CUT-Line

APPLITEC
CUTTING TOOLS

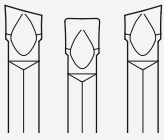
Index

CUT	22	-	U	R	-	8	02	Ou / Oder / Or	-	TIALN
								F		

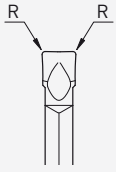
Nuance
Sorte
Grade

Angle de pointe
Spitzenwinkel
Point angle

L N R

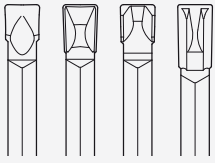


Rayon
Radius
Radius

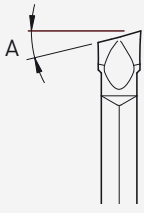


Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

U P T G

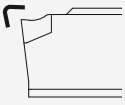


Valeur de l'angle de pointe
Wert des Spitzenwinkels
Value of the point angle



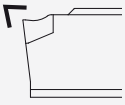
A
0°
8°
15°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

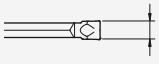
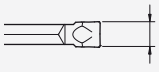
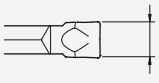


F

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

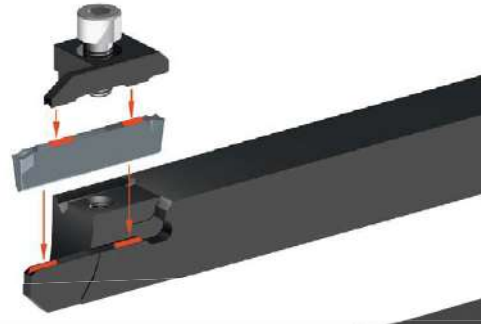


Epaisseur de coupe
Schnittbreite
Cutting thickness

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

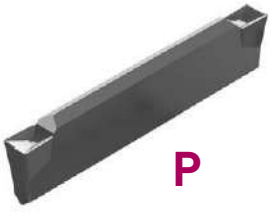
HX

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

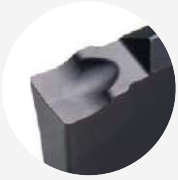
G

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.

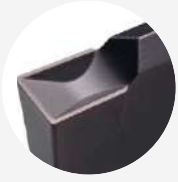
All the geometries of the inserts are designed to be fully compatible with the holders.

UN
UR
UL



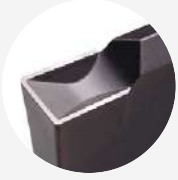
- géométrie positive universelle, bonne maîtrise du copeau
- Universalgeometrie positive gute Beherrschung der Späne
- all-round insert with efficient chip control

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)

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)

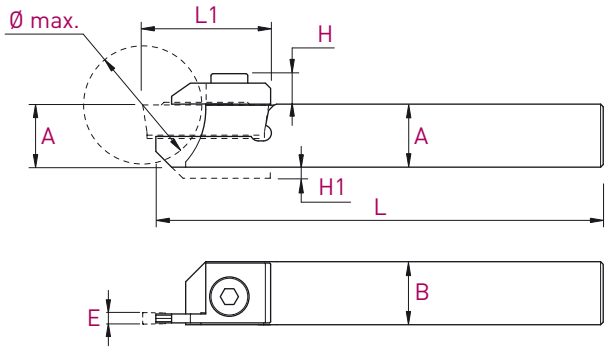
Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

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

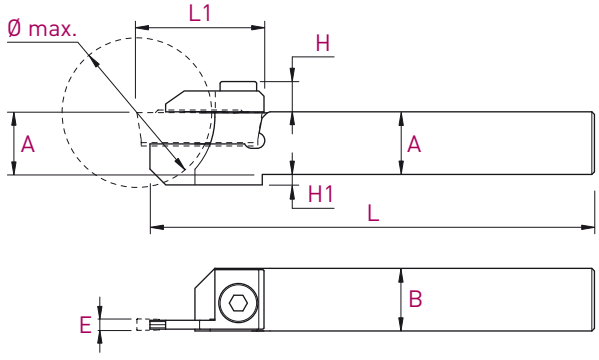
Ø max 34 mm

Porte-outils
Halter
Holders

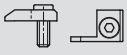


Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	L Art. N°	R Art. N°
E 1.6 mm **Type** CUT16	8 x 10	115	16	19.5	6.2	2	**CUT16-H0810L**	**CUT16-H0810R**
	10 x 10	115	16	19.5	6.2	-	**CUT16-H1010L**	**CUT16-H1010R**
	12 x 12	130	16	19.5	6.2	-	**CUT16-H1212L**	**CUT16-H1212R**
	12 x 12	90	16	19.5	6.2	-	**CUT16-H1212L-90**	**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



