mit Kühlungsdüse
Articulated kit with coolant nozzle

JKIT-AR3





Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JAR3-L27.5
2	1	JRMM-AR3-M6-L3.0
3	5	JAR3-L12.5
4	1	JJ-AR3-D3-L9
5	2	JO-M6
6	1	JWF-M6-D4
7	1	JS-M6-D4

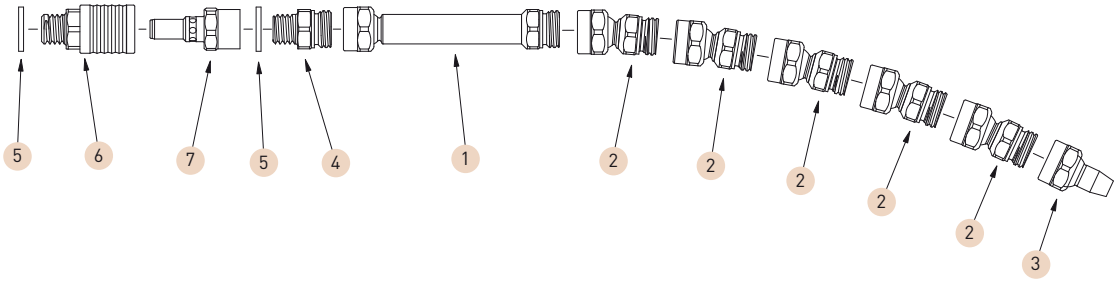
T (M)	L	**Art. N°**
M6	130	**JKIT-AR3-M6-D3-130**

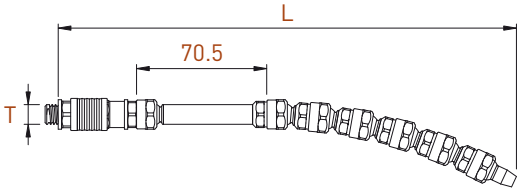
Pression max Max. Druck Max. pressure	Couple de serrage Anzugsmoment Torque setting
150 bar (2.175psi)	**1.8 Nm**

Option recommandée Empfohlene Option Recommended option	Page Seite Page
C-AR3	18.51

JKIT-AR6

Kit articulé avec buse d'arrosage
Gelenkkit mit Kühlungsdüse
Articulated kit with coolant nozzle





Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JAR6-L70.5
2	5	JAR6-L20.5
3	1	JJ-AR6-D6-L16
4	1	JRMM-AR6-M8X1-L4
5	2	JO-M8X1
6	1	JS-M8X1-D6
7	1	JWF-M8X1-D6

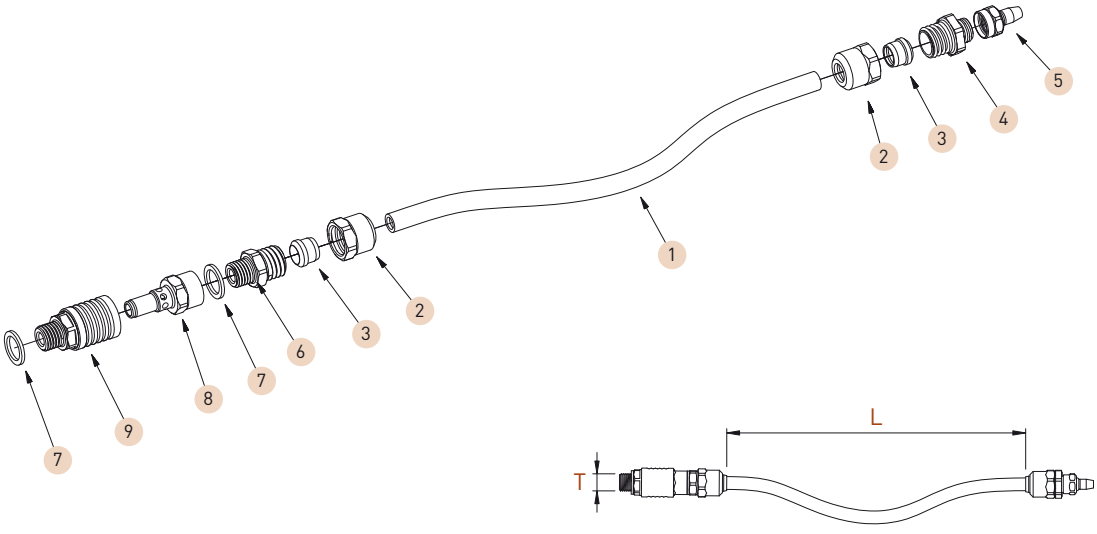
T (M)	L	**Art. N°**
M8X1	225	**JKIT-AR6-M8X1-D6-225**

