LOUIS BELET®
Swiss Cutting tools

Image Willemin-Macodel, machining on 408MT machine

JEWELRY

luxury accessories

SWISS MADE

PLATINUM

78
Pt
Platinum
195.08

46
Pd
Palladium
106.42

PALLADIUM

Milling

REF. 4010 - PCD end mill l_1=1xd_1

REF. 4200 - PCD end mill with ball end

REF. 4100 - T-slot cutter in PCD

Drilling

REF. 4500 - PCD twist drill - 2 teeth

REF. 353 - Twist drill Z3 (SUN coated)

Threading

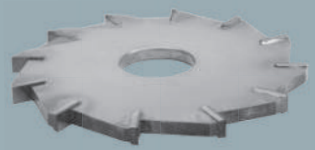
REF. 45600 - PCD Whirling tools

Engraving

REF. 4119-3 - Engraving mill in PCD - ¾

Sawing

PCD custom Slitting saw



Options :
(see p.10)

C01 | MCU ≤ ø3 | 701S ≤ ø3.2

79
Au
Gold
196.97

GOLD

Milling

REF. 114-2 - End mill with ball end Z2

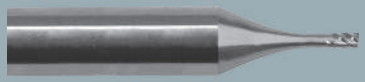
REF. 114-3 - End mill with ball end Z3

REF. 1510 - End mill Z3 l_1=1xd_1

REF. 1520C01 - Ceramic end mill Z3 l_1=2xd_1 EXPERT gold

REF. 1120 - Multi-uses end mill

REF. 1430/1450 - Micro end mill for deep machining



Drilling

REF. 339 -Micro twist drill - helix 24°

REF. 340-1 - Twist drill - helix 24°

REF. 353 - Twist drill Z3

REF. 335 - Step drill

Threading

REF. 5600 - Whirling tools Z3

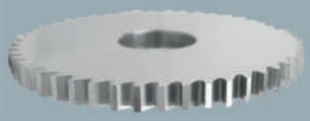
Engraving

REF. 119-2 - Helical engraving mill

REF. 4119-3 - Engraving mill in PCD - ¾

Sawing

REF.223-1 - Slitting saw DIN 1837 fine pitch



REF.228-2 - Angle cutter 12° to 20°

Options :
(see p.10)

C01 | MCU ≤ ø3 | 701S ≤ ø3.2

47
Ag
Silver
107.87

SILVER

Drilling

REF. 339 -Micro twist drill - helix 24°

REF. 340-1 - Twist drill - helix 24°

REF. 353 - Twist drill Z3

Milling

REF. 114-2 - End mill with ball end Z2

REF. 114-3 - End mill with ball end Z3

REF. 1510 - End mill Z3 l_1=1xd_1

REF. 1520C01 - Ceramic end mill Z3 l_1=2xd_1
EXPERT gold

REF. 1120 - Multi-uses end mill

Threading

REF. 5600 - Whirling tools Z3

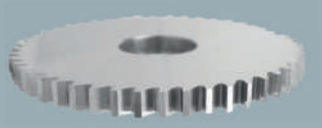
Engraving

REF. 119-2 - Helical engraving mill

REF. 4119-3 - Engraving mill in PCD - ¾

Sawing

REF.223-1 - Slitting saw DIN 1837 fine pitch



REF.228-2 - Angle cutter 12° to 20°

Options :
(see p.10)

C01 | MCU ≤ ø3 | 701S ≤ ø3.2

22
Ti
Titanium
47.87

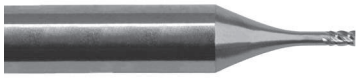
TITANIUM

Milling

REF. 114-2 - End mill with ball end Z2

REF. 114-3 - End mill with ball end Z3

REF. 1430/1450 - Micro end mill for deep machining



REF. 104-0 - Finishing end mill Z3

REF. 3100 - EXPERT end mill titanium

REF. 1620F- End mill for superfine finishing

REF. 1120 - Multi-uses end mill

Drilling

REF. 353 - Micro-foret Z3

Threading

REF. 5600 - Whirling tools Z3

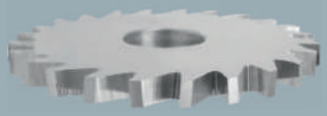
Engraving

REF. 119-3 - Engraving mill- ¾

REF. 119-4 - Engraving mill V-shape

Sawing

REF. 226 - Slitting saw staggered teeth



REF. 228-2 - Angle cutter 12° to 20°

Options :
(see p.10)

C01 | H | MCU ≤ ø3 | 701S ≤ ø3.2

29
Cu
Copper
63.55

+

30
Zn
Zinc
65.38

BRASS
LEAD-FREE BRASS

Milling

REF. 1820C01 - Ceramic EXPERT end mill for brass

REF. 1820 - EXPERT end mill for brass

REF. 114-2 - End mill with ball end Z2

REF. 114-3 - End mill with ball end Z3

REF. 4010 - PCD end mill l_1=1xd_1

Drilling

REF. 375 - EXPERT drill for brass

REF. 353 - Twist drill Z3

REF. 343 - Micro twist drill

Threading

REF. 5600 - Whirling tools Z3

REF. 45600 - PCD Whirling tools

Engraving

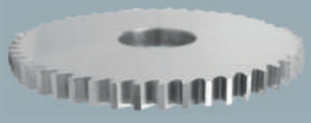
REF. 119-3 - Engraving mill- ¾

REF. 119-4 - Engraving mill V-shape

REF. 4119-3 - Engraving mill in PCD - ¾

Sawing

REF.223-1 - Slitting saw DIN 1837 fine pitch



REF.228-2 - Angle cutter 12° to 20°

Options :
(see p.10)

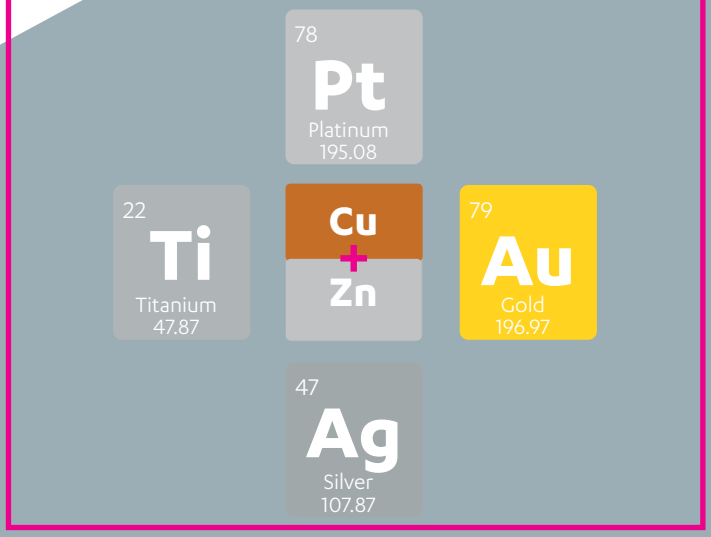
C01 | MCU ≤ ø3 | 701S ≤ ø3.2

CUSTOM FORM TOOLS
FOR ALL MATERIALS

End mill

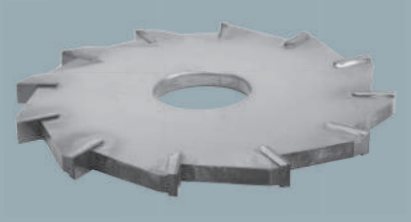
Step drill (1, 2 and 3 flutes)

T-slot end mill



Polygon cutter

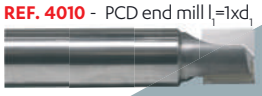
Thread mill



PCD Slitting saw

End mills with internal coolant

Material

Tools	Page	78 Pt Platinum 195.08	79 Au Gold 196.97	47 Ag Silver 107.87	22 Ti Titanium 47.87	Cu + Zn
Rec. Coating		SUN	SOLO	SOLO	MARC	SOLO
		Platinum / Palladium	Gold	Silver	Titanium	Brass
REF. 104-0- Finishing end mill Z3 	11	□	■	■	■	■
REF. 114-2 - End mill with ball end Z2 	12	□	■	■	■	■
REF. 114-3 - End mill with ball end Z3 	13	□	■	■	■	■
REF. 1120 - Multi-uses end mills 	14	□	■	■	■	■
REF. 1430-Micro end mill deep machining l_2=3xd_1 	15	-	■	■	■	■
REF. 1450-Micro end mill deep machining l_2=5xd_1 	16	-	■	■	■	■
REF. 1510 - End mill Z3 l_1=1xd_1 	17-18	□	■	■	■	■
REF. 1520C01 - Ceramic end mill EXPERT gold 	19	-	■	□	-	■
REF. 1620F - End mill for superfine finishing 	20	-	■	□	■	□
REF. 1820 - EXPERT end mill for brass 	21	-	□	□	■	■
REF. 1820C01 - Ceramic end mill EXPERT brass 	22	-	■	□	-	■
REF. 3100 - EXPERT end mill titanium 	23	-	-	-	■	-
REF. 4010 - PCD end mill l_1=1xd_1 	24	■	■	■	-	■
REF. 4100 - T-slot cutter in PCD 	25	■	■	■	-	■
REF. 4200 - PCD end mill with ball end 	26-27	■	■	■	-	■

Milling

not adapted - adapted □ highly adapted ■

Material

	78 Pt Platinum 195.08	79 Au Gold 196.97	47 Ag Silver 107.87	22 Ti Titanium 47.87	Cu + Zn
Rec. Coating	SUN	SOLO	SOLO	MARC	SOLO
Tools	Platinum / Palladium	Gold	Silver	Titanium	Brass
	Page				
Drilling					
REF. 335 - Step drill 	28	□	■	■	□	■
REF. 339 - Micro twist drill - helix 24° 	29	□	■	■	□	■
REF. 340-1 - Twist drill - helix 24° 	30-31	□	■	■	□	■
REF. 343 - Drill - helix 34° 	32-33	□	□	□	□	■
REF. 353 - Twist drill Z3 	34-36	□	■	□	■	□
REF. 375 - EXPERT drill for brass 	37	-	□	□	-	■
REF. 4500 - PCD twist drill - 2 teeth 	38-39	■	■	■	-	■
Sawing						
REF. 223-1 - Slitting saw DIN 1837 fine pitch 	41-46	-	■	■	□	■
REF.228-2 - Angle cutter 12° to 20° 	47	-	■	■	■	■
REF.226 - Slitting saw staggered teeth 	48-49	-	■	■	■	■
Engraving						
REF. 119-2- Helical engraving mill - flat tip 	50	-	■	■	□	□
REF. 119-3 - Engraving mill- ¾ - flat tip 	51	-	■	■	■	■
REF. 119-4 - Engraving mill V-shape 	52	-	■	■	■	■
REF. 4119-3 - Engraving mill in PCD - ¾ 	53	■	■	■	-	■
Threading						
REF. 5600 - Whirling tools Z3 	54	□	■	■	■	■
REF. 45600 - PCD Whirling tools 	55	■	■	■	-	■

Options

Ceramic (with beveled edge)

To order a ceramic tool, add the code "**C01**" after the part number.
Example: 104C01d0.50

Internal coolant

To order a tool with internal coolant, add the code "**H**" after the part number.
Example: 104Hd0.50

Micro machining centre

To order a tool compatible with micro machining centres, add the code "**M**" before the part number.
Example: M104d0.50

701S

To order a WM701S-compatible tool, add the code "**7**" before the part number.
Example: 7104d0.50

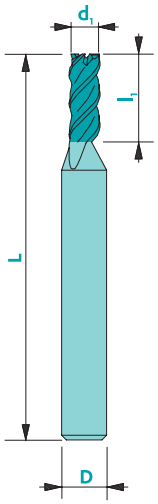
Finishing end mill Z3

Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating♦
Steel < 700 N/mm²	80	100	□	■	Trio (PO)
Steel > 700 N/mm²	60	80	□	■	Trio (PO)
Stainless steel	60	80	□	■	Tisi (BQ)
Cast iron	50	70	□	■	Nemo (NM)
Copper	80	100	□	■	Solo (DA)
Brass - Bronze	120	150	■	■	Solo (DA)
Aluminium	150	190	□	■	Solo (DA)
Gold - Silver	120	150	■	■	Solo (DA)
Platinum - Palladium	-	55	-	□	Sun (DG)
Superalloys	-	40	-	■	Tisi(BQ)
Titanium	40	60	■	■	Marc (ME)

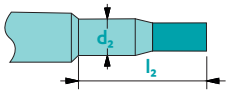
not adapted - adapted □ highly adapted ■

Tolerances

$d_1 \leq 1$ mm ▶ 0/-0.01 D: h5
$d_1 > 1$ mm ▶ 0/-0.02
$d_1 = D$ ▶ d_1: e8



Upon request



Art. n°	d_1	l_1	D	L
104-0d0.30	0.30	1.5	3	38
104-0d0.40	0.40	2.0	3	38
104-0d0.50	0.50	2.0	3	38
104-0d0.60	0.60	2.0	3	38
104-0d0.70	0.70	2.0	3	38
104-0d0.80	0.80	3.0	3	38
104-0d0.90	0.90	3.0	3	38
104-0d1.00	1.00	3.0	3	38
104-0d1.10	1.10	4.0	3	38
104-0d1.20	1.20	5.0	3	38
104-0d1.30	1.30	5.0	3	38
104-0d1.40	1.40	5.0	3	38
104-0d1.50	1.50	5.0	3	38
104-0d1.60	1.60	5.0	3	38
104-0d1.70	1.70	5.0	3	38
104-0d1.80	1.80	6.0	3	38
104-0d1.90	1.90	6.0	3	38
104-0d2.00	2.00	6.0	3	38
104-0d2.50	2.50	6.0	3	38
104-0d3.00	3.00	9.0	3	38
104-0d3.50	3.50	9.0	6	51
104-0d4.00	4.00	12.0	6	51
104-0d5.00	5.00	15.0	6	51
104-0d6.00	6.00	18.0	6	51
104-0d8.00	8.00	20.0	8	61
104-0d10.00	10.00	22.0	10	72
104-0d10.00	10.00	22.0	10	72
104-0d10.00	10.00	22.0	10	72

♦ Prices for coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

Available uncoated or coated

Z3

λ 45°

γ 8-10°

CARB

ap

ap ae

$ap = 0.25 \times d_1$

$ap = l_1$ max.

$ae = \frac{d_1^2}{4 \times Ap}$

If $d_1 \leq 0.5$ mm, a double cone applies

Options

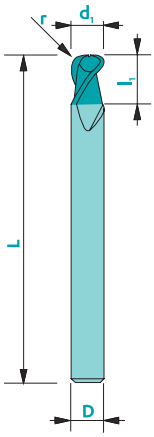
C01

MCU ≤ ø3

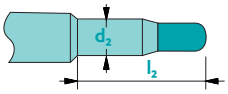
701S ≤ ø3.2

114-2

End mill with ball end Z2



Upon request



Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	80	100	□	■	Trio (PO)
Steel > 700 N/mm²	60	80	□	■	Trio (PO)
Stainless steel	60	80	□	■	Tisi (BQ)
Cast iron	50	70	□	■	Nemo (NM)
Copper	80	100	□	■	Solo (DA)
Brass - Bronze	120	150	■	■	Solo (DA)
Aluminium	150	190	□	■	Solo (DA)
Gold - Silver	120	150	■	■	Solo (DA)
Platinum - Palladium	-	55	-	□	Sun (DG)
Superalloys	-	40	-	■	Tisi(BQ)
Titanium	40	60	■	■	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances

$d_1 \leq 1$ mm ▶ 0/-0.01
$d_1 > 1$ mm ▶ 0/-0.02
$d_1 = D$ ▶ d_1 / r: e8

⌒ +0/-0.01
D: h5

Available uncoated or coated

Z2

λ 35°

γ 8-10°

CARB

ap

ap

ae

ap=0.25xd$_1$

ap= l_1 max.

ae= $\frac{d_1^2}{4xAp}$

If $d_1 \leq 0.5$ mm, a double cone applies

Art. n°	d_1	l_1	D	L	r
114-2d0.10	0.10	0.20	3	38	0.050
114-2d0.15	0.15	0.30	3	38	0.075
114-2d0.20	0.20	0.40	3	38	0.100
114-2d0.25	0.25	0.50	3	38	0.125
114-2d0.30	0.30	0.60	3	38	0.150
114-2d0.40	0.40	0.80	3	38	0.200
114-2d0.50	0.50	1.00	3	38	0.250
114-2d0.60	0.60	1.20	3	38	0.300
114-2d0.70	0.70	1.40	3	38	0.350
114-2d0.80	0.80	1.60	3	38	0.400
114-2d0.90	0.90	1.80	3	38	0.450
114-2d1.00	1.00	2.00	3	38	0.500
114-2d1.10	1.10	2.10	3	38	0.550
114-2d1.20	1.20	2.20	3	38	0.600
114-2d1.30	1.30	2.30	3	38	0.650
114-2d1.40	1.40	2.40	3	38	0.700
114-2d1.50	1.50	2.50	3	38	0.750
114-2d1.60	1.60	2.50	3	38	0.800

Art. n°	d_1	l_1	D	L	r
114-2d1.70	1.70	2.60	3	38	0.850
114-2d1.80	1.80	2.60	3	38	0.900
114-2d1.90	1.90	3.00	3	38	0.950
114-2d2.00	2.00	3.00	3	38	1.000
114-2d2.10	2.10	3.00	3	38	1.050
114-2d2.20	2.20	3.50	3	38	1.100
114-2d2.30	2.30	3.50	3	38	1.150
114-2d2.40	2.40	3.50	3	38	1.200
114-2d2.50	2.50	4.00	3	38	1.250
114-2d3.00	3.00	4.50	3	38	1.500
114-2d3.50	3.50	5.00	6	51	1.750
114-2d4.00	4.00	6.00	6	51	2.000
114-2d5.00	5.00	8.00	6	51	2.500
114-2d6.00	6.00	9.00	6	51	3.000
114-2d8.00	8.00	12.00	8	61	4.000
114-2d10.00	10.00	15.00	10	72	5.000
114-2d12.00	12.00	18.00	12	83	6.000

To order a coated tool, add the 2-letter coating code to the article number

Options

C01

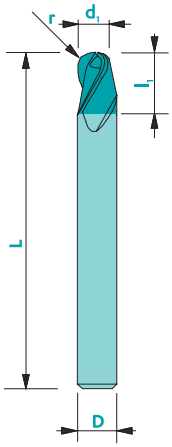
MCU ≤ ø3

701S ≤ ø3.2

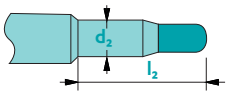
End mill with ball end Z3

Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	80	100	□	■	Trio (PO)
Steel > 700 N/mm²	60	80	□	■	Trio (PO)
Stainless steel	60	80	□	■	Tisi (BQ)
Cast iron	50	70	□	■	Nemo (NM)
Copper	80	100	□	■	Solo (DA)
Brass - Bronze	120	150	■	■	Solo (DA)
Aluminium	150	190	□	■	Solo (DA)
Gold - Silver	120	150	■	■	Solo (DA)
Platinum - Palladium	-	55	-	□	Sun (DG)
Superalloys	-	40	-	■	Tisi(BQ)
Titanium	40	60	■	■	Marc (ME)

not adapted - adapted □ highly adapted ■



Upon request



Tolerances

$d_1 \leq 1$ mm ▶ 0/-0.01
$d_1 > 1$ mm ▶ 0/-0.02
$d_1 = D$ ▶ d_1 / r: e8

D: h5
+0/-0.01

Art. n°	d_1	l_1	D	L	r
114-3d1.00	1.0	2.0	3	38	0.50
114-3d1.50	1.5	2.5	3	38	0.75
114-3d2.00	2.0	3.0	3	38	1.00
114-3d2.50	2.5	4.0	3	38	1.25
114-3d3.00	3.0	4.5	3	38	1.50
114-3d3.50	3.5	5.0	6	51	1.75
114-3d4.00	4.0	6.0	6	51	2.00
114-3d5.00	5.0	8.0	6	51	2.50
114-3d6.00	6.0	9.0	6	51	3.00
114-3d8.00	8.0	12.0	8	61	4.00
114-3d10.00	10.0	15.0	10	72	5.00
114-3d12.00	12.0	18.0	12	83	6.00
114-3d12.00	12.0	18.0	12	83	6.00