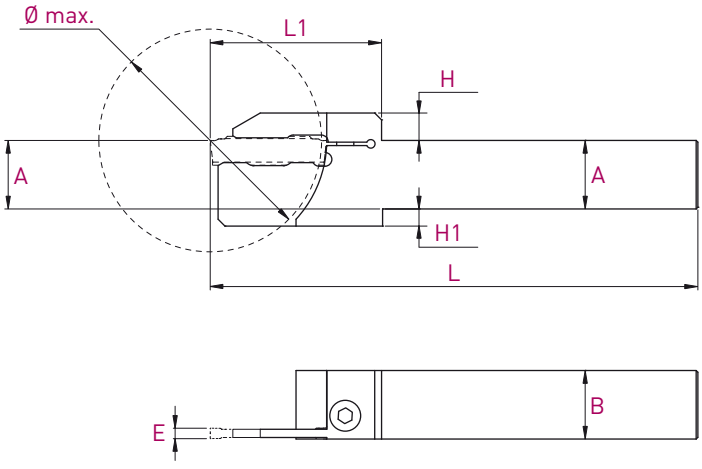
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	L  Art. N°	R  Art. N°
E 1.6 mm **Type** CUT16	10 x 12	115	20	21	6.2	2	**CUT16-H1012LX**	**CUT16-H1012RX**
	12 x 12	130	20	21	6.2	-	**CUT16-H1212LX**	**CUT16-H1212RX**
	12 x 12	90	20	21	6.2	-	**CUT16-H1212LX-90**	**CUT16-H1212RX-90**
	12.7 x 12.7	130	20	21	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



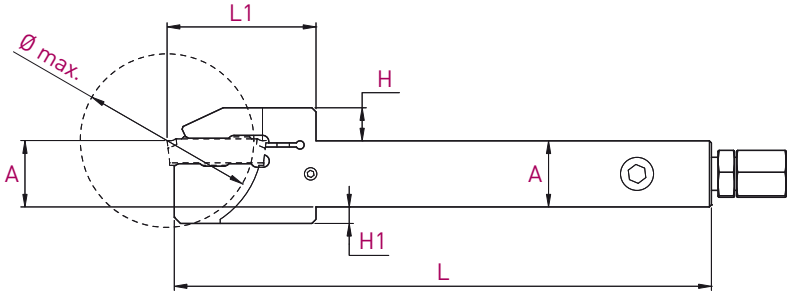
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	L **Art. N°**	R **Art. N°**
E 2.2 mm **Type** CUT22	16 x 16	130	32	30	7	-	**CUT22-H1616LZ-D32**	**CUT22-H1616RZ-D32**
	20 x 20	130	32	30	7	-	**CUT22-H2020LZ-D32**	**CUT22-H2020RZ-D32**
	16 x 16	130	42	35	7	4	**CUT22-H1616LZ-D42**	**CUT22-H1616RZ-D42**
	20 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**

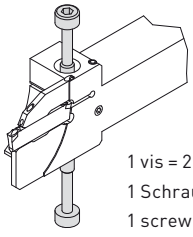
Pièces de rechange Ersatzteile Spare parts	Art. N°	Serrage Anzug Torque
CUT 22	**V-M4X10-BN7**	3.5 Nm
CUT 31	**V-M5X10-BN7**	4.5 Nm

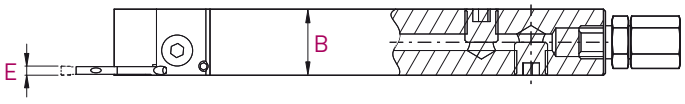
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