Pression max Max. Druck Max. pressure	Couple de serrage Anzugsmoment Torque setting
100 bar (1.450 psi)	**6 Nm**

Option recommandée Empfohlene Option Recommended option	Page Seite Page
C-AR6	18.51

Kit tube en cuivre avec buse d'arrosage
Kit Kupferrohr mit Kühlungsdüse
Kit copper tube with coolant nozzle

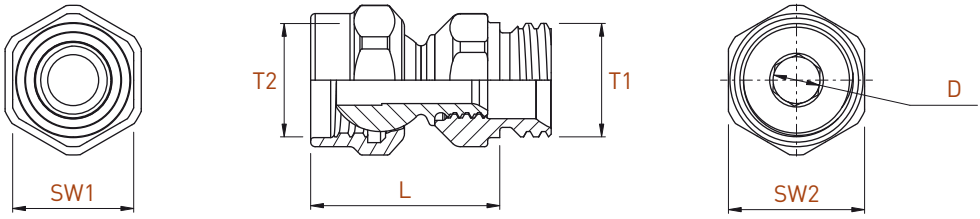
JKIT-CU

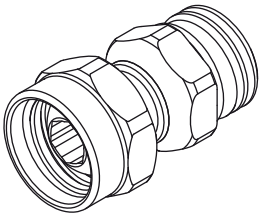


Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JT-CU
2	2	JN-M10-D6
3	2	JNG-D6
4	1	JRMM-AR3-M10-L3.0
5	1	JJ-AR3-D3-L9
6	1	JRMM-M10-M8X1-L3.5
7	2	JO-M8X1-D6
8	1	JWF-M8X1-D6
9	1	JS-M8X1-D6

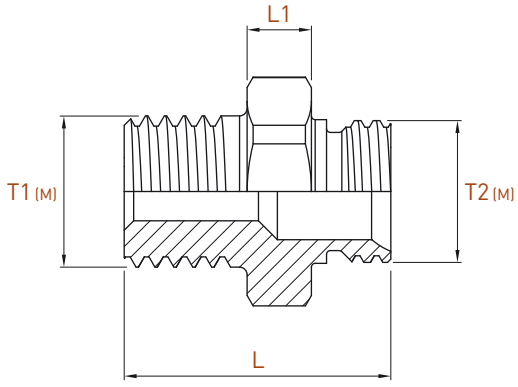
T (M)	L	**Art. N°**
M8X1	305	**JKIT-CU-AR3-M8X1-D3-305**

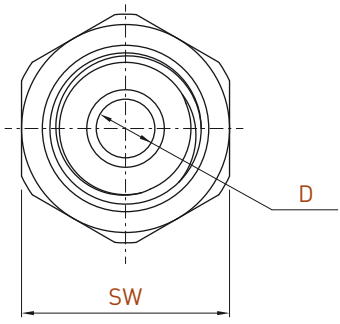
Pression max Max. Druck Max. pressure
= 220 Bar (3.190 PSI)

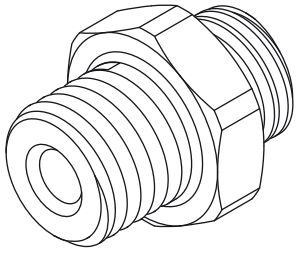




T1 (M)	T2 (F)	L	D	SW1	SW2	Art. N°
M7.5	M7.5	12.5	3	8	9	**JAR3-L12.5**
		27.5	3			**JAR3-L27.5**
		42.5	3			**JAR3-L42.5**
M13	M13	20.5	6	13	15	**JAR6-L20.5**
		45.5	6			**JAR6-L45.5**
		70.5	6			**JAR6-L70.5**