* Prices for coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

Available uncoated or coated

Z3

λ 30°

γ 8-10°

CARB

ap

ap ae

ap=0.25xd$_1$

ap= l_1 max.
ae= $\frac{d_1^2}{4xAp}$

Options

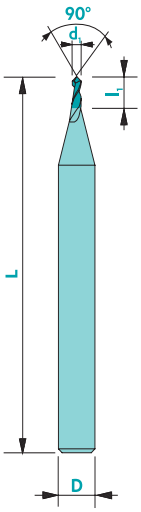
C01

MCU ≤ ø3

701S ≤ ø3.2

1120

Multi-uses end mill



Material	Vc uncoated	Vc coated	Uncoated	Coated	Rec. Coating
Steel < 700 N/mm²	100	130	□	■	Trio (PO)
Steel > 700 N/mm²	80	100	-	■	Trio (PO)
Stainless steel	50	70	□	■	Trio (PO)
Cast iron	60	100	□	■	Nemo (NM)
Copper	130	160	□	■	Solo (DA)
Brass - Bronze	140	190	■	□	Solo (DA)
Aluminium	200	350	□	■	Solo (DA)
Gold - Silver	140	180	■	■	Solo (DA)
Platinum - Palladium	-	35	-	□	Sun (DG)
Superalloys	-	40	-	■	Solo (DA)
Titanium	40	60	■	■	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances

$d_1 \leq 1$ mm ▶ +0/-0.01 D: h5
$d_1 > 1$ mm ▶ +0/-0.02
$d_1 = D$ ▶ d_1: e8

Available uncoated or coated

90° | Z2

λ 35° | γ 8-10°

MG10 | N

ap | ap, ae

ap=0.25xd_1 | ae=0.5xd_1 ap=0.5xd_1

Upon request

120° | 60°

Options

C01 | H

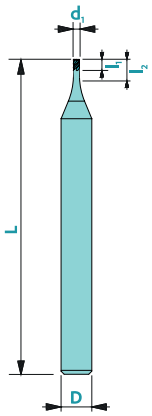
MCU ≤ ø3 | 701S ≤ ø3.2

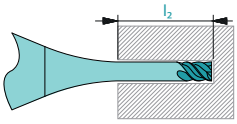
Art. n°	d_1	l_1	D	L
1120d0.50	0.50	1.0	3	38
1120d0.60	0.60	1.2	3	38
1120d0.70	0.70	1.4	3	38
1120d0.80	0.80	1.6	3	38
1120d0.90	0.90	1.8	3	38
1120d1.00	1.00	2.0	3	38
1120d1.50	1.50	3.0	3	38
1120d2.00	2.00	4.0	3	38
1120d3.00	3.00	6.0	6	51
1120d4.00	4.00	8.0	6	51
1120d6.00	6.00	12.0	6	51

Micro end mill for deep machining l_2=3xd_1

Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	-	-	-	-	-
Steel > 700 N/mm²	-	-	-	-	-
Stainless steel	-	40	-	■	Tisi (BQ)
Cast iron	-	-	-	-	-
Copper	-	-	-	-	-
Brass - Bronze	-	-	■	■	Solo (DA)
Aluminium	-	-	-	-	-
Gold - Silver	120	150	■	■	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Cobalt-chrome	-	100	-	■	Trio (PO)
Titanium	40	60	■	■	Marc (ME)

not adapted - adapted □ highly adapted ■





Tolerances

d_1: 0/-0.01
l_1 : +0.05/0
l_2 : +0.2/0

D: h5
L :±0.5

Art. n°	d_1	l_1	l_2	D	L	Z
1430d0.20	0.20	0.30	0.60	3.0	38	3
1430d0.25	0.25	0.38	0.75	3.0	38	3
1430d0.30	0.30	0.45	0.90	3.0	38	3
1430d0.35	0.35	0.52	1.05	3.0	38	4
1430d0.40	0.40	0.60	1.20	3.0	38	4
1430d0.45	0.45	0.68	1.35	3.0	38	4
1430d0.50	0.50	0.75	1.50	3.0	38	4
1430d0.60	0.60	0.90	1.80	3.0	38	4
1430d0.70	0.70	1.05	2.10	3.0	38	4
1430d0.80	0.80	1.20	2.40	3.0	38	4
1430d0.90	0.90	1.35	2.70	3.0	38	4
1430d1.00	1.00	1.50	3.00	3.0	38	4

* Prices for coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

Available uncoated or coated

Z3-4

λ 45°

γ 14°

CARB

pas ap ae

pas=0.8xd_1

ap= l_1 max.

ae= $\frac{d_1^2}{4xAp}$

If d_1 ≤ 0.5 mm, a double cone applies

Options

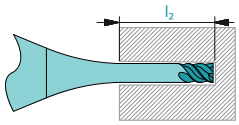
C01

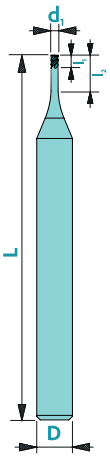
MCU ≤ ø3

701S ≤ ø3.2

1450

Micro end mill for deep machining l_2=5xd_1





Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating♦
Steel < 700 N/mm²	-	-	-	-	-
Steel > 700 N/mm²	-	-	-	-	-
Stainless steel	-	40	-	■	Tisi (BQ)
Cast iron	-	-	-	-	-
Copper	-	-	-	-	-
Brass - Bronze	-	-	■	■	Solo (DA)
Aluminium	-	-	-	-	-
Gold - Silver	120	150	■	■	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Cobalt-chrome	-	100	-	■	Trio (PO)
Titanium	40	60	■	■	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances

d_1: 0/-0.01
l_1 : +0.05/0
l_2 : +0.2/0
D: h5
L : ±0.5

Available uncoated or coated

Z3-4

λ 45°

γ 14°

CARB

pas ap ae

pas=0.8xd_1 ap= l_1 max. ae= $\frac{d_1^2}{4xAp}$

If d_1 ≤ 0.5 mm, a double cone applies

Art. n°	d_1	l_1	l_2	D	L	Z
1450d0.20	0.20	0.30	1.00	3.0	38	3
1450d0.25	0.25	0.38	1.25	3.0	38	3
1450d0.30	0.30	0.45	1.50	3.0	38	3
1450d0.35	0.35	0.52	1.75	3.0	38	4
1450d0.40	0.40	0.60	2.00	3.0	38	4
1450d0.45	0.45	0.68	2.25	3.0	38	4
1450d0.50	0.50	0.75	2.50	3.0	38	4
1450d0.60	0.60	0.90	3.00	3.0	38	4
1450d0.70	0.70	1.05	3.50	3.0	38	4
1450d0.80	0.80	1.20	4.00	3.0	38	4
1450d0.90	0.90	1.35	4.50	3.0	38	4
1450d1.00	1.00	1.50	5.00	3.0	38	4

♦ Prices for coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

Options

C01

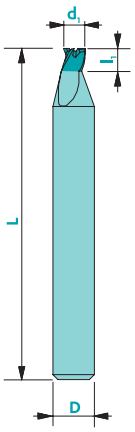
MCU ≤ ø3

701S ≤ ø3.2

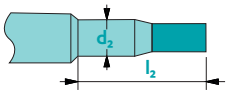
End mill Z3 l_1=1xd_1

Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	80	100	□	■	Trio (PO)
Steel > 700 N/mm²	60	80	□	■	Trio (PO)
Stainless steel	60	80	□	■	Tisi (BQ)
Cast iron	50	70	□	■	Nemo (NM)
Copper	80	100	□	■	Solo (DA)
Brass - Bronze	120	150	■	■	Solo (DA)
Aluminium	150	190	□	■	Solo (DA)
Gold - Silver	120	150	■	■	Solo (DA)
Platinum - Palladium	-	55	-	□	Sun (DG)
Superalloys	-	40	-	■	Tisi(BQ)
Titanium	40	60	■	■	Marc (ME)

not adapted - adapted □ highly adapted ■



Upon request



Tolerances

$d_1 \leq 1$ mm ▶ 0/-0.01 D: h5
$d_1 > 1$ mm ▶ 0/-0.02
$d_1 = D$ ▶ d_1: e8

Art. n°	d_1	l_1	D	L
1510d0.30	0.30	0.30	3	38
1510d0.35	0.35	0.35	3	38
1510d0.40	0.40	0.40	3	38
1510d0.45	0.45	0.45	3	38
1510d0.50	0.50	0.50	3	38
1510d0.55	0.55	0.55	3	38
1510d0.60	0.60	0.60	3	38
1510d0.65	0.65	0.65	3	38
1510d0.70	0.70	0.70	3	38
1510d0.75	0.75	0.75	3	38
1510d0.80	0.80	0.80	3	38
1510d0.85	0.85	0.85	3	38
1510d0.90	0.90	0.90	3	38
1510d0.95	0.95	0.95	3	38
1510d1.00	1.00	1.00	3	38
1510d1.05	1.05	1.05	3	38
1510d1.10	1.10	1.10	3	38
1510d1.15	1.15	1.15	3	38
1510d1.20	1.20	1.20	3	38
1510d1.25	1.25	1.25	3	38
1510d1.30	1.30	1.30	3	38
1510d1.35	1.35	1.35	3	38
1510d1.40	1.40	1.40	3	38
1510d1.45	1.45	1.45	3	38
1510d1.50	1.50	1.50	3	38
1510d1.55	1.55	1.55	3	38
1510d1.60	1.60	1.60	3	38
1510d1.65	1.65	1.65	3	38
1510d1.70	1.70	1.70	3	38
1510d1.75	1.75	1.75	3	38
1510d1.80	1.80	1.80	3	38

Art. n°	d_1	l_1	D	L
1510d1.85	1.85	1.85	3	38
1510d1.90	1.90	1.90	3	38
1510d1.95	1.95	1.95	3	38
1510d2.00	2.00	2.00	3	38
1510d2.05	2.05	2.05	3	38
1510d2.10	2.10	2.10	3	38
1510d2.15	2.15	2.15	3	38
1510d2.20	2.20	2.20	3	38
1510d2.25	2.25	2.25	3	38
1510d2.30	2.30	2.30	3	38
1510d2.35	2.35	2.35	3	38
1510d2.40	2.40	2.40	3	38
1510d2.45	2.45	2.45	3	38
1510d2.50	2.50	2.50	3	38
1510d2.55	2.55	2.55	3	38
1510d2.60	2.60	2.60	3	38
1510d2.65	2.65	2.65	3	38
1510d2.70	2.70	2.70	3	38
1510d2.75	2.75	2.75	3	38
1510d2.80	2.80	2.80	3	38
1510d2.85	2.85	2.85	3	38
1510d2.90	2.90	2.90	3	38
1510d2.95	2.95	2.95	3	38
1510d3.00	3.00	3.00	6	51
1510d3.10	3.10	3.10	6	51
1510d3.20	3.20	3.20	6	51
1510d3.30	3.30	3.30	6	51
1510d3.40	3.40	3.40	6	51
1510d3.50	3.50	3.50	6	51
1510d3.60	3.60	3.60	6	51
1510d3.70	3.70	3.70	6	51

To order a coated tool, add the 2-letter coating code to the article number

Available uncoated or coated

Z3

λ 30°

γ 8-10°

CARB

ap=0.25xd_1

ap= l_1 max.
ae= $\frac{d_1^2}{4xAp}$

If $d_1 \leq 0.5$ mm, a double cone applies

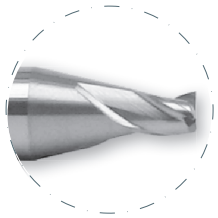
Options

C01

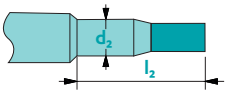
MCU ≤ ø3

701S ≤ ø3.2

End mill Z3 l_1=1xd_1



Upon request



Available
uncoated or coated

Z3

λ 30°

γ 8-10°

CARB

ap=0.25xd_1 ap= l_1 max.

ae= $\frac{d_1^2}{4xAp}$

Art. n°	d_1	l_1	D	L
1510d3.80	3.80	3.80	6	51
1510d3.90	3.90	3.90	6	51
1510d4.00	4.00	4.00	6	51
1510d4.10	4.10	4.10	6	51
1510d4.20	4.20	4.20	6	51
1510d4.30	4.30	4.30	6	51
1510d4.40	4.40	4.40	6	51
1510d4.50	4.50	4.50	6	51
1510d4.60	4.60	4.60	6	51
1510d4.70	4.70	4.70	6	51
1510d4.80	4.80	4.80	6	51
1510d4.90	4.90	4.90	6	51
1510d5.00	5.00	5.00	6	51
1510d5.10	5.10	5.10	6	51
1510d5.20	5.20	5.20	6	51
1510d5.30	5.30	5.30	6	51
1510d5.40	5.40	5.40	6	51
1510d5.50	5.50	5.50	6	51
1510d5.60	5.60	5.60	6	51
1510d5.70	5.70	5.70	6	51
1510d5.80	5.80	5.80	6	51
1510d5.90	5.90	5.90	6	51
1510d6.00	6.00	6.00	6	51
1510d6.50	6.50	6.50	8	61
1510d7.00	7.00	7.00	8	61
1510d7.50	7.50	7.50	8	61
1510d8.00	8.00	8.00	8	61
1510d8.50	8.50	8.50	10	72
1510d9.00	9.00	9.00	10	72
1510d9.50	9.50	9.50	10	72
1510d10.00	10.00	10.00	10	72
1510d11.00	11.00	11.00	11	83
1510d12.00	12.00	12.00	12	83
1510d13.00	13.00	13.00	13	83
1510d14.00	14.00	14.00	14	83
1510d15.00	15.00	15.00	15	83
1510d16.00	16.00	16.00	16	92

To order a coated tool, add the 2-letter coating code to the article number

Options

C01

MCU
≤ ø3

701S
≤ ø3.2

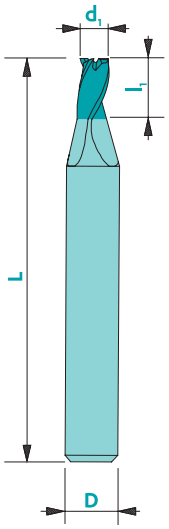
Ceramic end mill Z3 l_1=2xd_1 EXPERT gold

1520C01

Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Composite	-	-	-	-	-
Steel < 700 N/mm²	-	-	-	-	-
Steel > 700 N/mm²	-	-	-	-	-
Stainless steel	-	-	-	-	-
Cast iron	-	-	-	-	-
Copper	150-500	-	■	-	-
Brass - Bronze	250	-	■	-	-
Aluminium	100-200	-	■	-	-
Gold - Silver	200	-	■	-	-
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Titanium	-	-	-	-	-

not adapted - adapted □ highly adapted ■

Tolerances $d_1 \leq 1$ mm ▶ 0/-0.01 D: h5
$d_1 > 1$ mm ▶ 0/-0.02



Art. n°	d_1	l_1	D	L
1520C01d0.50	0.50	1.00	3	38
1520C01d0.80	0.80	1.60	3	38
1520C01d1.00	1.00	2.00	3	38
1520C01d1.50	1.50	3.00	3	38
1520C01d2.00	2.00	4.00	3	38
1520C01d3.00	3.00	5.00	6	51

Available uncoated

0.02-0.05

Z3

λ 30°

γ 8-10°

C01

ap

ap
ae

ap=0.25xd_1

ap= l_1 max.
ae= $\frac{d_1^2}{4xAp}$

If $d_1 \leq 0.5$ mm, a double cone applies

Options

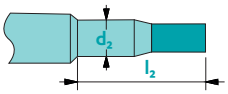
MCU ≤ ø3

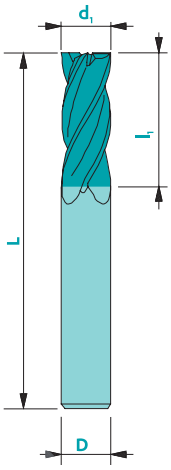
701S ≤ ø3.2

1620F

End mill for superfine finishing

Upon request





Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	-	-	-	-	-
Steel > 700 N/mm²	-	-	-	-	-
Stainless steel	-	100	-	■	Tisi (BQ)
Cast iron	-	-	-	-	-
Copper	-	-	-	-	-
Brass - Bronze	-	-	-	□	Tisi (BQ)
Aluminium	-	-	-	-	-
Gold - Silver	-	-	-	■	Tisi (BQ)
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Titanium	-	60	-	■	Tisi (BQ)

not adapted - adapted □ highly adapted ■

Tolerances

$d_1 \leq 1$ mm ▶ 0/-0.01
$d_1 > 1$ mm ▶ 0/-0.02
$d_1 = D$ ▶ d_1: e8

D: h5

Available coated only

Z4

λ 35-40°

γ 8°

CARB

ap= l_1 max.

ae= $\frac{d_1^2}{4xAp}$

Art. n°	d_1	l_1	D	L
1620Fd2.00BQ	**2.0**	**4**	6	51
1620Fd3.00BQ	**3.0**	**6**	6	51
1620Fd4.00BQ	**4.0**	**8**	6	51
1620Fd5.00BQ	**5.0**	**10**	6	51
1620Fd6.00BQ	**6.0**	**12**	6	51
1620Fd8.00BQ	**8.0**	**16**	8	61
1620Fd10.00BQ	**10.0**	**20**	10	72
1620Fd12.00BQ	**12.0**	**24**	12	83

To order a coated tool, add the 2-letter coating code to the article number

Options

MCU ≤ ø3

701S ≤ ø3.2

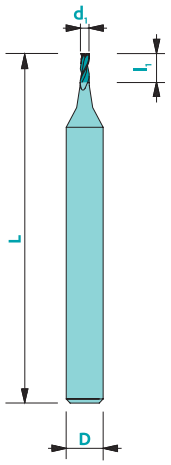
EXPERT end mill for brass - spiral toothing

1820

Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating♦
Steel < 700 N/mm²	-	-	-	-	-
Steel > 700 N/mm²	-	-	-	-	-
Stainless steel	-	-	-	-	-
Cast iron	-	-	-	-	-
Copper	-	-	-	-	-
Brass - Bronze	140	190	■	□	Solo (DA)
Aluminium	-	-	-	-	-
Gold - Silver	-	-	□	□	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Titanium	-	-	-	■	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances $d_1 \leq 1$ mm ▶ 0/-0.01 D: h5
$d_1 > 1$ mm ▶ 0/-0.02



Art. n°	d_1	l_1	D	L
1820d0.50	0.50	1.00	4	38
1820d0.80	0.80	1.60	4	38
1820d1.00	1.00	2.00	4	38
1820d1.50	1.50	3.00	4	38
1820d2.00	2.00	4.00	4	38
1820d3.00	3.00	5.00	4	38

Other dimensions available upon request

♦ Prices for coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

Available uncoated or coated

Z3

λ 30°

γ 4°

CARB

ap

ap
ae

ap=0.25xd$_1$

ap= l_1 max.
ae= $\frac{d_1^2}{4xAp}$

If $d_1 \leq 0.5$ mm, a double cone applies

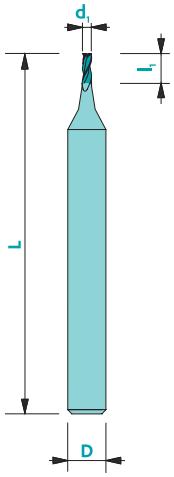
Options

MCU ≤ ø3

701S ≤ ø3.2

1820C01

Ceramic end mill
EXPERT brass



Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Composite	-	-	-	-	-
Steel < 700 N/mm²	-	-	-	-	-
Steel > 700 N/mm²	-	-	-	-	-
Stainless steel	-	-	-	-	-
Cast iron	-	-	-	-	-
Copper	-	-	-	-	-
Brass - Bronze	150-500	-	■	-	-
Aluminium	-	-	-	-	-
Gold - Silver	100-200	-	■	-	-
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Titanium	-	-	-	-	-

not adapted - adapted □ highly adapted ■

Tolerances $d_1 \leq 1$ mm ▶ 0/-0.01 D: h5
$d_1 > 1$ mm ▶ 0/-0.02

Available uncoated

0.02-0.05

Z3

λ **30°**

γ **4°**

C01

ap

ap ae

$ap = 0.25 \times d_1$

$ap = l_1$ max.