Ø max 65 mm

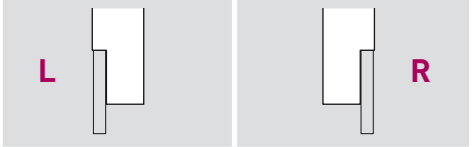
HZ-JET



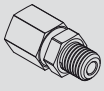


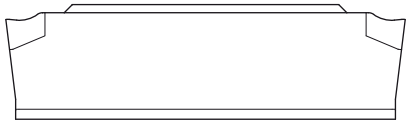


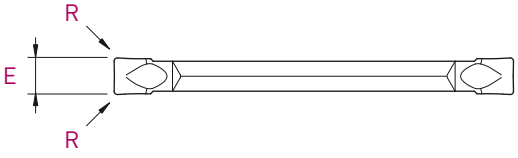
1 vis = 2 possibilités de serrage
1 Schraube = 2 Spannmöglichkeiten
1 screw = 2 clamp possibilities

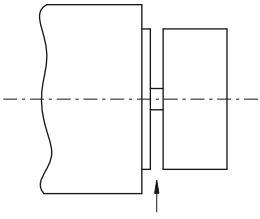


Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	Art. N°	Art. N°
E 2.2 mm **Type** CUT22	16 x 16	130	42	36	8	4	**CUT22-H1616LZ-JET42**	**CUT22-H1616RZ-JET42**
	20 x 20	130	42	36	8	-	**CUT22-H2020LZ-JET42**	**CUT22-H2020RZ-JET42**
E 3.1 mm **Type** CUT31	16 x 16	140	65	49	9	9	**CUT31-H1616LZ-JET65**	**CUT31-H1616RZ-JET65**
	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**

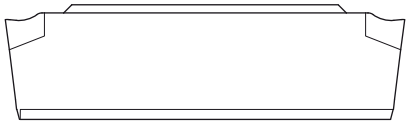


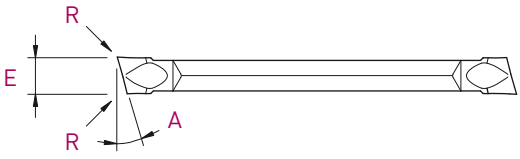


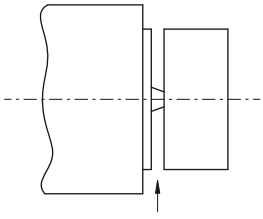


UN

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	●	●	●	●	●



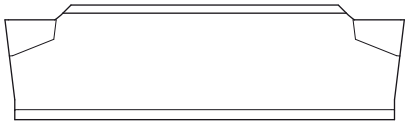


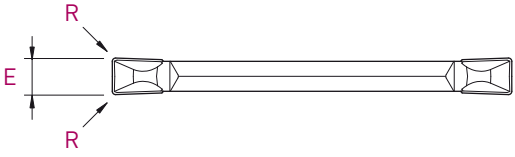


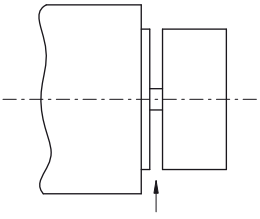
				UL				UR					
Type	E ±0.1	A	R	Art. N°	TiAlN	HTA	HAC	Art. N°	TiAlN	Tmax	Zmax	HTA	HAC
CUT16	1.6	8°	0.02	CUT16-UL-800F	●	●	●	CUT16-UR-800F	●			●	●
	1.6	15°	0.02	CUT16-UL-1500F	●	●	●	CUT16-UR-1500F	●			●	●
CUT22	2.2	8°	0.02	CUT22-UL-800F	●	●	●	CUT22-UR-800F	●			●	●
	2.2	8°	0.20	–				CUT22-UR-802		●	●		
	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