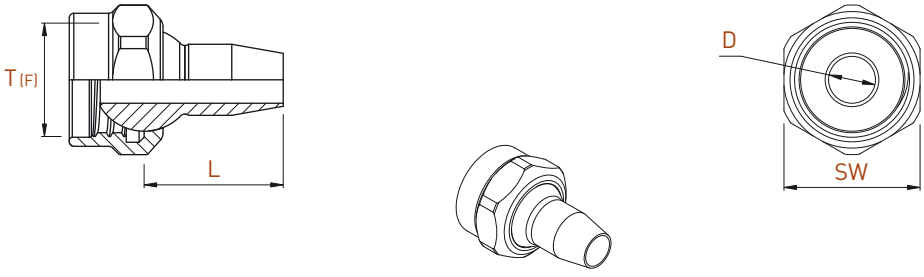




T1 (M)	T2 (M)	L	L1	D	SW	Art. N°
M6	M7.5	12	3	3	8	**JRMM-AR3-M6-L3.0**
M8X1	M7.5	14	3.5	3	11	**JRMM-AR3-M8X1-L3.5**
M10	M7.5	15	3	3	11	**JRMM-AR3-M10-L3.0**
M8X1	M13	17	4	6	13	**JRMM-AR6-M8X1-L4.0**
M10X1	M13	18	4	6	13	**JRMM-AR6-M10X1-L4.0**
BSP 1/8"	M13	18	4	6	13	**JRMM-AR6-BSP1/8-L4.0**