$ae = \frac{d_1^2}{4 \times Ap}$

If $d_1 \leq 0.5$ mm, a double cone applies

Art. n°	d_1	l_1	D	L
1820C01d0.50	**0.50**	**1.00**	4	38
1820C01d0.80	**0.80**	**1.60**	4	38
1820C01d1.00	**1.00**	**2.00**	4	38
1820C01d1.50	**1.50**	**3.00**	4	38
1820C01d2.00	**2.00**	**4.00**	4	38
1820C01d3.00	**3.00**	**5.00**	4	38

Options

MCU ≤ ø3

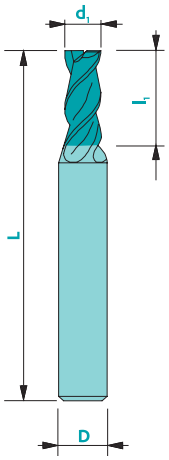
701S ≤ ø3.2

EXPERT end mill titanium

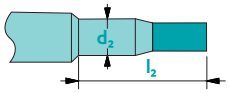
Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating♦
Steel < 700 N/mm²	-	-	-	-	-
Steel > 700 N/mm²	-	-	-	-	-
Stainless steel	-	-	-	-	-
Cast iron	-	-	-	-	-
Copper	-	-	-	-	-
Brass - Bronze	-	-	-	-	-
Aluminium	-	-	-	-	-
Gold - Silver	-	-	-	-	-
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Titanium	40	60	■	■	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances $d_1 \leq 1$ mm ▶ 0/-0.01 D: h5
$d_1 > 1$ mm ▶ 0/-0.02
$d_1 = D$ ▶ d_1: e8



Upon request



Art. n°	d_1	l_1	D	L	Z
3100d0.50	0.5	1.0	6	57	3
3100d0.60	0.6	1.2	6	57	3
3100d0.70	0.7	1.4	6	57	3
3100d0.80	0.8	1.6	6	57	3
3100d0.90	0.9	1.8	6	57	3
3100d1.00	1.0	2.0	6	57	3
3100d1.10	1.1	2.2	6	57	3
3100d1.20	1.2	2.4	6	57	3
3100d1.30	1.3	2.6	6	57	3
3100d1.40	1.4	2.8	6	57	3
3100d1.50	1.5	3.0	6	57	3
3100d1.60	1.6	3.2	6	57	3
3100d1.70	1.7	3.4	6	57	3
3100d1.80	1.8	3.6	6	57	3
3100d1.90	1.9	3.8	6	57	3
3100d2.00	2.0	4.0	6	57	3
3100d2.10	2.1	4.2	6	57	3
3100d2.20	2.2	4.4	6	57	3
3100d2.30	2.3	4.6	6	57	3
3100d2.40	2.4	4.8	6	57	3
3100d2.50	2.5	5.0	6	57	3
3100d2.60	2.6	5.2	6	57	3
3100d2.70	2.7	5.4	6	57	3
3100d2.80	2.8	5.6	6	57	3

Art. n°	d_1	l_1	D	L	Z
3100d2.90	2.9	5.8	6	57	3
3100d3.00	3.0	6.0	6	57	3
3100d3.50	3.5	7.0	6	57	3
3100d4.00	4.0	8.0	6	57	3
3100d5.00	5.0	10.0	6	57	3
3100d6.00	6.0	12.0	8	63	3
3100d8.00	8.0	16.0	8	63	3
3100d10.00	10.0	20.0	10	72	4
3100d12.00	12.0	24.0	12	83	4

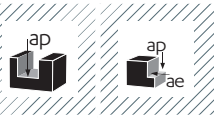
Available uncoated or coated

Z3-4

λ 45°

γ 8°

CARB



ap=0.25xd$_1$ ap= l_1 max. ae= $\frac{d_1^2}{4xAp}$

If $d_1 \leq 0.5$ mm, a double cone applies

♦ Prices for coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

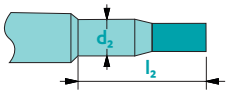
Options

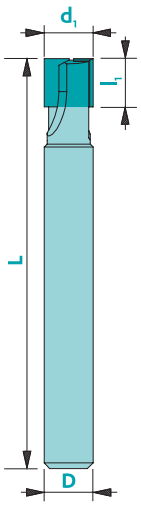
MCU ≤ ø3

701S ≤ ø3.2

PCD end mill l_1=1xd_1

Upon request





Material	Vc [m/min]	Uncoated
Steel < 700 N/mm²	-	-
Steel > 700 N/mm²	-	-
Stainless steel	-	-
Cast iron	-	-
Copper	350	■
Brass - Bronze	500	■
Aluminium	1000	■
Gold - Silver	300	■
Platinum - Palladium	130	■
Superalloys	-	-
Titanium	-	-
Composite	500	■

not adapted - adapted □ highly adapted ■

Tolerances d_1 < 1mm ▶ 0/-0.01 l_1: +0.2/-0
d_1 > 1mm ▶ 0/-0.02 D: h5

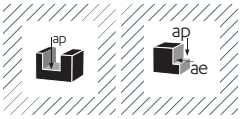
Available uncoated only

Z1-2

λ 0°

γ 0°

PCD



ap=0.15xd_1 ae=0.03xd_1
ap=1xd_1

If d_1 ≤ 0.5 mm, a double cone applies

Options

45° 0.03-0.20

r 0.05-2.00

MCU ≤ ø3

701S ≤ ø6

Art. n°	d_1	l_1	D	L	Z
4010d0.20L38Z1	0.2	0.2	6	38	1
4010d0.30L38Z1	0.3	0.3	6	38	1
4010d0.40L38Z1	0.4	0.4	6	38	1
4010d0.40L38Z2	0.4	0.4	6	38	2
4010d0.50L38Z1	0.5	0.5	6	38	1
4010d0.50L38Z2	0.5	0.5	6	38	2
4010d0.60L38Z1	0.6	0.6	6	38	1
4010d0.60L38Z2	0.6	0.6	6	38	2
4010d0.70L38Z1	0.7	0.7	6	38	1
4010d0.70L38Z2	0.7	0.7	6	38	2
4010d0.80L38Z1	0.8	0.8	6	38	1
4010d0.80L38Z2	0.8	0.8	6	38	2
4010d0.90L38Z1	0.9	0.9	6	38	1
4010d0.90L38Z2	0.9	0.9	6	38	2
4010d1.00L38Z1	1.0	1.0	6	38	1
4010d1.00L38Z2	1.0	1.0	6	38	2
4010d1.50L38Z1	1.5	1.5	6	38	1
4010d1.50L38Z2	1.5	1.5	6	38	2
4010d2.00L38Z1	2.0	2.0	6	38	1
4010d2.00L38Z2	2.0	2.0	6	38	2
4010d2.50L38Z1	2.5	2.5	6	38	1
4010d2.50L38Z2	2.5	2.5	6	38	2
4010d3.00L38Z1	3.0	3.0	6	38	1
4010d3.00L38Z2	3.0	3.0	6	38	2
4010d3.50L38Z1	3.5	3.5	6	38	1
4010d3.50L38Z2	3.5	3.5	6	38	2
4010d4.00L51Z1	4.0	4.0	6	51	1
4010d4.00L51Z2	4.0	4.0	6	51	2
4010d5.00L51Z1	5.0	5.0	6	51	1

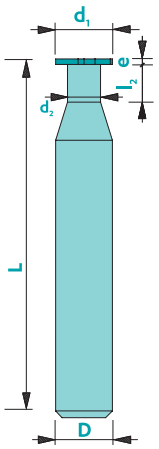
Art. n°	d_1	l_1	D	L	Z
4010d5.00L51Z2	5.0	5.0	6	51	2
4010d6.00L51Z1	6.0	6.0	6	51	1
4010d6.00L51Z2	6.0	6.0	6	51	2
4010d7.00L61Z1	7.0	7.0	8	61	1
4010d7.00L61Z2	7.0	7.0	8	61	2
4010d8.00L61Z1	8.0	8.0	8	61	1
4010d8.00L61Z2	8.0	8.0	8	61	2
4010d8.00L120Z1	8.0	8.0	8	120	1
4010d8.00L120Z2	8.0	8.0	8	120	2
4010d10.00L72Z1	10.0	10.0	10	72	1
4010d10.00L72Z2	10.0	10.0	10	72	2
4010d10.00L120Z1	10.0	10.0	10	120	1
4010d10.00L120Z2	10.0	10.0	10	120	2
4010d12.00L83Z1	12.0	12.0	12	83	1
4010d12.00L83Z2	12.0	12.0	12	83	2
4010d12.00L150Z1	12.0	12.0	12	150	1
4010d12.00L150Z2	12.0	12.0	12	150	2
4010d14.00L83Z1	14.0	14.0	14	83	1
4010d14.00L83Z2	14.0	14.0	14	83	2
4010d14.00L150Z1	14.0	14.0	14	150	1
4010d14.00L150Z2	14.0	14.0	14	150	2
4010d16.00L92Z1	16.0	16.0	16	92	1
4010d16.00L92Z2	16.0	16.0	16	92	2
4010d16.00L180Z1	16.0	16.0	16	180	1
4010d16.00L180Z2	16.0	16.0	16	180	2
4010d20.00L104Z1	20.0	20.0	20	104	1
4010d20.00L104Z2	20.0	20.0	20	104	2
4010d20.00L180Z1	20.0	20.0	20	180	1
4010d20.00L180Z2	20.0	20.0	20	180	2

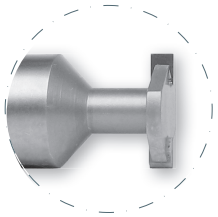
d_1 possible every 0.1 mm,other dimensions, CVD/CBN available upon request.
d_1 ≤ 1.0 mm: Z2 possible in «PCD Monobloc» instead of soldered inserts

T-slot cutter in PCD

Material	Vc [m/min]	Uncoated
Steel < 700 N/mm²	-	-
Steel > 700 N/mm²	-	-
Stainless steel	-	-
Cast iron	-	-
Copper	350	■
Brass - Bronze	500	■
Aluminium	1000	■
Gold - Silver	300	■
Platinum - Palladium	130	■
Superalloys	-	-
Titanium	-	-
Composite	500	■

not adapted - adapted □ highly adapted ■





Tolerances d_1 < 1mm ▶ 0/-0.01 d_1 > 1mm ▶ 0/-0.02 e: +0.01/-0.01 d_2: 0/-0.1 l_2: +0.2/0 D: h5

Art. n°	d_1	e	d_2	l_2	D	L	Z
4100d3.00e#.##Z1	3	0.6 - 1.5	1.5	2	4	38	1
4100d4.00e#.##Z1	4	0.6 - 1.5	2.5	3	4	38	1
4100d4.00e#.##Z2	4	0.6 - 1.5	2.5	3	4	38	2
4100d5.00e#.##Z1	5	0.6 - 1.5	3.0	3	5	38	1
4100d5.00e#.##Z2	5	0.6 - 1.5	3.0	3	5	38	2
4100d6.00e#.##Z2	6	0.6 - 2.0	3.5	4	6	38	2
4100d8.00e#.##Z2	8	0.6 - 3.0	4.0	5	8	51	2
4100d10.00e#.##Z2	10	0.6 - 3.0	5.0	5	10	51	2
4100d12.00e#.##Z2	12	0.6 - 4.0	6.0	6	10	51	2
4100d15.00e#.##Z2	15	0.6 - 5.0	8.0	8	10	61	2
4100d16.00e#.##Z2	16	0.6 - 2.9	8.0	8	10	61	2
4100d16.00e#.##Z2	16	3.0 - 6.0	8.0	8	10	61	2

Available uncoated only

Z1-2

λ 0°

γ 0°

PCD

☐ **Order** ☐ **Quotation request**

Dimensions :

d_1 : _____ e : _____ d_2 : _____

D : _____ L : _____ l_2 : _____

Machined material :

Contact person :

Quantity :

Order No :

Company's stamp & date :

Standard dimensions of the bars : Ø 3x L 38, Ø 4x L 38, Ø 6x L 38, Ø 6x L 51, Ø 8x L 61, Ø 10x L 72, Ø 12x L 83, Ø 16x L 92, Ø 20x L 104

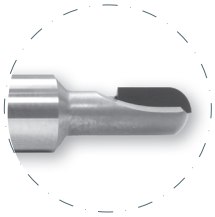
d_1 possible every 0.1 mm,other dimensions, CVD/CBN available upon request.

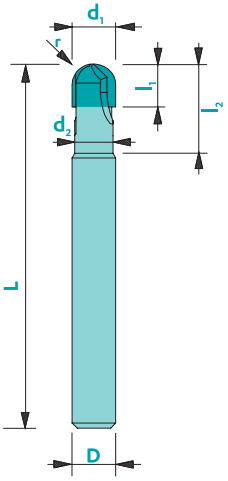
Options

MCU ≤ ø3

701S ≤ ø6

4200 PCD end mill with ball end





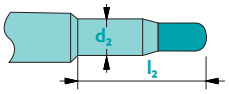
Material	Vc [m/min]	Uncoated
Steel < 700 N/mm²	-	-
Steel > 700 N/mm²	-	-
Stainless steel	-	-
Cast iron	-	-
Copper	300	■
Brass - Bronze	400	■
Aluminium	800	■
Gold - Silver	220	■
Platinum - Palladium	110	■
Superalloys	-	-
Titanium	-	-
Composite	500	■

not adapted - adapted □ highly adapted ■

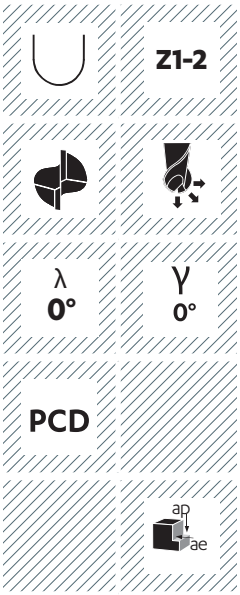
Tolerances

d_1 < 1mm ▶ 0/-0.01
d_1 > 1mm ▶ 0/-0.02
0/-0.01
D: h5

Upon request



Available uncoated only



ae=0.1xd_1
ap=0.1xd_1

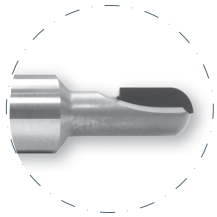
d_1 ≤ 1.0 mm: Z2 possible in «PCD Monobloc» instead of soldered inserts

Options

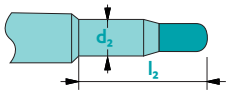
Art. n°	d_1	l_1	r	d_2	l_2	D	L	Z
4200d0.30L38Z1	0.30	0.30	0.15	-	-	6	38	1
4200d0.40L38Z1	0.40	0.40	0.20	-	-	6	38	1
4200d0.50L38Z1	0.50	0.50	0.25	-	-	6	38	1
4200d0.50L38Z2	0.50	0.50	0.25	-	-	6	38	2
4200d0.60L38Z1	0.60	0.60	0.30	-	-	6	38	1
4200d0.60L38Z2	0.60	0.60	0.30	-	-	6	38	2
4200d0.70L38Z1	0.70	0.70	0.35	-	-	6	38	1
4200d0.70L38Z2	0.70	0.70	0.35	-	-	6	38	2
4200d0.80L38Z1	0.80	0.80	0.40	-	-	6	38	1
4200d0.80L38Z2	0.80	0.80	0.40	-	-	6	38	2
4200d0.90L38Z1	0.90	0.90	0.45	-	-	6	38	1
4200d0.90L38Z2	0.90	0.90	0.45	-	-	6	38	2
4200d1.00L38Z1	1.00	1.00	0.50	-	-	6	38	1
4200d1.00L38Z2	1.00	1.00	0.50	-	-	6	38	2
4200d1.50L38Z1	1.50	1.50	0.75	-	-	6	38	1
4200d1.50L38Z2	1.50	1.50	0.75	-	-	6	38	2
4200d2.00L38Z1	2.00	2.00	1.00	1.75	6.50	6	38	1
4200d2.00L38Z2	2.00	2.00	1.00	1.75	6.50	6	38	2
4200d2.50L38Z1	2.50	2.50	1.25	2.20	7.50	6	38	1
4200d2.50L38Z2	2.50	2.50	1.25	2.20	7.50	6	38	2
4200d3.00L38Z1	3.00	3.00	1.50	2.60	8.00	6	38	1
4200d3.00L38Z2	3.00	3.00	1.50	2.60	8.00	6	38	2
4200d3.50L38Z1	3.50	3.50	1.75	3.00	9.00	6	38	1
4200d3.50L38Z2	3.50	3.50	1.75	3.00	9.00	6	38	2
4200d4.00L51Z1	4.00	4.00	2.00	3.50	10.00	6	51	1
4200d4.00L51Z2	4.00	4.00	2.00	3.50	10.00	6	51	2
4200d5.00L51Z1	5.00	5.00	2.50	4.40	11.00	6	51	1
4200d5.00L51Z2	5.00	5.00	2.50	4.40	11.00	6	51	2