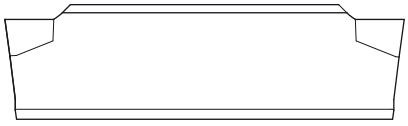


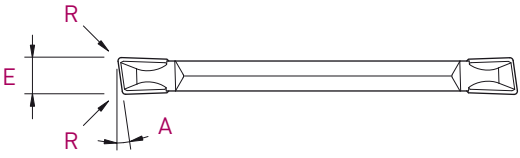


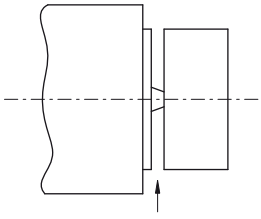


PN

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	●	●





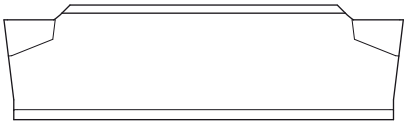


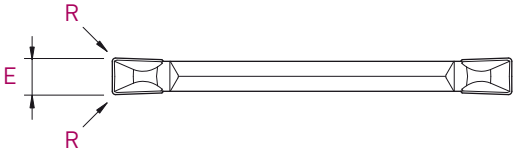
PR

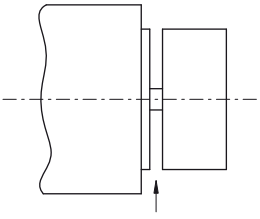
Type	E ±0.1	A	R	Art. N°	TiAlN	Tmax
CUT16	1.6	8°	0.10	**CUT16-PR-801**	●	●
CUT22	2.2	8°	0.20	**CUT22-PR-802**	●	●
CUT31	3.1	8°	0.20	**CUT31-PR-802**	●	●

PNW

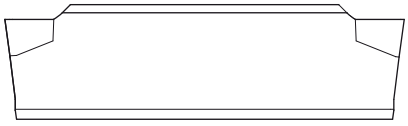
Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

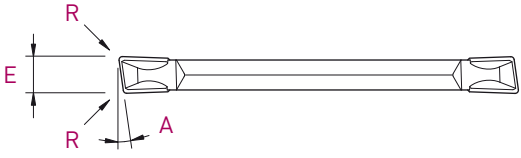


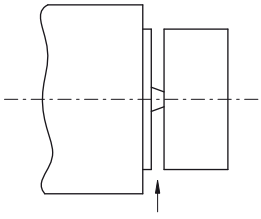




Type	E ±0.1	R	Art. N°	N S
CUT22	2.2	0.20	CUT22-PNW-002	●
CUT31	3.1	0.20	CUT31-PNW-002	●

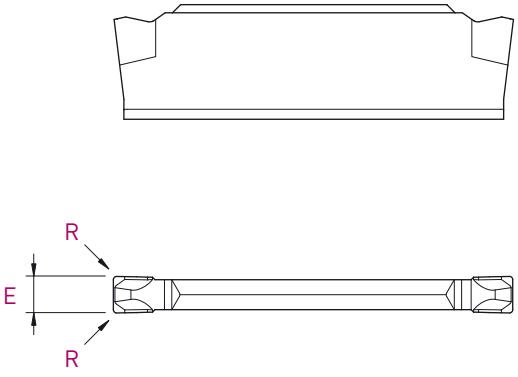


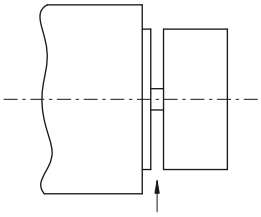




PRW

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	●

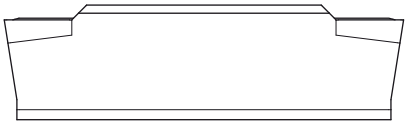


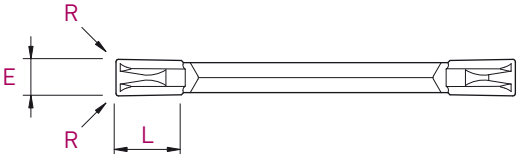


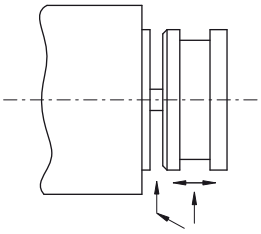
TN

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



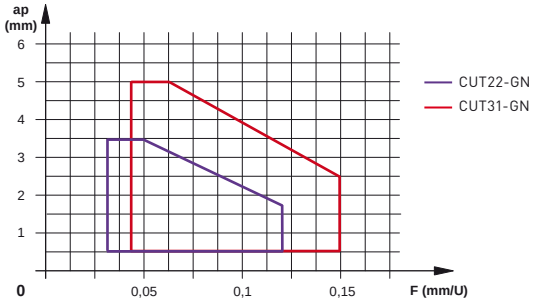


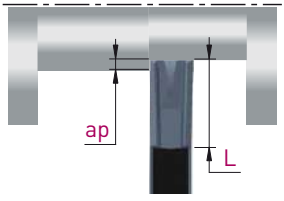


GN

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

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