JJ-AR-SHORT

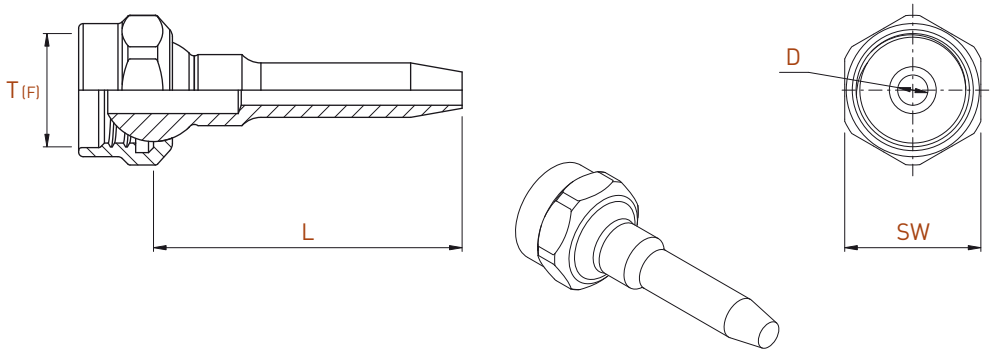
Buses
Düse
Nozzle



T (F)	L	D	SW	Art. N°
M7.5	9	3	9	**JJ-AR3-D3-L9**
M13	16	6	15	**JJ-AR6-D6-L16**

JJ-AR-LONG

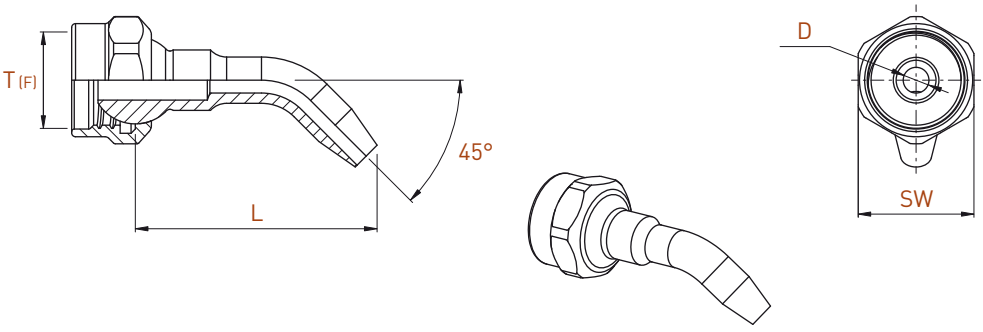
Buses
Düse
Nozzle



T (F)	L	D	SW	Art. N°
M7.5	20	2	9	**JJ-AR3-D2-L20**
M13	35	3	15	**JJ-AR6-D3-L35**

Buses
Düse
Nozzle

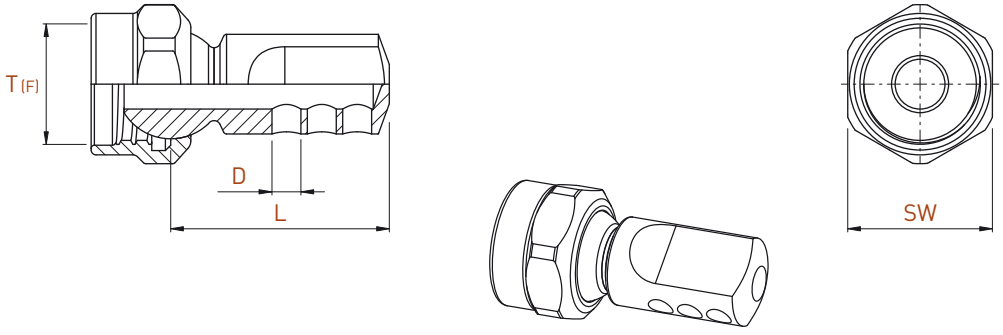
JJ-AR-CURVED



T (F)	L	D	SW	Art. N°
M7.5	19	2	9	**JJ-AR3-D2-L19-45°**
M13	23,5	6	15	**JJ-AR6-D6-L23.5-45°**

Buses
Düse
Nozzle

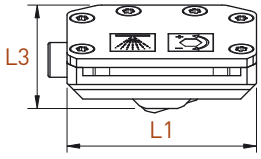
JJ-AR-3XD

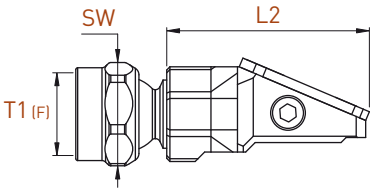


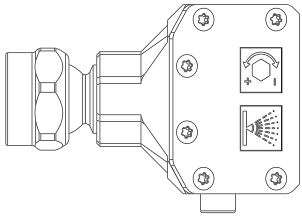
T (F)	L	D	SW	Art. N°
M7.5	15	1.8	9	**JJ-AR3-3XD1.8-L13.5**
M13	24	3.4	15	**JJ-AR6-3XD3.4-L24**

JJ-AR6-V

Buses plates jet diffusé
Flachdüse mit breitem Sprühstrahl
Diverging flat nozzle



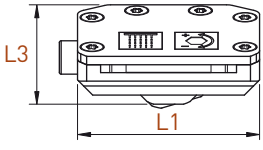


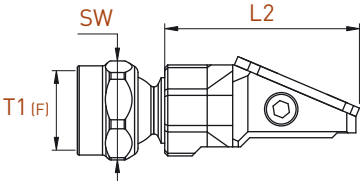


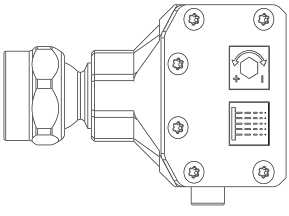
T1 (F)	L1	L2	L3	SW	Art. N°
ML13	20	30.6	16.4	15	**JJ-AR6-V20**
	30	32			**JJ-AR6-V30**
	40	38.5			**JJ-AR6-V40**
	50	43.5			**JJ-AR6-V50**

JJ-AR6-W

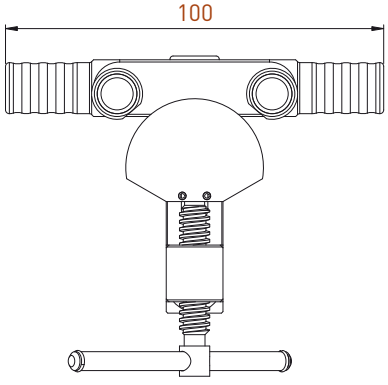
Buses plates jet droit
Flachdüse mit geradem Sprühstrahl
Straight flat nozzle