PCD end mill with ball end

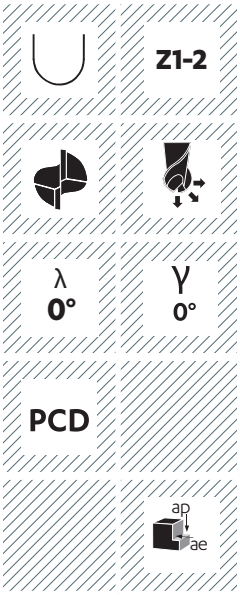
Art. n°	d_1	l_1	r	d_2	l_2	D	L	Z
4200d6.00L51Z1	6.00	6.00	3.00	5.25	12.50	6	51	1
4200d6.00L51Z2	6.00	6.00	3.00	5.25	12.50	6	51	2
4200d8.00L61Z1	8.00	8.00	4.00	7.00	15.00	8	61	1
4200d8.00L61Z2	8.00	8.00	4.00	7.00	15.00	8	61	2
4200d8.00L120Z1	8.00	8.00	4.00	7.00	15.00	8	120	1
4200d8.00L120Z2	8.00	8.00	4.00	7.00	15.00	8	120	2
4200d10.00L72Z1	10.00	10.00	5.00	8.75	17.00	10	72	1
4200d10.00L72Z2	10.00	10.00	5.00	8.75	17.00	10	72	2
4200d10.00L120Z1	10.00	10.00	5.00	8.75	17.00	10	120	1
4200d10.00L120Z2	10.00	10.00	5.00	8.75	17.00	10	120	2
4200d12.00L83Z1	12.00	12.00	6.00	10.50	20.00	12	83	1
4200d12.00L83Z2	12.00	12.00	6.00	10.50	20.00	12	83	2
4200d12.00L150Z1	12.00	12.00	6.00	10.50	20.00	12	150	1
4200d12.00L150Z2	12.00	12.00	6.00	10.50	20.00	12	150	2



Upon request



Available uncoated only

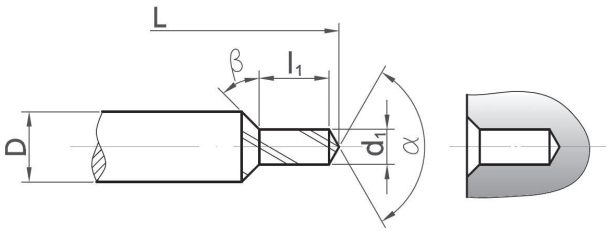


ae=0.1xd_1
ap=0.1xd_1

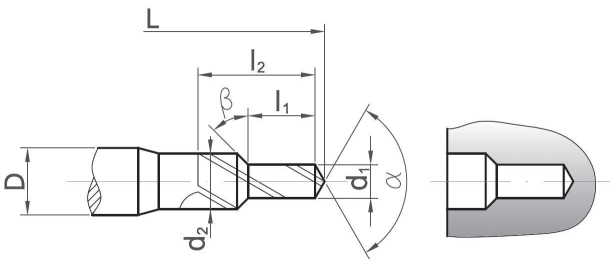
Options

Step drill in solid carbide

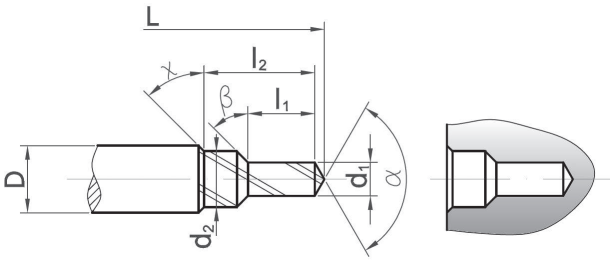
Type A



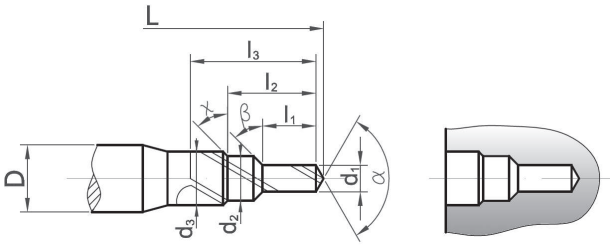
Type B



Type C



Type D



☐ **Order** ☐ **Quotation request**

☐ **Type A** ☐ **Type B** ☐ **Type C** ☐ **Type D**

Dimensions :

D : _____ L : _____ α : _____

d_1 : _____ l_1 : _____ β : _____

d_2 : _____ l_2 : _____ χ : _____

d_3 : _____ l_3 : _____ Z : ☐ 1 ☐ 2 ☐ 3

Helix angle :

☐ 24° for brass and steel

☐ 34° for stainless steel, synthetic and aluminium

Quantity :

_____

Coolant holes ?

☐ Yes

☐ No

Coating :

☐ Uncoated

☐ Coated * :

_____

Machined material :

_____

Order No :

_____

☐ **MCU** ≤ ø3

☐ **701S** ≤ ø6

Company's stamp & date :

_____

Contact person :

_____

Standard dimensions of the bars : Ø 3x L 38, Ø 4x L 38, Ø 6x L 38, Ø 6x L 51, Ø 8x L 61, Ø 10x L 72, Ø 12x L 83, Ø 16x L 92, Ø 20x L 104

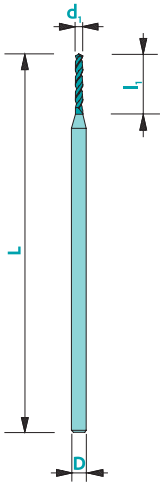
* Without information, the most suitable Coating will be applied.

Micro twist drill - helix 24°

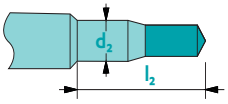
Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	70	80	□	■	Tisi (BQ)
Steel > 700 N/mm²	60	70	□	■	Tisi (BQ)
Stainless steel	20	40	□	□	Tisi (BQ)
Cast iron	60	70	□	■	Tisi (BQ)
Copper	100	130	□	□	Solo (DA)
Brass - Bronze	80	120	■	■	Solo (DA)
Aluminium	100	120	□	■	Solo (DA)
Gold - Silver	80	100	■	■	Solo (DA)
Platinum - Palladium	-	20	-	□	Sun (DG)
Superalloys	-	25	-	■	Trio (PO)
Titanium	40	60	□	□	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances d_1: -0.002/-0.004
D: h5



Upon request



Art. n°	d_1	l_1	D	L
339d0.05	0.05	0.35	1	30
339d0.06	0.06	0.40	1	30
339d0.07	0.07	0.50	1	30
339d0.08	0.08	0.60	1	30
339d0.09	0.09	0.65	1	30
339d0.10	0.10	0.70	1	30
339d0.11	0.11	0.70	1	30
339d0.12	0.12	0.70	1	30
339d0.13	0.13	0.70	1	30
339d0.14	0.14	0.70	1	30
339d0.15	0.15	1.00	1	30
339d0.16	0.16	1.00	1	30
339d0.17	0.17	1.00	1	30
339d0.18	0.18	1.00	1	30
339d0.19	0.19	1.00	1	30
339d0.20	0.20	1.00	1	30
339d0.21	0.21	1.00	1	30
339d0.22	0.22	1.00	1	30
339d0.23	0.23	1.00	1	30
339d0.24	0.24	1.00	1	30
339d0.25	0.25	1.00	1	30
339d0.26	0.26	1.00	1	30
339d0.27	0.27	1.00	1	30
339d0.28	0.28	1.00	1	30
339d0.29	0.29	1.00	1	30
339d0.30	0.30	1.50	1	30
339d0.31	0.31	1.50	1	30
339d0.32	0.32	1.50	1	30
339d0.33	0.33	1.50	1	30

Art. n°	d_1	l_1	D	L
339d0.34	0.34	1.50	1	30
339d0.35	0.35	1.50	1	30
339d0.36	0.36	1.50	1	30
339d0.37	0.37	1.50	1	30
339d0.38	0.38	1.50	1	30
339d0.39	0.39	1.50	1	30
339d0.40	0.40	2.00	1	30
339d0.41	0.41	2.00	1	30
339d0.42	0.42	2.00	1	30
339d0.43	0.43	2.00	1	30
339d0.44	0.44	2.00	1	30
339d0.45	0.45	3.50	1	30
339d0.46	0.46	3.50	1	30
339d0.47	0.47	3.50	1	30
339d0.48	0.48	3.50	1	30
339d0.49	0.49	4.00	1	30
339d0.50	0.50	4.00	1	30

Available uncoated or coated

118°

Z2

λ 24°

CARB

If $d_1 \leq 0.2$ mm, a double cone applies

Options

MCU ≤ ø3

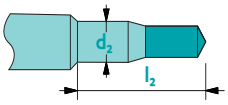
701S ≤ ø6

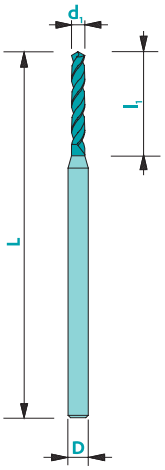
* Prices for other coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

340-1

Micro twist drill - helix 34°

Upon request





Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating♦
Steel < 700 N/mm²	70	80	□	■	Tisi (BQ)
Steel > 700 N/mm²	60	70	□	■	Tisi (BQ)
Stainless steel	20	40	□	□	Tisi (BQ)
Cast iron	60	70	□	■	Tisi (BQ)
Copper	100	130	□	□	Solo (DA)
Brass - Bronze	80	120	■	■	Solo (DA)
Aluminium	100	120	□	■	Solo (DA)
Gold - Silver	80	100	■	■	Solo (DA)
Platinum - Palladium	-	20	-	□	Sun (DG)
Superalloys	-	25	-	■	Trio (PO)
Titanium	40	60	□	□	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances d_1: -0.002/-0.004
D: h5

Available uncoated or coated (see page 314)

118°

Z2

λ 24°

CARB

Options

MCU ≤ ø3

701S ≤ ø6

Art. n°	d_1	l_1	D	L
340-1d0.40	0.40	3.0	1.5	30
340-1d0.41	0.41	3.0	1.5	30
340-1d0.42	0.42	3.0	1.5	30
340-1d0.43	0.43	3.0	1.5	30
340-1d0.44	0.44	3.0	1.5	30
340-1d0.45	0.45	3.0	1.5	30
340-1d0.46	0.46	3.0	1.5	30
340-1d0.47	0.47	3.0	1.5	30
340-1d0.48	0.48	3.0	1.5	30
340-1d0.49	0.49	3.0	1.5	30
340-1d0.50	0.50	4.0	1.5	30
340-1d0.51	0.51	4.0	1.5	30
340-1d0.52	0.52	4.0	1.5	30
340-1d0.53	0.53	4.0	1.5	30
340-1d0.54	0.54	4.0	1.5	30
340-1d0.55	0.55	4.0	1.5	30
340-1d0.56	0.56	4.0	1.5	30
340-1d0.57	0.57	4.0	1.5	30
340-1d0.58	0.58	4.0	1.5	30
340-1d0.59	0.59	4.0	1.5	30
340-1d0.60	0.60	5.0	1.5	30
340-1d0.61	0.61	5.0	1.5	30
340-1d0.62	0.62	5.0	1.5	30
340-1d0.63	0.63	5.0	1.5	30
340-1d0.64	0.64	5.0	1.5	30
340-1d0.65	0.65	5.0	1.5	30
340-1d0.66	0.66	5.0	1.5	30
340-1d0.67	0.67	5.0	1.5	30
340-1d0.68	0.68	5.0	1.5	30
340-1d0.69	0.69	5.0	1.5	30
340-1d0.70	0.70	5.0	1.5	30
340-1d0.71	0.71	5.0	1.5	30

Art. n°	d_1	l_1	D	L
340-1d0.72	0.72	5.0	1.5	30
340-1d0.73	0.73	5.0	1.5	30
340-1d0.74	0.74	5.0	1.5	30
340-1d0.75	0.75	5.0	1.5	30
340-1d0.76	0.76	5.0	1.5	30
340-1d0.77	0.77	5.0	1.5	30
340-1d0.78	0.78	5.0	1.5	30
340-1d0.79	0.79	5.0	1.5	30
340-1d0.80	0.80	6.0	1.5	30
340-1d0.81	0.81	6.0	1.5	30
340-1d0.82	0.82	6.0	1.5	30
340-1d0.83	0.83	6.0	1.5	30
340-1d0.84	0.84	6.0	1.5	30
340-1d0.85	0.85	6.0	1.5	30
340-1d0.86	0.86	6.0	1.5	30
340-1d0.87	0.87	6.0	1.5	30
340-1d0.88	0.88	6.0	1.5	30
340-1d0.89	0.89	6.0	1.5	30
340-1d0.90	0.90	7.0	1.5	30
340-1d0.91	0.91	7.0	1.5	30
340-1d0.92	0.92	7.0	1.5	30
340-1d0.93	0.93	7.0	1.5	30
340-1d0.94	0.94	7.0	1.5	30
340-1d0.95	0.95	7.0	1.5	30
340-1d0.96	0.96	7.0	1.5	30
340-1d0.97	0.97	7.0	1.5	30
340-1d0.98	0.98	7.0	1.5	30
340-1d0.99	0.99	7.0	1.5	30
340-1d1.00	1.00	8.0	1.5	30
340-1d1.01	1.01	8.0	1.5	30
340-1d1.02	1.02	8.0	1.5	30
340-1d1.03	1.03	8.0	1.5	30

♦ Prices for other coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

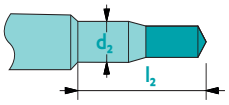
Micro twist drill - helix 34°

Art. n°	d_1	l_1	D	L
340-1d1.04	1.04	8.0	1.5	30
340-1d1.05	1.05	8.0	1.5	30
340-1d1.06	1.06	8.0	1.5	30
340-1d1.07	1.07	8.0	1.5	30
340-1d1.08	1.08	8.0	1.5	30
340-1d1.09	1.09	8.0	1.5	30
340-1d1.10	1.10	9.0	1.5	30
340-1d1.11	1.11	9.0	1.5	30
340-1d1.12	1.12	9.0	1.5	30
340-1d1.13	1.13	9.0	1.5	30
340-1d1.14	1.14	9.0	1.5	30
340-1d1.15	1.15	9.0	1.5	30
340-1d1.16	1.16	9.0	1.5	30
340-1d1.17	1.17	9.0	1.5	30
340-1d1.18	1.18	9.0	1.5	30
340-1d1.19	1.19	9.0	1.5	30
340-1d1.20	1.20	10.0	1.5	30
340-1d1.21	1.21	10.0	1.5	30
340-1d1.22	1.22	10.0	1.5	30
340-1d1.23	1.23	10.0	1.5	30
340-1d1.24	1.24	10.0	1.5	30
340-1d1.25	1.25	10.0	1.5	30
340-1d1.26	1.26	10.0	1.5	30
340-1d1.27	1.27	10.0	1.5	30
340-1d1.28	1.28	10.0	1.5	30
340-1d1.29	1.29	10.0	1.5	30
340-1d1.30	1.30	10.0	1.5	30
340-1d1.31	1.31	10.0	1.5	30
340-1d1.32	1.32	10.0	1.5	30
340-1d1.33	1.33	10.0	1.5	30
340-1d1.34	1.34	10.0	1.5	30
340-1d1.35	1.35	11.0	1.5	30
340-1d1.36	1.36	11.0	1.5	30
340-1d1.37	1.37	11.0	1.5	30
340-1d1.38	1.38	11.0	1.5	30
340-1d1.39	1.39	11.0	1.5	30
340-1d1.40	1.40	11.0	1.5	30
340-1d1.41	1.41	11.0	1.5	30
340-1d1.42	1.42	11.0	1.5	30
340-1d1.43	1.43	11.0	1.5	30
340-1d1.44	1.44	11.0	1.5	30
340-1d1.45	1.45	11.0	1.5	30
340-1d1.46	1.46	11.0	1.5	30
340-1d1.47	1.47	11.0	1.5	30
340-1d1.48	1.48	11.0	1.5	30
340-1d1.49	1.49	11.0	1.5	30
340-1d1.50	1.50	12.0	2.0	38
340-1d1.51	1.51	12.0	2.0	38

Art. n°	d_1	l_1	D	L
340-1d1.52	1.52	12.0	2.0	38
340-1d1.53	1.53	12.0	2.0	38
340-1d1.54	1.54	12.0	2.0	38
340-1d1.55	1.55	12.0	2.0	38
340-1d1.56	1.56	12.0	2.0	38
340-1d1.57	1.57	12.0	2.0	38
340-1d1.58	1.58	12.0	2.0	38
340-1d1.59	1.59	12.0	2.0	38
340-1d1.60	1.60	12.0	2.0	38
340-1d1.61	1.61	12.0	2.0	38
340-1d1.62	1.62	12.0	2.0	38
340-1d1.63	1.63	12.0	2.0	38
340-1d1.64	1.64	12.0	2.0	38
340-1d1.65	1.65	12.0	2.0	38
340-1d1.66	1.66	12.0	2.0	38
340-1d1.67	1.67	12.0	2.0	38
340-1d1.68	1.68	12.0	2.0	38
340-1d1.69	1.69	12.0	2.0	38
340-1d1.70	1.70	12.0	2.0	38
340-1d1.71	1.71	12.0	2.0	38
340-1d1.72	1.72	12.0	2.0	38
340-1d1.73	1.73	12.0	2.0	38
340-1d1.74	1.74	12.0	2.0	38
340-1d1.75	1.75	12.0	2.0	38
340-1d1.76	1.76	12.0	2.0	38
340-1d1.77	1.77	12.0	2.0	38
340-1d1.78	1.78	12.0	2.0	38
340-1d1.79	1.79	12.0	2.0	38
340-1d1.80	1.80	12.0	2.0	38
340-1d1.81	1.81	12.0	2.0	38
340-1d1.82	1.82	12.0	2.0	38
340-1d1.83	1.83	12.0	2.0	38
340-1d1.84	1.84	12.0	2.0	38
340-1d1.85	1.85	12.0	2.0	38
340-1d1.86	1.86	12.0	2.0	38
340-1d1.87	1.87	12.0	2.0	38
340-1d1.88	1.88	12.0	2.0	38
340-1d1.89	1.89	12.0	2.0	38
340-1d1.90	1.90	12.0	2.0	38
340-1d1.91	1.91	12.0	2.0	38
340-1d1.92	1.92	12.0	2.0	38
340-1d1.93	1.93	12.0	2.0	38
340-1d1.94	1.94	12.0	2.0	38
340-1d1.95	1.95	12.0	2.0	38
340-1d1.96	1.96	12.0	2.0	38
340-1d1.97	1.97	12.0	2.0	38
340-1d1.98	1.98	12.0	2.0	38
340-1d1.99	1.99	12.0	2.0	38

♦ Prices for other coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

Upon request



Available uncoated or coated (see page 314)

118°

Z2

λ
24°

CARB

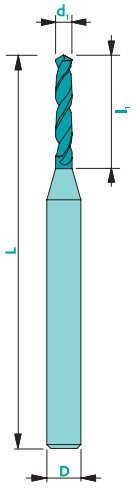
Options

MCU
≤ ø3

701S
≤ ø6

343-6

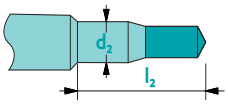
Drill - helix 34° - l_1=6 mm



Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	70	80	□	□	Tisi (BQ)
Steel > 700 N/mm²	60	70	□	■	Tisi (BQ)
Stainless steel	20	40	□	■	Tisi (BQ)
Cast iron	60	70	□	■	Tisi (BQ)
Copper	100	130	□	■	Solo (DA)
Brass - Bronze	80	120	■	■	Solo (DA)
Aluminium	100	120	■	■	Solo (DA)
Gold - Silver	80	100	□	□	Solo (DA)
Platinum - Palladium	-	20	-	□	Sun (DG)
Superalloys	-	25	-	□	Trio (PO)
Titanium	40	60	□	□	Marc (ME)

not adapted - adapted □ highly adapted ■

Upon request



Tolerances d_1: -0.002/-0.004
D: h5

Available uncoated or coated

118°

Z2

λ 34°

CARB

Art. n°	d_1	l_1	D	L
343-6d0.60	0.60	6.0	2.0	38
343-6d0.61	0.61	6.0	2.0	38
343-6d0.62	0.62	6.0	2.0	38
343-6d0.63	0.63	6.0	2.0	38
343-6d0.64	0.64	6.0	2.0	38
343-6d0.65	0.65	6.0	2.0	38
343-6d0.66	0.66	6.0	2.0	38
343-6d0.67	0.67	6.0	2.0	38
343-6d0.68	0.68	6.0	2.0	38
343-6d0.69	0.69	6.0	2.0	38
343-6d0.70	0.70	6.0	2.0	38
343-6d0.71	0.71	6.0	2.0	38
343-6d0.72	0.72	6.0	2.0	38
343-6d0.73	0.73	6.0	2.0	38
343-6d0.74	0.74	6.0	2.0	38
343-6d0.75	0.75	6.0	2.0	38
343-6d0.76	0.76	6.0	2.0	38
343-6d0.77	0.77	6.0	2.0	38
343-6d0.78	0.78	6.0	2.0	38
343-6d0.79	0.79	6.0	2.0	38
343-6d0.80	0.80	6.0	2.0	38
343-6d0.81	0.81	6.0	2.0	38
343-6d0.82	0.82	6.0	2.0	38
343-6d0.83	0.83	6.0	2.0	38
343-6d0.84	0.84	6.0	2.0	38
343-6d0.85	0.85	6.0	2.0	38
343-6d0.86	0.86	6.0	2.0	38
343-6d0.87	0.87	6.0	2.0	38
343-6d0.88	0.88	6.0	2.0	38

Art. n°	d_1	l_1	D	L
343-6d0.89	0.89	6.0	2.0	38
343-6d0.90	0.90	6.0	2.0	38
343-6d0.91	0.91	6.0	2.0	38
343-6d0.92	0.92	6.0	2.0	38
343-6d0.93	0.93	6.0	2.0	38
343-6d0.94	0.94	6.0	2.0	38
343-6d0.95	0.95	6.0	2.0	38
343-6d0.96	0.96	6.0	2.0	38
343-6d0.97	0.97	6.0	2.0	38
343-6d0.98	0.98	6.0	2.0	38
343-6d0.99	0.99	6.0	2.0	38
343-6d1.00	1.00	6.0	2.0	38
343-6d1.01	1.01	6.0	2.0	38
343-6d1.02	1.02	6.0	2.0	38
343-6d1.03	1.03	6.0	2.0	38
343-6d1.04	1.04	6.0	2.0	38
343-6d1.05	1.05	6.0	2.0	38
343-6d1.06	1.06	6.0	2.0	38
343-6d1.07	1.07	6.0	2.0	38
343-6d1.08	1.08	6.0	2.0	38
343-6d1.09	1.09	6.0	2.0	38
343-6d1.09	1.09	6.0	2.0	38
343-6d1.10	1.10	6.0	2.0	38
343-6d1.11	1.11	6.0	2.0	38
343-6d1.12	1.12	6.0	2.0	38
343-6d1.13	1.13	6.0	2.0	38
343-6d1.14	1.14	6.0	2.0	38
343-6d1.15	1.15	6.0	2.0	38
343-6d1.16	1.16	6.0	2.0	38

Options

MCU ≤ ø3

701S ≤ ø6

To order a coated tool, add the 2-letter coating code to the article number

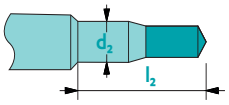
Drill - helix 34° - l_1=6 mm

Art. n°	d_1	l_1	D	L
343-6d1.17	1.17	6.0	2.0	38
343-6d1.18	1.18	6.0	2.0	38
343-6d1.19	1.19	6.0	2.0	38
343-6d1.20	1.20	6.0	2.0	38
343-6d1.21	1.21	6.0	2.0	38
343-6d1.22	1.22	6.0	2.0	38
343-6d1.23	1.23	6.0	2.0	38
343-6d1.24	1.24	6.0	2.0	38
343-6d1.25	1.25	6.0	2.0	38
343-6d1.26	1.26	6.0	2.0	38
343-6d1.27	1.27	6.0	2.0	38
343-6d1.28	1.28	6.0	2.0	38
343-6d1.29	1.29	6.0	2.0	38
343-6d1.30	1.30	6.0	2.0	38
343-6d1.31	1.31	6.0	2.0	38
343-6d1.32	1.32	6.0	2.0	38
343-6d1.33	1.33	6.0	2.0	38
343-6d1.34	1.34	6.0	2.0	38
343-6d1.35	1.35	6.0	2.0	38
343-6d1.36	1.36	6.0	2.0	38
343-6d1.37	1.37	6.0	2.0	38
343-6d1.38	1.38	6.0	2.0	38
343-6d1.39	1.39	6.0	2.0	38
343-6d1.40	1.40	6.0	2.0	38
343-6d1.41	1.41	6.0	2.0	38
343-6d1.42	1.42	6.0	2.0	38
343-6d1.43	1.43	6.0	2.0	38
343-6d1.44	1.44	6.0	2.0	38
343-6d1.45	1.45	6.0	2.0	38
343-6d1.46	1.46	6.0	2.0	38
343-6d1.47	1.47	6.0	2.0	38
343-6d1.48	1.48	6.0	2.0	38
343-6d1.49	1.49	6.0	2.0	38
343-6d1.50	1.50	6.0	2.0	38
343-6d1.51	1.51	6.0	2.0	38
343-6d1.52	1.52	6.0	2.0	38
343-6d1.53	1.53	6.0	2.0	38
343-6d1.54	1.54	6.0	2.0	38
343-6d1.55	1.55	6.0	2.0	38
343-6d1.56	1.56	6.0	2.0	38
343-6d1.57	1.57	6.0	2.0	38
343-6d1.58	1.58	6.0	2.0	38
343-6d1.59	1.59	6.0	2.0	38
343-6d1.60	1.60	6.0	2.0	38
343-6d1.61	1.61	6.0	2.0	38

Art. n°	d_1	l_1	D	L
343-6d1.62	1.62	6.0	2.0	38
343-6d1.63	1.63	6.0	2.0	38
343-6d1.64	1.64	6.0	2.0	38
343-6d1.65	1.65	6.0	2.0	38
343-6d1.66	1.66	6.0	2.0	38
343-6d1.67	1.67	6.0	2.0	38
343-6d1.68	1.68	6.0	2.0	38
343-6d1.69	1.69	6.0	2.0	38
343-6d1.70	1.70	6.0	2.0	38
343-6d1.71	1.71	6.0	2.0	38
343-6d1.72	1.72	6.0	2.0	38
343-6d1.73	1.73	6.0	2.0	38
343-6d1.74	1.74	6.0	2.0	38
343-6d1.75	1.75	6.0	2.0	38
343-6d1.76	1.76	6.0	2.0	38
343-6d1.77	1.77	6.0	2.0	38
343-6d1.78	1.78	6.0	2.0	38
343-6d1.79	1.79	6.0	2.0	38
343-6d1.80	1.80	6.0	2.0	38
343-6d1.81	1.81	6.0	2.0	38
343-6d1.82	1.82	6.0	2.0	38
343-6d1.83	1.83	6.0	2.0	38
343-6d1.84	1.84	6.0	2.0	38
343-6d1.85	1.85	6.0	2.0	38
343-6d1.86	1.86	6.0	2.0	38
343-6d1.87	1.87	6.0	2.0	38
343-6d1.88	1.88	6.0	2.0	38
343-6d1.89	1.89	6.0	2.0	38
343-6d1.90	1.90	6.0	2.0	38
343-6d1.91	1.91	6.0	2.0	38
343-6d1.92	1.92	6.0	2.0	38
343-6d1.93	1.93	6.0	2.0	38
343-6d1.94	1.94	6.0	2.0	38
343-6d1.95	1.95	6.0	2.0	38
343-6d1.96	1.96	6.0	2.0	38
343-6d1.97	1.97	6.0	2.0	38
343-6d1.98	1.98	6.0	2.0	38
343-6d1.99	1.99	6.0	2.0	38
343-6d2.00	2.00	6.0	2.0	38

To order a coated tool, add the 2-letter coating code to the article number

Upon request



Available
uncoated or coated

118°

Z2

λ
34°

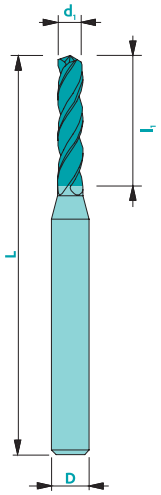
CARB

Options

MCU
≤ ø3

701S
≤ ø6

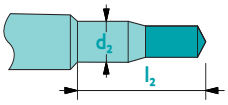
Twist drill Z3 - shank Ø3



Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	70	80	□	□	Tisi (BQ)
Steel > 700 N/mm²	60	70	□	□	Tisi (BQ)
Stainless steel	20	40	□	□	Tisi (BQ)
Cast iron	60	70	□	□	Tisi (BQ)
Copper	100	130	□	□	Solo (DA)
Brass - Bronze	80	120	□	□	Solo (DA)
Aluminium	100	120	□	□	Solo (DA)
Gold - Silver	80	100	■	■	Solo (DA)
Platinum - Palladium	-	20	-	□	Sun (DG)
Superalloys	-	25	-	■	Trio (PO)
Titanium	40	60	■	■	Marc (DG)

not adapted - adapted □ highly adapted ■

Upon request



Tolerances d_1: -0.002/-0.004
D: h5

Available uncoated or coated

140° **Z3**

λ 34°

CARB

If $d_1 \leq 0.2$ mm, a double cone applies

Art. n°	d_1	l_1	D	L
353d0.15	0.15	2.0	3.0	38
353d0.18	0.18	2.0	3.0	38
353d0.20	0.20	3.0	3.0	38
353d0.21	0.21	3.0	3.0	38
353d0.22	0.22	3.0	3.0	38
353d0.23	0.23	3.0	3.0	38
353d0.24	0.24	3.0	3.0	38
353d0.25	0.25	3.5	3.0	38
353d0.26	0.26	3.5	3.0	38
353d0.27	0.27	3.5	3.0	38
353d0.28	0.28	3.5	3.0	38
353d0.29	0.29	3.5	3.0	38
353d0.30	0.30	5.0	3.0	38
353d0.31	0.31	5.0	3.0	38
353d0.32	0.32	5.0	3.0	38
353d0.33	0.33	5.0	3.0	38
353d0.34	0.34	5.0	3.0	38
353d0.35	0.35	5.0	3.0	38
353d0.36	0.36	5.0	3.0	38
353d0.37	0.37	5.0	3.0	38
353d0.38	0.38	5.0	3.0	38
353d0.39	0.39	5.0	3.0	38
353d0.40	0.40	6.0	3.0	38
353d0.41	0.41	6.0	3.0	38
353d0.42	0.42	6.0	3.0	38
353d0.43	0.43	6.0	3.0	38
353d0.44	0.44	6.0	3.0	38
353d0.45	0.45	6.0	3.0	38
353d0.46	0.46	6.0	3.0	38

Art. n°	d_1	l_1	D	L
353d0.47	0.47	6.0	3.0	38
353d0.48	0.48	6.0	3.0	38
353d0.49	0.49	6.0	3.0	38
353d0.50	0.50	6.0	3.0	38
353d0.51	0.51	6.0	3.0	38
353d0.52	0.52	6.0	3.0	38
353d0.53	0.53	6.0	3.0	38
353d0.54	0.54	6.0	3.0	38
353d0.55	0.55	7.0	3.0	38
353d0.56	0.56	7.0	3.0	38
353d0.57	0.57	7.0	3.0	38
353d0.58	0.58	7.0	3.0	38
353d0.59	0.59	7.0	3.0	38
353d0.60	0.60	7.0	3.0	38
353d0.61	0.61	7.0	3.0	38
353d0.62	0.62	7.0	3.0	38
353d0.63	0.63	7.0	3.0	38
353d0.64	0.64	7.0	3.0	38
353d0.65	0.65	7.0	3.0	38
353d0.66	0.66	7.0	3.0	38
353d0.67	0.67	7.0	3.0	38
353d0.68	0.68	7.0	3.0	38
353d0.69	0.69	7.0	3.0	38
353d0.70	0.70	9.5	3.0	38
353d0.71	0.71	9.5	3.0	38
353d0.72	0.72	9.5	3.0	38
353d0.73	0.73	9.5	3.0	38
353d0.74	0.74	9.5	3.0	38
353d0.75	0.75	9.5	3.0	38

Options

MCU ≤ ø3

701S ≤ ø6

To order a coated tool, add the 2-letter coating code to the article number

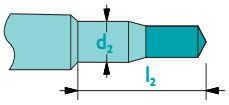
Twist drill Z3 - shank Ø3

Art. n°	d_1	l_1	D	L
353d0.76	0.76	9.5	3.0	38
353d0.77	0.77	9.5	3.0	38
353d0.78	0.78	9.5	3.0	38
353d0.79	0.79	9.5	3.0	38
353d0.80	0.80	9.5	3.0	38
353d0.81	0.81	9.5	3.0	38
353d0.82	0.82	9.5	3.0	38
353d0.83	0.83	9.5	3.0	38
353d0.84	0.84	9.5	3.0	38
353d0.85	0.85	9.5	3.0	38
353d0.86	0.86	9.5	3.0	38
353d0.87	0.87	9.5	3.0	38
353d0.88	0.88	9.5	3.0	38
353d0.89	0.89	9.5	3.0	38
353d0.90	0.90	9.5	3.0	38
353d0.91	0.91	9.5	3.0	38
353d0.92	0.92	9.5	3.0	38
353d0.93	0.93	9.5	3.0	38
353d0.94	0.94	9.5	3.0	38
353d0.95	0.95	9.5	3.0	38
353d0.96	0.96	9.5	3.0	38
353d0.97	0.97	9.5	3.0	38
353d0.98	0.98	9.5	3.0	38
353d0.99	0.99	9.5	3.0	38
353d1.00	1.00	9.5	3.0	38
353d1.01	1.01	9.5	3.0	38
353d1.02	1.02	9.5	3.0	38
353d1.03	1.03	9.5	3.0	38
353d1.04	1.04	9.5	3.0	38
353d1.05	1.05	10.5	3.0	38
353d1.06	1.06	10.5	3.0	38
353d1.07	1.07	10.5	3.0	38
353d1.08	1.08	10.5	3.0	38
353d1.09	1.09	10.5	3.0	38
353d1.10	1.10	10.5	3.0	38
353d1.11	1.11	10.5	3.0	38
353d1.12	1.12	10.5	3.0	38
353d1.13	1.13	10.5	3.0	38
353d1.14	1.14	10.5	3.0	38
353d1.15	1.15	10.5	3.0	38
353d1.16	1.16	10.5	3.0	38
353d1.17	1.17	10.5	3.0	38
353d1.18	1.18	10.5	3.0	38
353d1.19	1.19	10.5	3.0	38

Art. n°	d_1	l_1	D	L
353d1.20	1.20	10.5	3.0	38
353d1.21	1.21	10.5	3.0	38
353d1.22	1.22	10.5	3.0	38
353d1.23	1.23	10.5	3.0	38
353d1.24	1.24	10.5	3.0	38
353d1.25	1.25	10.5	3.0	38
353d1.26	1.26	10.5	3.0	38
353d1.27	1.27	10.5	3.0	38
353d1.28	1.28	10.5	3.0	38
353d1.29	1.29	10.5	3.0	38
353d1.30	1.30	10.5	3.0	38
353d1.31	1.31	10.5	3.0	38
353d1.32	1.32	10.5	3.0	38
353d1.33	1.33	10.5	3.0	38
353d1.34	1.34	10.5	3.0	38
353d1.35	1.35	10.5	3.0	38
353d1.36	1.36	10.5	3.0	38
353d1.37	1.37	10.5	3.0	38
353d1.38	1.38	10.5	3.0	38
353d1.39	1.39	10.5	3.0	38
353d1.40	1.40	10.5	3.0	38
353d1.41	1.41	10.5	3.0	38
353d1.42	1.42	10.5	3.0	38
353d1.43	1.43	10.5	3.0	38
353d1.44	1.44	10.5	3.0	38
353d1.45	1.45	10.5	3.0	38
353d1.46	1.46	10.5	3.0	38
353d1.47	1.47	10.5	3.0	38
353d1.48	1.48	10.5	3.0	38
353d1.49	1.49	10.5	3.0	38
353d1.50	1.50	10.5	3.0	38
353d1.51	1.51	10.5	3.0	38
353d1.52	1.52	10.5	3.0	38
353d1.53	1.53	10.5	3.0	38
353d1.54	1.54	10.5	3.0	38
353d1.55	1.55	10.5	3.0	38
353d1.56	1.56	10.5	3.0	38
353d1.57	1.57	10.5	3.0	38
353d1.58	1.58	10.5	3.0	38
353d1.59	1.59	10.5	3.0	38
353d1.60	1.60	10.5	3.0	38
353d1.61	1.61	10.5	3.0	38
353d1.62	1.62	10.5	3.0	38
353d1.63	1.63	10.5	3.0	38

To order a coated tool, add the 2-letter coating code to the article number

Upon request



Available uncoated or coated

140°

Z3

λ
34°

CARB

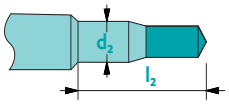
Options

MCU
≤ ø3

701S
≤ ø6

Twist drill Z3 - shank Ø3

Upon request



Available uncoated or coated

140°

Z3

λ 34°

CARB

Options

MCU ≤ ø3

701S ≤ ø6

Art. n°	d_1	l_1	D	L
353d1.64	1.64	10.5	3.0	38
353d1.65	1.65	10.5	3.0	38
353d1.66	1.66	10.5	3.0	38
353d1.67	1.67	10.5	3.0	38
353d1.68	1.68	10.5	3.0	38
353d1.69	1.69	10.5	3.0	38
353d1.70	1.70	10.5	3.0	38
353d1.71	1.71	10.5	3.0	38
353d1.72	1.72	10.5	3.0	38
353d1.73	1.73	10.5	3.0	38
353d1.74	1.74	10.5	3.0	38
353d1.75	1.75	10.5	3.0	38
353d1.76	1.76	10.5	3.0	38
353d1.77	1.77	10.5	3.0	38
353d1.78	1.78	10.5	3.0	38
353d1.79	1.79	10.5	3.0	38
353d1.80	1.80	10.5	3.0	38
353d1.81	1.81	10.5	3.0	38
353d1.82	1.82	10.5	3.0	38
353d1.83	1.83	10.5	3.0	38
353d1.84	1.84	10.5	3.0	38
353d1.85	1.85	10.5	3.0	38
353d1.86	1.86	10.5	3.0	38
353d1.87	1.87	10.5	3.0	38
353d1.88	1.88	10.5	3.0	38
353d1.89	1.89	10.5	3.0	38
353d1.90	1.90	10.5	3.0	38
353d1.91	1.91	10.5	3.0	38
353d1.92	1.92	10.5	3.0	38
353d1.93	1.93	10.5	3.0	38
353d1.94	1.94	10.5	3.0	38
353d1.95	1.95	10.5	3.0	38
353d1.96	1.96	10.5	3.0	38
353d1.97	1.97	10.5	3.0	38
353d1.98	1.98	10.5	3.0	38
353d1.99	1.99	10.5	3.0	38
353d2.00	2.00	10.5	3.0	38
353d2.05	2.05	10.5	3.0	38
353d2.10	2.10	10.5	3.0	38
353d2.15	2.15	10.5	3.0	38
353d2.20	2.20	10.5	3.0	38
353d2.25	2.25	10.5	3.0	38
353d2.30	2.30	10.5	3.0	38
353d2.35	2.35	10.5	3.0	38