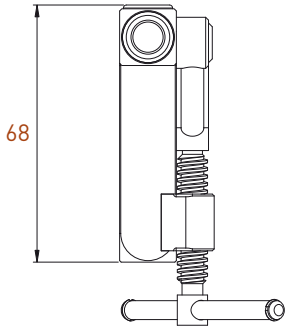


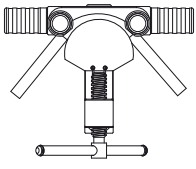




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	40	38.5			**JJ-AR6-W40**
	50	43.5			**JJ-AR6-W50**







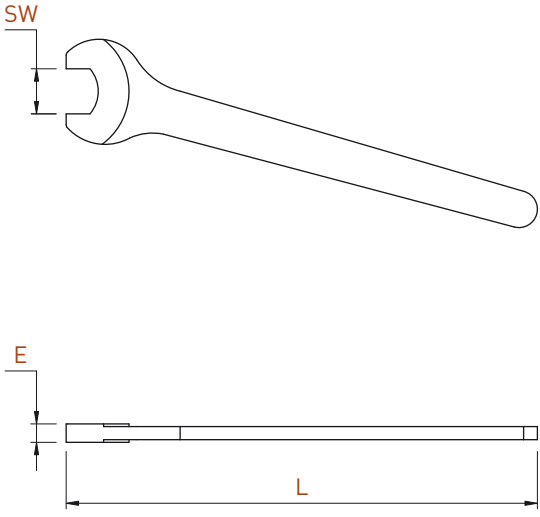
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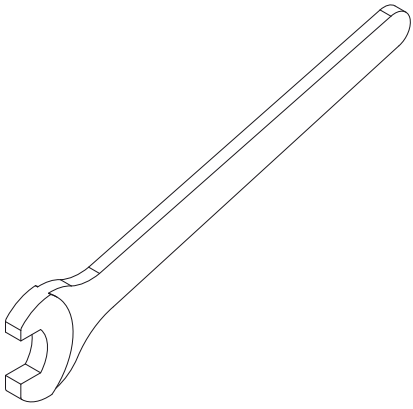
TEF

Rubans d'étanchéité pour filetage
Gewindedichtungsbänder
Thread sealing tapes



Largeur Breite Width	Épaisseur Dicke Thickness	Longueur Länge Length	**Art. N°**
6 mm	0.1 mm	12 m	**TEF-6010**





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	T216-R	7.08
	TEF	18.50
	TM	12.42
	TN (CUT-Line)	11.24
	TN (EVOCUT-Line)	10.31
	TP55	12.40
	TP60	12.38
	TR (EVOCUT-Line)	10.32
	TSN (EVOCUT-Line)	10.33
U	UL-UR (CUT-Line)	11.19
	UL-UR (EVOCUT-Line)	10.27
	UN (CUT-Line)	11.18
	UN (EVOCUT-Line)	10.26
V	VCGT...	9.62
	VCMT...	9.68
W	W750	1.186
	W751-E5	1.188
	W751-E6	1.190
	W760	1.186
	W761-E	1.188
	W761-E6	1.190

Légende des symboles
Symbollegende
Symbol Legend

E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	**731RU-1.0**	●		●			
1.2	5	**731RU-1.2**	●		●			
1.5	7	**731RU-1.5**	●		●	●		●
2.0	7	**731RU-2.0**	●		●			

● Article standart
Standardartikel
Standard item

P Acier
Stahl
Steel

M Inox
Rostfreistahl
Stainless steel

N Alliages d'aluminium et non ferreux
Aluminium- und Nichteisenlegierungen
Aluminium and non-ferrous alloys

S Titane et superalliages
Titan und Superlegierungen
Titanium and superalloys

H Acier trempé
Gehärteter Stahl
Hardened steel

K Fonte
Gusseisen
Cast iron

O Matière exotique
Exotisches material
Exotic material

Carbure
Hartmetall
Carbide

TiAlN



K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

P ★★★★★
M ★★★★★
N ★★★★☆
S ★★★★☆

TF — F — M — E

Épaisseur du revêtement
Dicken der Beschichtung
Thickness of the coating

TF Très fin
Sehr dünn
Very thin

F Fin
Dünn
Thin

M Moyen
Mittel
Medium

E Épais
Dick
Thick

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