Art. n°	d_1	l_1	D	L
353d2.40	2.40	10.5	3.0	38
353d2.45	2.45	10.5	3.0	38
353d2.50	2.50	10.5	3.0	38
353d2.55	2.55	10.5	3.0	38
353d2.60	2.60	10.5	3.0	38
353d2.65	2.65	10.5	3.0	38
353d2.70	2.70	10.5	3.0	38
353d2.75	2.75	10.5	3.0	38
353d2.80	2.80	10.5	3.0	38
353d2.85	2.85	10.5	3.0	38
353d2.90	2.90	10.5	3.0	38
353d2.95	2.95	10.5	3.0	38
353d3.00	3.00	10.5	3.0	38

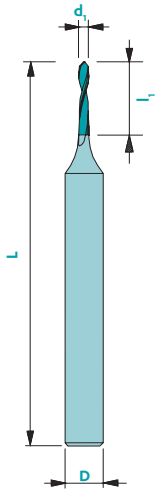
To order a coated tool, add the 2-letter coating code to the article number

Expert drill for brass

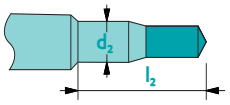
Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating♦
Steel < 700 N/mm²	-	-	-	-	-
Steel > 700 N/mm²	-	-	-	-	-
Stainless steel	-	-	-	-	-
Cast iron	-	-	-	-	-
Copper	-	-	-	-	-
Brass - Bronze	115	130	■	■	Solo (DA)
Aluminium	-	-	-	-	-
Gold - Silver	-	-	□	□	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Titanium	-	-	-	-	-

not adapted - adapted □ highly adapted ■

Tolerances
d_1: -0.002/-0.004
l_1: 0.1/-0
D: h5



Upon request



Art. n°	d_1	l_1	D	L
375d#.##	0.20-0.29	1.0	3	38
375d#.##	0.30-0.34	1.5	3	38
375d#.##	0.35-0.39	2.0	3	38
375d#.##	0.40-0.49	3.0	3	38
375d#.##	0.50-0.79	4.0	3	38
375d#.##	0.80-1.19	6.0	3	38
375d#.##	1.20-1.50	8.0	3	38

♦ Prices for other coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

Available uncoated or coated

90°

Z2

λ Variable

CARB

If $d_1 \leq 0.2$ mm, a double cone applies

Options

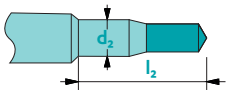
MCU ≤ ø3

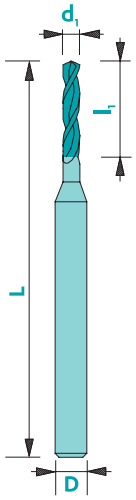
701S ≤ ø6

4500

PCD twist drill - 2 teeth

Upon request





Material	Vc [m/min]	Uncoated
Steel < 700 N/mm²	-	-
Steel > 700 N/mm²	-	-
Stainless steel	-	-
Cast iron	-	-
Copper	180	■
Brass - Bronze	280	■
Aluminium	250	■
Gold - Silver	200	■
Platinum - Palladium	100	■
Superalloys	-	-
Titanium	-	-
Composite	500	■

not adapted - adapted □ highly adapted ■

Tolerances d_1 = 0/-0.013
D: h6

Available uncoated only

118°

Z2

λ 30°

PCD

If $d_1 \leq 0.5$ mm, a double cone applies

Options

MCU ≤ ø3

Art. n°	d_1	l_1	D	L
4500d0.48	0.48	4.0	3	38
4500d0.49	0.49	4.0	3	38
4500d0.50	0.50	4.0	3	38
4500d0.51	0.51	4.0	3	38
4500d0.52	0.52	4.0	3	38
4500d0.53	0.53	4.0	3	38
4500d0.54	0.54	4.0	3	38
4500d0.55	0.55	4.0	3	38
4500d0.56	0.56	4.0	3	38
4500d0.57	0.57	4.0	3	38
4500d0.58	0.58	4.0	3	38
4500d0.59	0.59	4.0	3	38
4500d0.60	0.60	5.0	3	38
4500d0.61	0.61	5.0	3	38
4500d0.62	0.62	5.0	3	38
4500d0.63	0.63	5.0	3	38
4500d0.64	0.64	5.0	3	38
4500d0.65	0.65	5.0	3	38
4500d0.66	0.66	5.0	3	38
4500d0.67	0.67	5.0	3	38
4500d0.68	0.68	5.0	3	38
4500d0.69	0.69	5.0	3	38
4500d0.70	0.70	5.0	3	38
4500d0.71	0.71	5.0	3	38
4500d0.72	0.72	5.0	3	38
4500d0.73	0.73	5.0	3	38
4500d0.74	0.74	5.0	3	38
4500d0.75	0.75	5.0	3	38
4500d0.76	0.76	5.0	3	38
4500d0.77	0.77	5.0	3	38

Art. n°	d_1	l_1	D	L
4500d0.78	0.78	5.0	3	38
4500d0.79	0.79	5.0	3	38
4500d0.80	0.80	6.0	3	38
4500d0.81	0.81	6.0	3	38
4500d0.82	0.82	6.0	3	38
4500d0.83	0.83	6.0	3	38
4500d0.84	0.84	6.0	3	38
4500d0.85	0.85	6.0	3	38
4500d0.86	0.86	6.0	3	38
4500d0.87	0.87	6.0	3	38
4500d0.88	0.88	6.0	3	38
4500d0.89	0.89	6.0	3	38
4500d0.90	0.90	7.0	3	38
4500d0.91	0.91	7.0	3	38
4500d0.92	0.92	7.0	3	38
4500d0.93	0.93	7.0	3	38
4500d0.94	0.94	7.0	3	38
4500d0.95	0.95	7.0	3	38
4500d0.96	0.96	7.0	3	38
4500d0.97	0.97	7.0	3	38
4500d0.98	0.98	7.0	3	38
4500d0.99	0.99	7.0	3	38
4500d1.00	1.00	8.0	3	38
4500d1.01	1.01	8.0	3	38
4500d1.02	1.02	8.0	3	38
4500d1.03	1.03	8.0	3	38
4500d1.04	1.04	8.0	3	38
4500d1.05	1.05	8.0	3	38
4500d1.06	1.06	8.0	3	38
4500d1.07	1.07	8.0	3	38

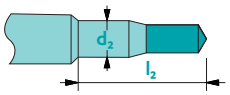
Other dimensions, CVD/CBN available upon request.

PCD twist drill - 2 teeth

Art. n°	d_1	l_1	D	L
4500d1.08	1.08	8.0	3	38
4500d1.09	1.09	8.0	3	38
4500d1.10	1.10	9.0	3	38
4500d1.11	1.11	9.0	3	38
4500d1.12	1.12	9.0	3	38
4500d1.13	1.13	9.0	3	38
4500d1.14	1.14	9.0	3	38
4500d1.15	1.15	9.0	3	38
4500d1.16	1.16	9.0	3	38
4500d1.17	1.17	9.0	3	38
4500d1.18	1.18	9.0	3	38
4500d1.19	1.19	9.0	3	38
4500d1.20	1.20	9.0	3	38
4500d1.21	1.21	9.0	3	38
4500d1.22	1.22	9.0	3	38
4500d1.23	1.23	9.0	3	38
4500d1.24	1.24	9.0	3	38
4500d1.25	1.25	9.0	3	38
4500d1.26	1.26	9.0	3	38
4500d1.27	1.27	9.0	3	38
4500d1.28	1.28	9.0	3	38
4500d1.29	1.29	9.0	3	38
4500d1.30	1.30	9.0	3	38
4500d1.31	1.31	9.0	3	38
4500d1.32	1.32	9.0	3	38
4500d1.33	1.33	9.0	3	38
4500d1.34	1.34	9.0	3	38
4500d1.35	1.35	9.0	3	38
4500d1.36	1.36	9.0	3	38
4500d1.37	1.37	9.0	3	38
4500d1.38	1.38	9.0	3	38
4500d1.39	1.39	9.0	3	38
4500d1.40	1.40	9.0	3	38
4500d1.41	1.41	9.0	3	38
4500d1.42	1.42	9.0	3	38
4500d1.43	1.43	9.0	3	38
4500d1.44	1.44	9.0	3	38
4500d1.45	1.45	9.0	3	38
4500d1.46	1.46	9.0	3	38
4500d1.47	1.47	9.0	3	38
4500d1.48	1.48	9.0	3	38
4500d1.49	1.49	9.0	3	38
4500d1.50	1.50	9.0	3	38
4500d1.55	1.55	9.0	3	38
4500d1.60	1.60	9.0	3	38

Art. n°	d_1	l_1	D	L
4500d1.65	1.65	9.0	3	38
4500d1.70	1.70	9.0	3	38
4500d1.75	1.75	9.0	3	38
4500d1.80	1.80	9.0	3	38
4500d1.85	1.85	9.0	3	38
4500d1.90	1.90	9.0	3	38
4500d1.95	1.95	9.0	3	38
4500d2.00	2.00	9.0	3	38
4500d2.05	2.05	9.0	3	38
4500d2.10	2.10	9.0	3	38
4500d2.15	2.15	9.0	3	38
4500d2.20	2.20	9.0	3	38
4500d2.25	2.25	9.0	3	38
4500d2.29	2.29	9.0	3	38
4500d2.30	2.30	9.0	3	38
4500d2.40	2.40	9.0	3	38
4500d2.50	2.50	9.0	3	38

Upon request



Available uncoated only

118°

Z2

λ 30°

PCD

Options

MCU ≤ ø3

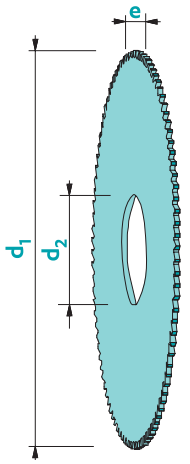
Other dimensions available upon request.

Slitting saw DIN 1837 fine pitch

Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating *
Steel < 700 N/mm²	80	120	□	■	Tisi (BQ)
Steel > 700 N/mm²	60	100	□	■	Tisi (BQ)
Stainless steel	60	100	□	■	Tisi (BQ)
Cast iron	50	90	□	■	Tisi (BQ)
Copper	200	300	□	■	Solo (DA)
Brass - Bronze	200	300	■	□	Solo (DA)
Aluminium	250	400	□	■	Solo (DA)
Gold - Silver	150	300	□	■	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Superalloys	20	40	□	■	Trio (PO)
Titanium	40	60	□	□	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances e : ± 0.01
d_2: H7



Art. n°	d_1	e	d_2	Z
223-1d15e0.10A5Z64	15	0.10	5	64
223-1d15e0.15A5Z64	15	0.15	5	64
223-1d15e0.20A5Z64	15	0.20	5	64
223-1d15e0.25A5Z64	15	0.25	5	64
223-1d15e0.30A5Z64	15	0.30	5	64
223-1d15e0.35A5Z64	15	0.35	5	64
223-1d15e0.40A5Z64	15	0.40	5	64
223-1d15e0.45A5Z48	15	0.45	5	48
223-1d15e0.50A5Z48	15	0.50	5	48
223-1d15e0.60A5Z48	15	0.60	5	48
223-1d15e0.70A5Z48	15	0.70	5	48
223-1d15e0.80A5Z40	15	0.80	5	40
223-1d15e0.90A5Z40	15	0.90	5	40
223-1d15e1.00A5Z40	15	1.00	5	40
223-1d15e1.10A5Z40	15	1.10	5	40
223-1d15e1.20A5Z40	15	1.20	5	40
223-1d15e1.30A5Z40	15	1.30	5	40
223-1d15e1.40A5Z40	15	1.40	5	40
223-1d15e1.50A5Z40	15	1.50	5	40
223-1d15e1.60A5Z40	15	1.60	5	40
223-1d15e1.70A5Z40	15	1.70	5	40
223-1d15e1.80A5Z40	15	1.80	5	40
223-1d15e1.90A5Z40	15	1.90	5	40
223-1d15e2.00A5Z40	15	2.00	5	40
223-1d15e2.10A5Z40	15	2.10	5	40
223-1d15e2.20A5Z40	15	2.20	5	40
223-1d15e2.30A5Z40	15	2.30	5	40
223-1d15e2.40A5Z40	15	2.40	5	40
223-1d15e2.50A5Z40	15	2.50	5	40
223-1d15e2.60A5Z40	15	2.60	5	40

Art. n°	d_1	e	d_2	Z
223-1d15e2.70A5Z40	15	2.70	5	40
223-1d15e2.80A5Z40	15	2.80	5	40
223-1d15e2.90A5Z40	15	2.90	5	40
223-1d15e3.00A5Z40	15	3.00	5	40
223-1d15e3.10A5Z24	15	3.10	5	24
223-1d15e3.20A5Z24	15	3.20	5	24
223-1d15e3.30A5Z24	15	3.30	5	24
223-1d15e3.40A5Z24	15	3.40	5	24
223-1d15e3.50A5Z24	15	3.50	5	24
223-1d15e3.60A5Z24	15	3.60	5	24
223-1d15e3.70A5Z24	15	3.70	5	24
223-1d15e3.80A5Z24	15	3.80	5	24
223-1d15e3.90A5Z24	15	3.90	5	24
223-1d15e4.00A5Z24	15	4.00	5	24
223-1d15e4.50A5Z24	15	4.50	5	24
223-1d15e5.00A5Z24	15	5.00	5	24
223-1d15e5.50A5Z24	15	5.50	5	24
223-1d15e6.00A5Z24	15	6.00	5	24
223-1d20e0.10A5Z80	20	0.10	5	80
223-1d20e0.15A5Z80	20	0.15	5	80
223-1d20e0.20A5Z80	20	0.20	5	80
223-1d20e0.25A5Z64	20	0.25	5	64
223-1d20e0.30A5Z64	20	0.30	5	64
223-1d20e0.35A5Z64	20	0.35	5	64
223-1d20e0.40A5Z64	20	0.40	5	64
223-1d20e0.45A5Z48	20	0.45	5	48
223-1d20e0.50A5Z48	20	0.50	5	48
223-1d20e0.60A5Z48	20	0.60	5	48
223-1d20e0.70A5Z48	20	0.70	5	48
223-1d20e0.80A5Z40	20	0.80	5	40

Available uncoated or coated

Z 24-160

λ 0°

γ 6°

CARB

To order a coated tool, add the 2-letter coating code to the article number.

Slitting saw DIN 1837 fine pitch

Available uncoated or coated

Z 24-160

λ 0°

γ 6°

CARB

Art. n°	d_1	e	d_2	Z
223-1d20e0.90A5Z40	20	0.90	5	40
223-1d20e1.00A5Z40	20	1.00	5	40
223-1d20e1.10A5Z40	20	1.10	5	40
223-1d20e1.20A5Z40	20	1.20	5	40
223-1d20e1.30A5Z40	20	1.30	5	40
223-1d20e1.40A5Z40	20	1.40	5	40
223-1d20e1.50A5Z40	20	1.50	5	40
223-1d20e1.60A5Z40	20	1.60	5	40
223-1d20e1.70A5Z32	20	1.70	5	32
223-1d20e1.80A5Z32	20	1.80	5	32
223-1d20e1.90A5Z32	20	1.90	5	32
223-1d20e2.00A5Z32	20	2.00	5	32
223-1d20e2.10A5Z32	20	2.10	5	32
223-1d20e2.20A5Z32	20	2.20	5	32
223-1d20e2.30A5Z32	20	2.30	5	32
223-1d20e2.40A5Z32	20	2.40	5	32
223-1d20e2.50A5Z32	20	2.50	5	32
223-1d20e2.60A5Z32	20	2.60	5	32
223-1d20e2.70A5Z32	20	2.70	5	32
223-1d20e2.80A5Z32	20	2.80	5	32
223-1d20e2.90A5Z32	20	2.90	5	32
223-1d20e3.00A5Z32	20	3.00	5	32
223-1d20e3.10A5Z24	20	3.10	5	24
223-1d20e3.20A5Z24	20	3.20	5	24
223-1d20e3.30A5Z24	20	3.30	5	24
223-1d20e3.40A5Z24	20	3.40	5	24
223-1d20e3.50A5Z24	20	3.50	5	24
223-1d20e3.60A5Z24	20	3.60	5	24
223-1d20e3.70A5Z24	20	3.70	5	24
223-1d20e3.80A5Z24	20	3.80	5	24
223-1d20e3.90A5Z24	20	3.90	5	24
223-1d20e4.00A5Z24	20	4.00	5	24
223-1d20e4.50A5Z24	20	4.50	5	24
223-1d20e5.00A5Z24	20	5.00	5	24
223-1d20e5.50A5Z24	20	5.50	5	24
223-1d20e6.00A5Z24	20	6.00	5	24
223-1d25e0.10A8Z80	25	0.10	8	80
223-1d25e0.15A8Z80	25	0.15	8	80
223-1d25e0.20A8Z80	25	0.20	8	80
223-1d25e0.25A8Z80	25	0.25	8	80
223-1d25e0.30A8Z80	25	0.30	8	80
223-1d25e0.35A8Z64	25	0.35	8	64
223-1d25e0.40A8Z64	25	0.40	8	64
223-1d25e0.45A8Z64	25	0.45	8	64
223-1d25e0.50A8Z64	25	0.50	8	64

Art. n°	d_1	e	d_2	Z
223-1d25e0.60A8Z64	25	0.60	8	64
223-1d25e0.70A8Z48	25	0.70	8	48
223-1d25e0.80A8Z48	25	0.80	8	48
223-1d25e0.90A8Z48	25	0.90	8	48
223-1d25e1.00A8Z48	25	1.00	8	48
223-1d25e1.10A8Z48	25	1.10	8	48
223-1d25e1.20A8Z48	25	1.20	8	48
223-1d25e1.30A8Z40	25	1.30	8	40
223-1d25e1.40A8Z40	25	1.40	8	40
223-1d25e1.50A8Z40	25	1.50	8	40
223-1d25e1.60A8Z40	25	1.60	8	40
223-1d25e1.70A8Z40	25	1.70	8	40
223-1d25e1.80A8Z40	25	1.80	8	40
223-1d25e1.90A8Z40	25	1.90	8	40
223-1d25e2.00A8Z40	25	2.00	8	40
223-1d25e2.10A8Z40	25	2.10	8	40
223-1d25e2.20A8Z40	25	2.20	8	40
223-1d25e2.30A8Z40	25	2.30	8	40
223-1d25e2.40A8Z40	25	2.40	8	40
223-1d25e2.50A8Z40	25	2.50	8	40
223-1d25e2.60A8Z32	25	2.60	8	32
223-1d25e2.70A8Z32	25	2.70	8	32
223-1d25e2.80A8Z32	25	2.80	8	32
223-1d25e2.90A8Z32	25	2.90	8	32
223-1d25e3.00A8Z32	25	3.00	8	32
223-1d25e3.10A8Z32	25	3.10	8	32
223-1d25e3.20A8Z32	25	3.20	8	32
223-1d25e3.30A8Z32	25	3.30	8	32
223-1d25e3.40A8Z32	25	3.40	8	32
223-1d25e3.50A8Z32	25	3.50	8	32
223-1d25e3.60A8Z32	25	3.60	8	32
223-1d25e3.70A8Z32	25	3.70	8	32
223-1d25e3.80A8Z32	25	3.80	8	32
223-1d25e3.90A8Z32	25	3.90	8	32
223-1d25e4.00A8Z32	25	4.00	8	32
223-1d25e4.50A8Z32	25	4.50	8	32
223-1d25e5.00A8Z32	25	5.00	8	32
223-1d25e5.50A8Z24	25	5.50	8	24
223-1d25e6.00A8Z24	25	6.00	8	24
--> Ref. 223-2	30	0.10	8	100
--> Ref. 223-2	30	0.15	8	100
--> Ref. 223-2	30	0.20	8	100
--> Ref. 223-2	30	0.25	8	100
223-1d30e0.30A8Z80	30	0.30	8	80
223-1d30e0.35A8Z80	30	0.35	8	80

To order a coated tool, add the 2-letter coating code to the article number.

Slitting saw DIN 1837 fine pitch

Art. n°	d_1	e	d_2	Z
223-1d30e0.40A8Z80	30	0.40	8	80
223-1d30e0.45A8Z80	30	0.45	8	80
223-1d30e0.50A8Z80	30	0.50	8	80
223-1d30e0.60A8Z64	30	0.60	8	64
223-1d30e0.70A8Z64	30	0.70	8	64
223-1d30e0.80A8Z64	30	0.80	8	64
223-1d30e0.90A8Z64	30	0.90	8	64
223-1d30e1.00A8Z64	30	1.00	8	64
223-1d30e1.10A8Z48	30	1.10	8	48
223-1d30e1.20A8Z48	30	1.20	8	48
223-1d30e1.30A8Z48	30	1.30	8	48
223-1d30e1.40A8Z48	30	1.40	8	48
223-1d30e1.50A8Z48	30	1.50	8	48
223-1d30e1.60A8Z48	30	1.60	8	48
223-1d30e1.70A8Z48	30	1.70	8	48
223-1d30e1.80A8Z48	30	1.80	8	48
223-1d30e1.90A8Z48	30	1.90	8	48
223-1d30e2.00A8Z48	30	2.00	8	48
223-1d30e2.10A8Z40	30	2.10	8	40
223-1d30e2.20A8Z40	30	2.20	8	40
223-1d30e2.30A8Z40	30	2.30	8	40
223-1d30e2.40A8Z40	30	2.40	8	40
223-1d30e2.50A8Z40	30	2.50	8	40
223-1d30e2.60A8Z40	30	2.60	8	40
223-1d30e2.70A8Z40	30	2.70	8	40
223-1d30e2.80A8Z40	30	2.80	8	40
223-1d30e2.90A8Z40	30	2.90	8	40
223-1d30e3.00A8Z40	30	3.00	8	40
223-1d30e3.10A8Z40	30	3.10	8	40
223-1d30e3.20A8Z40	30	3.20	8	40
223-1d30e3.30A8Z40	30	3.30	8	40
223-1d30e3.40A8Z40	30	3.40	8	40
223-1d30e3.50A8Z40	30	3.50	8	40
223-1d30e3.60A8Z40	30	3.60	8	40
223-1d30e3.70A8Z40	30	3.70	8	40
223-1d30e3.80A8Z40	30	3.80	8	40
223-1d30e3.90A8Z40	30	3.90	8	40
223-1d30e4.00A8Z40	30	4.00	8	40
223-1d30e4.50A8Z32	30	4.50	8	32
223-1d30e5.00A8Z32	30	5.00	8	32
223-1d30e5.50A8Z32	30	5.50	8	32
223-1d30e6.00A8Z32	30	6.00	8	32
223-1d40e0.10A10Z128	40	0.10	10	128
223-1d40e0.15A10Z128	40	0.15	10	128
223-1d40e0.20A10Z128	40	0.20	10	128

Art. n°	d_1	e	d_2	Z
--> Ref. 223-2	40	0.25	10	100
--> Ref. 223-2	40	0.30	10	100
--> Ref. 223-2	40	0.35	10	100
--> Ref. 223-2	40	0.40	10	100
223-1d40e0.45A10Z80	40	0.45	10	80
223-1d40e0.50A10Z80	40	0.50	10	80
223-1d40e0.60A10Z80	40	0.60	10	80
223-1d40e0.70A10Z80	40	0.70	10	80
223-1d40e0.80A10Z80	40	0.80	10	80
223-1d40e0.90A10Z64	40	0.90	10	64
223-1d40e1.00A10Z64	40	1.00	10	64
223-1d40e1.10A10Z64	40	1.10	10	64
223-1d40e1.20A10Z64	40	1.20	10	64
223-1d40e1.30A10Z64	40	1.30	10	64
223-1d40e1.40A10Z64	40	1.40	10	64
223-1d40e1.50A10Z64	40	1.50	10	64
223-1d40e1.60A10Z64	40	1.60	10	64
223-1d40e1.70A10Z48	40	1.70	10	48
223-1d40e1.80A10Z48	40	1.80	10	48
223-1d40e1.90A10Z48	40	1.90	10	48
223-1d40e2.00A10Z48	40	2.00	10	48
223-1d40e2.10A10Z48	40	2.10	10	48
223-1d40e2.20A10Z48	40	2.20	10	48
223-1d40e2.30A10Z48	40	2.30	10	48
223-1d40e2.40A10Z48	40	2.40	10	48
223-1d40e2.50A10Z48	40	2.50	10	48
223-1d40e2.60A10Z48	40	2.60	10	48
223-1d40e2.70A10Z48	40	2.70	10	48
223-1d40e2.80A10Z48	40	2.80	10	48
223-1d40e2.90A10Z48	40	2.90	10	48
223-1d40e3.00A10Z48	40	3.00	10	48
223-1d40e3.10A10Z40	40	3.10	10	40
223-1d40e3.20A10Z40	40	3.20	10	40
223-1d40e3.30A10Z40	40	3.30	10	40
223-1d40e3.40A10Z40	40	3.40	10	40
223-1d40e3.50A10Z40	40	3.50	10	40
223-1d40e3.60A10Z40	40	3.60	10	40
223-1d40e3.70A10Z40	40	3.70	10	40
223-1d40e3.80A10Z40	40	3.80	10	40
223-1d40e3.90A10Z40	40	3.90	10	40
223-1d40e4.00A10Z40	40	4.00	10	40
223-1d40e4.50A10Z40	40	4.50	10	40
223-1d40e5.00A10Z40	40	5.00	10	40
223-1d40e5.50A10Z40	40	5.50	10	40
223-1d40e6.00A10Z40	40	6.00	10	40

Available uncoated or coated

Z 24-160

λ 0°

γ 6°

CARB

To order a coated tool, add the 2-letter coating code to the article number.

Slitting saw DIN 1837 fine pitch

Available uncoated or coated

Z 24-160

λ 0°

γ 6°

CARB

Art. n°	d_1	e	d_2	Z
223-1d50e0.20A13Z128	50	0.20	13	128
223-1d50e0.25A13Z128	50	0.25	13	128
223-1d50e0.30A13Z128	50	0.30	13	128
223-1d50e0.35A13Z100	50	0.35	13	100
223-1d50e0.40A13Z100	50	0.40	13	100
223-1d50e0.45A13Z100	50	0.45	13	100
223-1d50e0.50A13Z100	50	0.50	13	100
223-1d50e0.60A13Z100	50	0.60	13	100
223-1d50e0.70A13Z80	50	0.70	13	80
223-1d50e0.80A13Z80	50	0.80	13	80
223-1d50e0.90A13Z80	50	0.90	13	80
223-1d50e1.00A13Z80	50	1.00	13	80
223-1d50e1.10A13Z80	50	1.10	13	80
223-1d50e1.20A13Z80	50	1.20	13	80
223-1d50e1.30A13Z64	50	1.30	13	64
223-1d50e1.40A13Z64	50	1.40	13	64
223-1d50e1.50A13Z64	50	1.50	13	64
223-1d50e1.60A13Z64	50	1.60	13	64
223-1d50e1.70A13Z64	50	1.70	13	64
223-1d50e1.80A13Z64	50	1.80	13	64
223-1d50e1.90A13Z64	50	1.90	13	64
223-1d50e2.00A13Z64	50	2.00	13	64
223-1d50e2.10A13Z64	50	2.10	13	64
223-1d50e2.20A13Z64	50	2.20	13	64
223-1d50e2.30A13Z64	50	2.30	13	64
223-1d50e2.40A13Z64	50	2.40	13	64
223-1d50e2.50A13Z64	50	2.50	13	64
223-1d50e2.60A13Z48	50	2.60	13	48
223-1d50e2.70A13Z48	50	2.70	13	48
223-1d50e2.80A13Z48	50	2.80	13	48
223-1d50e2.90A13Z48	50	2.90	13	48
223-1d50e3.00A13Z48	50	3.00	13	48
223-1d50e3.10A13Z48	50	3.10	13	48
223-1d50e3.20A13Z48	50	3.20	13	48
223-1d50e3.30A13Z48	50	3.30	13	48
223-1d50e3.40A13Z48	50	3.40	13	48
223-1d50e3.50A13Z48	50	3.50	13	48
223-1d50e3.60A13Z48	50	3.60	13	48
223-1d50e3.70A13Z48	50	3.70	13	48
223-1d50e3.80A13Z48	50	3.80	13	48
223-1d50e3.90A13Z48	50	3.90	13	48
223-1d50e4.00A13Z48	50	4.00	13	48
223-1d50e4.50A13Z48	50	4.50	13	48
223-1d50e5.00A13Z48	50	5.00	13	48
223-1d50e5.50A13Z40	50	5.50	13	40

Art. n°	d_1	e	d_2	Z
223-1d50e6.00A13Z40	50	6.00	13	40
223-1d63e0.20A16Z160	63	0.20	16	160
223-1d63e0.25A16Z128	63	0.25	16	128
223-1d63e0.30A16Z128	63	0.30	16	128
223-1d63e0.35A16Z128	63	0.35	16	128
223-1d63e0.40A16Z128	63	0.40	16	128
223-1d63e0.45A16Z128	63	0.45	16	128
223-1d63e0.50A16Z128	63	0.50	16	128
223-1d63e0.60A16Z100	63	0.60	16	100
223-1d63e0.70A16Z100	63	0.70	16	100
223-1d63e0.80A16Z100	63	0.80	16	100
223-1d63e0.90A16Z100	63	0.90	16	100
223-1d63e1.00A16Z100	63	1.00	16	100
223-1d63e1.10A16Z80	63	1.10	16	80
223-1d63e1.20A16Z80	63	1.20	16	80
223-1d63e1.30A16Z80	63	1.30	16	80
223-1d63e1.40A16Z80	63	1.40	16	80
223-1d63e1.50A16Z80	63	1.50	16	80
223-1d63e1.60A16Z80	63	1.60	16	80
223-1d63e1.70A16Z80	63	1.70	16	80
223-1d63e1.80A16Z80	63	1.80	16	80
223-1d63e1.90A16Z80	63	1.90	16	80
223-1d63e2.00A16Z80	63	2.00	16	80
223-1d63e2.10A16Z64	63	2.10	16	64
223-1d63e2.20A16Z64	63	2.20	16	64
223-1d63e2.30A16Z64	63	2.30	16	64
223-1d63e2.40A16Z64	63	2.40	16	64
223-1d63e2.50A16Z64	63	2.50	16	64
223-1d63e2.60A16Z64	63	2.60	16	64
223-1d63e2.70A16Z64	63	2.70	16	64
223-1d63e2.80A16Z64	63	2.80	16	64
223-1d63e2.90A16Z64	63	2.90	16	64
223-1d63e3.00A16Z64	63	3.00	16	64
223-1d63e3.10A16Z64	63	3.10	16	64
223-1d63e3.20A16Z64	63	3.20	16	64
223-1d63e3.30A16Z64	63	3.30	16	64
223-1d63e3.40A16Z64	63	3.40	16	64
223-1d63e3.50A16Z64	63	3.50	16	64
223-1d63e3.60A16Z64	63	3.60	16	64
223-1d63e3.70A16Z64	63	3.70	16	64
223-1d63e3.80A16Z64	63	3.80	16	64
223-1d63e3.90A16Z64	63	3.90	16	64
223-1d63e4.00A16Z64	63	4.00	16	64
223-1d63e4.50A16Z48	63	4.50	16	48
223-1d63e5.00A16Z48	63	5.00	16	48

To order a coated tool, add the 2-letter coating code to the article number.

Slitting saw DIN 1837 fine pitch

Art. n°	d_1	e	d_2	Z
223-1d63e5.50A16Z48	63	5.50	16	48
223-1d63e6.00A16Z48	63	6.00	16	48
223-1d80e0.25A22Z160	80	0.25	22	160
223-1d80e0.30A22Z160	80	0.30	22	160
223-1d80e0.35A22Z160	80	0.35	22	160
223-1d80e0.40A22Z160	80	0.40	22	160
223-1d80e0.45A22Z128	80	0.45	22	128
223-1d80e0.50A22Z128	80	0.50	22	128
223-1d80e0.60A22Z128	80	0.60	22	128
223-1d80e0.70A22Z128	80	0.70	22	128
223-1d80e0.80A22Z128	80	0.80	22	128
223-1d80e0.90A22Z100	80	0.90	22	100
223-1d80e1.00A22Z100	80	1.00	22	100
223-1d80e1.10A22Z100	80	1.10	22	100
223-1d80e1.20A22Z100	80	1.20	22	100
223-1d80e1.30A22Z100	80	1.30	22	100
223-1d80e1.40A22Z100	80	1.40	22	100
223-1d80e1.50A22Z100	80	1.50	22	100
223-1d80e1.60A22Z100	80	1.60	22	100
223-1d80e1.70A22Z80	80	1.70	22	80
223-1d80e1.80A22Z80	80	1.80	22	80
223-1d80e1.90A22Z80	80	1.90	22	80
223-1d80e2.00A22Z80	80	2.00	22	80
223-1d80e2.10A22Z80	80	2.10	22	80
223-1d80e2.20A22Z80	80	2.20	22	80
223-1d80e2.30A22Z80	80	2.30	22	80
223-1d80e2.40A22Z80	80	2.40	22	80
223-1d80e2.50A22Z80	80	2.50	22	80
223-1d80e2.60A22Z80	80	2.60	22	80
223-1d80e2.70A22Z80	80	2.70	22	80
223-1d80e2.80A22Z80	80	2.80	22	80
223-1d80e2.90A22Z80	80	2.90	22	80
223-1d80e3.00A22Z80	80	3.00	22	80
223-1d80e3.10A22Z64	80	3.10	22	64
223-1d80e3.20A22Z64	80	3.20	22	64
223-1d80e3.30A22Z64	80	3.30	22	64
223-1d80e3.40A22Z64	80	3.40	22	64
223-1d80e3.50A22Z64	80	3.50	22	64
223-1d80e3.60A22Z64	80	3.60	22	64
223-1d80e3.70A22Z64	80	3.70	22	64
223-1d80e3.80A22Z64	80	3.80	22	64
223-1d80e3.90A22Z64	80	3.90	22	64
223-1d80e4.00A22Z64	80	4.00	22	64
223-1d80e4.50A22Z64	80	4.50	22	64
223-1d80e5.00A22Z64	80	5.00	22	64

Art. n°	d_1	e	d_2	Z
223-1d80e5.50A22Z64	80	5.50	22	64
223-1d80e6.00A22Z64	80	6.00	22	64
223-1d100e0.50A22Z160	100	0.50	22	160
223-1d100e0.60A22Z160	100	0.60	22	160
223-1d100e0.70A22Z128	100	0.70	22	128
223-1d100e0.80A22Z128	100	0.80	22	128
223-1d100e0.90A22Z128	100	0.90	22	128
223-1d100e1.00A22Z128	100	1.00	22	128
223-1d100e1.10A22Z128	100	1.10	22	128
223-1d100e1.20A22Z128	100	1.20	22	128
223-1d100e1.30A22Z100	100	1.30	22	100
223-1d100e1.40A22Z100	100	1.40	22	100
223-1d100e1.50A22Z100	100	1.50	22	100
223-1d100e1.60A22Z100	100	1.60	22	100
223-1d100e1.70A22Z100	100	1.70	22	100
223-1d100e1.80A22Z100	100	1.80	22	100
223-1d100e1.90A22Z100	100	1.90	22	100
223-1d100e2.00A22Z100	100	2.00	22	100
223-1d100e2.10A22Z100	100	2.10	22	100
223-1d100e2.20A22Z100	100	2.20	22	100
223-1d100e2.30A22Z100	100	2.30	22	100
223-1d100e2.40A22Z100	100	2.40	22	100
223-1d100e2.50A22Z100	100	2.50	22	100
223-1d100e2.60A22Z80	100	2.60	22	80
223-1d100e2.70A22Z80	100	2.70	22	80
223-1d100e2.80A22Z80	100	2.80	22	80
223-1d100e2.90A22Z80	100	2.90	22	80
223-1d100e3.00A22Z80	100	3.00	22	80
223-1d100e3.10A22Z80	100	3.10	22	80
223-1d100e3.20A22Z80	100	3.20	22	80
223-1d100e3.30A22Z80	100	3.30	22	80
223-1d100e3.40A22Z80	100	3.40	22	80
223-1d100e3.50A22Z80	100	3.50	22	80
223-1d100e3.60A22Z80	100	3.60	22	80
223-1d100e3.70A22Z80	100	3.70	22	80
223-1d100e3.80A22Z80	100	3.80	22	80
223-1d100e3.90A22Z80	100	3.90	22	80
223-1d100e4.00A22Z80	100	4.00	22	80
223-1d100e4.50A22Z80	100	4.50	22	80
223-1d100e5.00A22Z80	100	5.00	22	80
223-1d100e5.50A22Z64	100	5.50	22	64
223-1d100e6.00A22Z64	100	6.00	22	64
223-1d125e0.60A22Z160	125	0.60	22	160
223-1d125e0.70A22Z160	125	0.70	22	160
223-1d125e0.80A22Z160	125	0.80	22	160

Available uncoated or coated

Z 24-160

λ 0°

γ 6°

CARB

To order a coated tool, add the 2-letter coating code to the article number.

Slitting saw DIN 1837 fine pitch

Available
uncoated or coated

Z
24-160

λ
0°

γ
6°

CARB

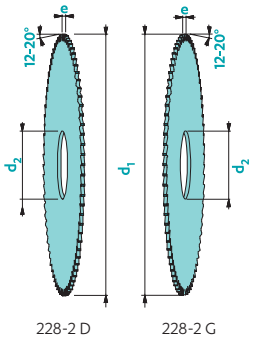
Art. n°	d_1	e	d_2	Z
223-1d125e0.90A22Z160	125	0.90	22	160
223-1d125e1.00A22Z160	125	1.00	22	160
223-1d125e1.10A22Z128	125	1.10	22	128
223-1d125e1.20A22Z128	125	1.20	22	128
223-1d125e1.30A22Z128	125	1.30	22	128
223-1d125e1.40A22Z128	125	1.40	22	128
223-1d125e1.50A22Z128	125	1.50	22	128
223-1d125e1.60A22Z128	125	1.60	22	128
223-1d125e1.70A22Z128	125	1.70	22	128
223-1d125e1.80A22Z128	125	1.80	22	128
223-1d125e1.90A22Z128	125	1.90	22	128
223-1d125e2.00A22Z128	125	2.00	22	128
223-1d125e2.10A22Z100	125	2.10	22	100
223-1d125e2.20A22Z100	125	2.20	22	100
223-1d125e2.30A22Z100	125	2.30	22	100
223-1d125e2.40A22Z100	125	2.40	22	100
223-1d125e2.50A22Z100	125	2.50	22	100
223-1d125e2.60A22Z100	125	2.60	22	100
223-1d125e2.70A22Z100	125	2.70	22	100
223-1d125e2.80A22Z100	125	2.80	22	100
223-1d125e2.90A22Z100	125	2.90	22	100
223-1d125e3.00A22Z100	125	3.00	22	100
223-1d125e3.10A22Z100	125	3.10	22	100
223-1d125e3.20A22Z100	125	3.20	22	100
223-1d125e3.30A22Z100	125	3.30	22	100
223-1d125e3.40A22Z100	125	3.40	22	100
223-1d125e3.50A22Z100	125	3.50	22	100
223-1d125e3.60A22Z100	125	3.60	22	100
223-1d125e3.70A22Z100	125	3.70	22	100
223-1d125e3.80A22Z100	125	3.80	22	100
223-1d125e3.90A22Z100	125	3.90	22	100
223-1d125e4.00A22Z100	125	4.00	22	100
223-1d125e4.50A22Z100	125	4.50	22	100
223-1d125e5.00A22Z100	125	5.00	22	100
223-1d125e5.50A22Z100	125	5.50	22	100
223-1d125e6.00A22Z100	125	6.00	22	100
223-1d160e1.00A32Z160	160	1.00	32	160
223-1d160e1.20A32Z160	160	1.20	32	160
223-1d160e1.50A32Z160	160	1.50	32	160
223-1d160e1.60A32Z160	160	1.60	32	160
223-1d160e1.80A32Z128	160	1.80	32	128
223-1d160e2.00A32Z128	160	2.00	32	128
223-1d160e2.50A32Z128	160	2.50	32	128
223-1d160e3.00A32Z128	160	3.00	32	128

To order a coated tool, add the 2-letter coating code to the article number.

Angle cutter 12° to 20°

Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating *
Steel < 700 N/mm²	80	120	▫	■	Tisi (BQ)
Steel > 700 N/mm²	60	100	▫	■	Tisi (BQ)
Stainless steel	60	100	▫	■	Tisi (BQ)
Cast iron	50	90	▫	■	Tisi (BQ)
Copper	200	300	▫	■	Solo (DA)
Brass - Bronze	200	300	■	▫	Solo (DA)
Aluminium	250	400	▫	■	Solo (DA)
Gold - Silver	150	300	▫	■	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Superalloys	20	40	▫	■	Trio (PO)
Titanium	40	60	■	■	Marc (ME)

not adapted - adapted ▫ highly adapted ■



228-2 D 228-2 G

Tolerances e : ± 0.01
d_2: H5

Right cut: 228-2D / Left cut: 228-2G

Art. n°	d_1	e	d_2	Z	a
228-2Dd30e0.5a##° / 228-2Gd30e0.5a##°	30	0.5	8	64	12-20°
228-2Dd30e0.7a##° / 228-2Gd30e0.7a##°	30	0.7	8	64	12-20°
228-2Dd30e0.8a##° / 228-2Gd30e0.8a##°	30	0.8	8	64	12-20°
228-2Dd30e1.0a##° / 228-2Gd30e1.0a##°	30	1.0	8	64	12-20°
228-2Dd30e1.5a##° / 228-2Gd30e1.5a##°	30	1.5	8	48	12-20°
228-2Dd40e0.5a##° / 228-2Gd40e0.5a##°	40	0.5	10	80	12-20°
228-2Dd40e0.8a##° / 228-2Gd40e0.8a##°	40	0.8	10	64	12-20°
228-2Dd40e1.0a##° / 228-2Gd40e1.0a##°	40	1.0	10	64	12-20°
228-2Dd50e0.5a##° / 228-2Gd50e0.5a##°	50	0.5	13	100	12-20°
228-2Dd50e0.8a##° / 228-2Gd50e0.8a##°	50	0.8	13	100	12-20°
228-2Dd50e1.0a##° / 228-2Gd50e1.0a##°	50	1.0	13	100	12-20°
228-2Dd63e0.5a##° / 228-2Gd63e0.5a##°	63	0.5	16	100	12-20°
228-2Dd63e0.7a##° / 228-2Gd63e0.7a##°	63	0.7	16	100	12-20°
228-2Dd63e0.8a##° / 228-2Gd63e0.8a##°	63	0.8	16	100	12-20°
228-2Dd63e1.0a##° / 228-2Gd63e1.0a##°	63	1.0	16	100	12-20°
228-2Dd80e0.5a##° / 228-2Gd80e0.5a##°	80	0.5	22	128	12-20°
228-2Dd80e0.8a##° / 228-2Gd80e0.8a##°	80	0.8	22	128	12-20°
228-2Dd80e1.0a##° / 228-2Gd80e1.0a##°	80	1.0	22	100	12-20°
228-2Dd100e0.6a##° / 228-2Gd100e0.6a##°	100	0.6	22	128	12-20°
228-2Dd100e0.7a##° / 228-2Gd100e0.7a##°	100	0.7	22	128	12-20°
228-2Dd100e0.8a##° / 228-2Gd100e0.8a##°	100	0.8	22	128	12-20°
228-2Dd100e1.0a##° / 228-2Gd100e1.0a##°	100	1.0	22	128	12-20°

To order a coated tool, add the 2-letter coating code to the article number.

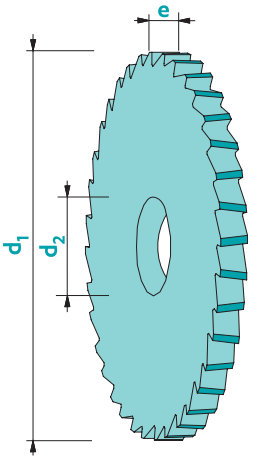
Available uncoated or coated

Z 64-128

λ 0°

CARB

Slitting saw staggered teeth



Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating ♦
Steel < 700 N/mm²	80	120	□	■	Tisi (BQ)
Steel > 700 N/mm²	60	100	□	■	Tisi (BQ)
Stainless steel	60	100	□	■	Tisi (BQ)
Cast iron	50	90	□	■	Tisi (BQ)
Copper	200	300	□	■	Solo (DA)
Brass - Bronze	200	300	■	□	Solo (DA)
Aluminium	250	400	□	■	Solo (DA)
Gold - Silver	150	300	□	■	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Superalloys	20	40	□	■	Trio (PO)
Titanium	40	60	■	■	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances e : ± 0.01
d_2: H5

Available uncoated or coated

Z 12-36

λ ALT

γ 6°

CARB

Art. n°	d_1	e	d_2	Z
226d15e1.5a5Z##	15	1.5	5	12 - 18
226d15e2.0a5Z##	15	2.0	5	12 - 18
226d15e2.5a5Z##	15	2.5	5	12 - 18
226d15e3.0a5Z##	15	3.0	5	12 - 18
226d15e3.5a5Z##	15	3.5	5	12 - 18
226d15e4.0a5Z##	15	4.0	5	12 - 18
226d15e4.5a5Z##	15	4.5	5	12 - 18
226d15e5.0a5Z##	15	5.0	5	12 - 18
226d15e5.5a5Z##	15	5.5	5	12 - 18
226d15e6.0a5Z##	15	6.0	5	12 - 18
226d20e1.5a5Z##	20	1.5	5	20 - 24
226d20e2.0a5Z##	20	2.0	5	20 - 24
226d20e2.5a5Z##	20	2.5	5	20 - 24
226d20e3.0a5Z##	20	3.0	5	20 - 24
226d20e3.5a5Z##	20	3.5	5	20 - 24
226d20e4.0a5Z##	20	4.0	5	20 - 24
226d20e4.5a5Z##	20	4.5	5	20 - 24
226d20e5.0a5Z##	20	5.0	5	20 - 24
226d20e5.5a5Z##	20	5.5	5	20 - 24
226d20e6.0a5Z##	20	6.0	5	20 - 24
226d25e1.5a8Z##	25	1.5	8	24 - 28
226d25e2.0a8Z##	25	2.0	8	24 - 28
226d25e2.5a8Z##	25	2.5	8	24 - 28
226d25e3.0a8Z##	25	3.0	8	24 - 28
226d25e3.5a8Z##	25	3.5	8	24 - 28
226d25e4.0a8Z##	25	4.0	8	24 - 28
226d25e4.5a8Z##	25	4.5	8	24 - 28
226d25e5.0a8Z##	25	5.0	8	24 - 28
226d25e5.5a8Z##	25	5.5	8	24 - 28
226d25e6.0a8Z##	25	6.0	8	24 - 28

Art. n°	d_1	e	d_2	Z
226d25e6.5a8Z##	25	6.5	8	24 - 28
226d25e7.0a8Z##	25	7.0	8	24 - 28
226d25e7.5a8Z##	25	7.5	8	24 - 28
226d25e8.0a8Z##	25	8.0	8	24 - 28
226d30e1.5a8Z##	30	1.5	8	24 - 28
226d30e2.0a8Z##	30	2.0	8	24 - 28
226d30e2.5a8Z##	30	2.5	8	24 - 28
226d30e3.0a8Z##	30	3.0	8	24 - 28
226d30e3.5a8Z##	30	3.5	8	24 - 28
226d30e4.0a8Z##	30	4.0	8	24 - 28
226d30e4.5a8Z##	30	4.5	8	24 - 28
226d30e5.0a8Z##	30	5.0	8	24 - 28
226d30e5.5a8Z##	30	5.5	8	24 - 28
226d30e6.0a8Z##	30	6.0	8	24 - 28
226d30e6.5a8Z##	30	6.5	8	24 - 28
226d30e7.0a8Z##	30	7.0	8	24 - 28
226d30e7.5a8Z##	30	7.5	8	24 - 28
226d30e8.0a8Z##	30	8.0	8	24 - 28
226d30e8.5a8Z##	30	8.5	8	24 - 28
226d30e9.0a8Z##	30	9.0	8	24 - 28
226d30e9.5a8Z##	30	9.5	8	24 - 28
226d30e10.0a8Z##	30	10.0	8	24 - 28
226d40e2.0a10Z##	40	2.0	10	28 - 32
226d40e2.5a10Z##	40	2.5	10	28 - 32
226d40e3.0a10Z##	40	3.0	10	28 - 32
226d40e3.5a10Z##	40	3.5	10	28 - 32
226d40e4.0a10Z##	40	4.0	10	28 - 32
226d40e4.5a10Z##	40	4.5	10	28 - 32
226d40e5.0a10Z##	40	5.0	10	28 - 32
226d40e5.5a10Z##	40	5.5	10	28 - 32

♦ Prices for other coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number.

Slitting saw staggered teeth

Art. n°	d_1	e	d_2	Z
226d40e6.0a10Z##	40	6.0	10	28 - 32
226d40e6.5a10Z##	40	6.5	10	28 - 32
226d40e7.0a10Z##	40	7.0	10	28 - 32
226d40e7.5a10Z##	40	7.5	10	28 - 32
226d40e8.0a10Z##	40	8.0	10	28 - 32
226d40e8.5a10Z##	40	8.5	10	28 - 32
226d40e9.0a10Z##	40	9.0	10	28 - 32
226d40e9.5a10Z##	40	9.5	10	28 - 32
226d40e10.0a10Z##	40	10.0	10	28 - 32
226d40e11.0a10Z##	40	11.0	10	28 - 32
226d40e12.0a10Z##	40	12.0	10	28 - 32
226d50e2.0a13Z##	50	2.0	13	28 - 32
226d50e2.5a13Z##	50	2.5	13	28 - 32
226d50e3.0a13Z##	50	3.0	13	28 - 32
226d50e3.5a13Z##	50	3.5	13	28 - 32
226d50e4.0a13Z##	50	4.0	13	28 - 32
226d50e4.5a13Z##	50	4.5	13	28 - 32
226d50e5.0a13Z##	50	5.0	13	28 - 32
226d50e5.5a13Z##	50	5.5	13	28 - 32
226d50e6.0a13Z##	50	6.0	13	28 - 32
226d50e6.5a13Z##	50	6.5	13	28 - 32
226d50e7.0a13Z##	50	7.0	13	28 - 32
226d50e7.5a13Z##	50	7.5	13	28 - 32
226d50e8.0a13Z##	50	8.0	13	28 - 32
226d50e8.5a13Z##	50	8.5	13	28 - 32
226d50e9.0a13Z##	50	9.0	13	28 - 32
226d50e9.5a13Z##	50	9.5	13	28 - 32
226d50e10.0a13Z##	50	10.0	13	28 - 32
226d50e11.0a13Z##	50	11.0	13	28 - 32
226d50e12.0a13Z##	50	12.0	13	28 - 32
226d63e2.0a16Z##	63	2.0	16	28 - 36
226d63e2.5a16Z##	63	2.5	16	28 - 36
226d63e3.0a16Z##	63	3.0	16	28 - 36
226d63e3.5a16Z##	63	3.5	16	28 - 36
226d63e4.0a16Z##	63	4.0	16	28 - 36
226d63e4.5a16Z##	63	4.5	16	28 - 36
226d63e5.0a16Z##	63	5.0	16	28 - 36
226d63e5.5a16Z##	63	5.5	16	28 - 36
226d63e6.0a16Z##	63	6.0	16	28 - 36
226d63e6.5a16Z##	63	6.5	16	28 - 36
226d63e7.0a16Z##	63	7.0	16	28 - 36
226d63e7.5a16Z##	63	7.5	16	28 - 36
226d63e8.0a16Z##	63	8.0	16	28 - 36
226d63e8.5a16Z##	63	8.5	16	28 - 36
226d63e9.0a16Z##	63	9.0	16	28 - 36
226d63e10.0a16Z##	63	10.0	16	28 - 36
226d80e2.0a22Z##	80	2.0	22	28 - 36
226d80e2.5a22Z##	80	2.5	22	28 - 36
226d80e3.0a22Z##	80	3.0	22	28 - 36
226d80e3.5a22Z##	80	3.5	22	28 - 36
226d80e4.0a22Z##	80	4.0	22	28 - 36
226d80e4.5a22Z##	80	4.5	22	28 - 36
226d80e5.0a22Z##	80	5.0	22	28 - 36
226d80e5.5a22Z##	80	5.5	22	28 - 36
226d80e6.0a22Z##	80	6.0	22	28 - 36
226d80e6.5a22Z##	80	6.5	22	28 - 36
226d80e7.0a22Z##	80	7.0	22	28 - 36
226d80e7.5a22Z##	80	7.5	22	28 - 36
226d80e8.0a22Z##	80	8.0	22	28 - 36
226d80e8.5a22Z##	80	8.5	22	28 - 36
226d80e9.0a22Z##	80	9.0	22	28 - 36
226d80e9.5a22Z##	80	9.5	22	28 - 36
226d80e10.0a22Z##	80	10.0	22	28 - 36
226d80e11.0a22Z##	80	11.0	22	28 - 36
226d80e12.0a22Z##	80	12.0	22	28 - 36

Available uncoated or coated

Z
12-36

λ
ALT

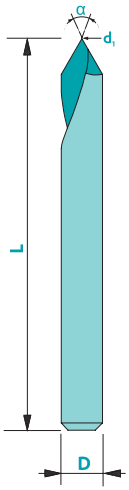
γ
6°

CARB

♦ Prices for other coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number.

119-2

Helical engraving mill - flat tip



Material	n [rpm]	Ap	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	25 - 40'000	0.05 -0.40	□	■	Tisi (BQ)
Steel > 700 N/mm²	20 - 40'000	0.05 -0.30	-	■	Tisi (BQ)
Stainless steel	20 - 30'000	0.05 - 0.30	-	□	Tisi (BQ)
Cast iron	25 - 40'000	0.05 - 0.40	□	■	Tisi (BQ)
Copper	20 - 40'000	0.05 - 0.40	□	■	Solo (DA)
Brass - Bronze	25 - 40'000	0.05 -0.40	□	□	Solo (DA)
Aluminium	25 - 40'000	0.05 - 0.50	□	■	Solo (DA)
Gold - Silver	20 - 40'000	0.05 -0.40	■	□	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Titanium	25 - 40'000	0.05 - 0.40	□	□	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances d_1: ±0.01
D : h5

Available uncoated or coated

0.02-0.20

λ 24°

CARB

If α < 30°, a double cone applies

Article number: 119-2a##d#.##
Example: End mill ref. 119-2 with 25° angle and tip diameter 0.05 mm: 119-2a25d0.05

α*	d_1**	D	L
15-45°	0.02-0.09	3	33
15-45°	0.10-0.30	3	33
50-140°	0.02-0.09	3	33
50-140°	0.10-0.30	3	33

* Available angles: every 5° between 15° and 45°; every 10° between 50° and 140°
** Available diameters: every 0.01 mm between 0.02 and 0.09 mm; every 0.05 mm between 0.10 and 0.30 mm

Other dimensions (angle, tip diameter, shank) upon request

♦ Prices for coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number

Options

C01

MCU ≤ ø3

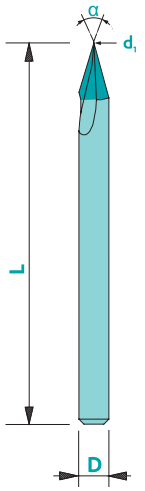
701S ≤ ø3.2

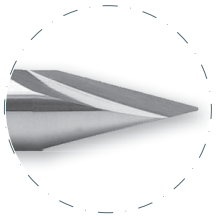
Engraving mill- ¾ - flat tip

Material	n [rpm]	Ap	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	25 - 40'000	0.05 -0.40	□	■	Tisi (BQ)
Steel > 700 N/mm²	20 - 40'000	0.05 -0.30	-	■	Tisi (BQ)
Stainless steel	20 - 30'000	0.05 - 0.30	-	□	Tisi (BQ)
Cast iron	25 - 40'000	0.05 - 0.40	□	■	Tisi (BQ)
Copper	20 - 40'000	0.05 - 0.40	□	■	Solo (DA)
Brass - Bronze	25 - 40'000	0.05 -0.40	■	■	Solo (DA)
Aluminium	25 - 40'000	0.05 - 0.50	□	■	Solo (DA)
Gold - Silver	20 - 40'000	0.05 -0.40	■	□	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Titanium	25 - 40'000	0.05 - 0.40	□	■	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances d_1: ±0.01
D : h5





Article number: 119-3a##d#.##
Example: End mill ref. 119-3 with 25° angle and tip diameter 0.05 mm: 119-3a25d0.05

α	d_1	D	L
15-45°	0.02-0.09	3	33
15-45°	0.10-0.30	3	33
50-140°	0.02-0.09	3	33
50-140°	0.10-0.30	3	33

Available angles: every 5° between 15° and 45°; every 10° between 50° and 140°
Available radius: every 0.01 mm between 0.02 and 0.09 mm; every 0.05mm between 0.10 and 0.30 mm

Other dimensions (angle, radius, shank) upon request

To order a coated tool, add the 2-letter coating code to the article number

Available uncoated or coated

0.02-0.20

λ 0°

CARB

If α < 30°, a double cone applies

Options

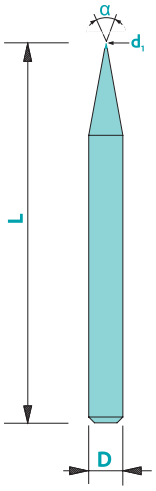
C01

MCU ≤ ø3

701S ≤ ø3.2

119-4

Engraving mill V-shape - reinforced



Material	n [rpm]	Ap	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	25 - 40'000	0.05 -0.40	□	■	Tisi (BQ)
Steel > 700 N/mm²	20 - 40'000	0.05 -0.30	-	■	Tisi (BQ)
Stainless steel	20 - 30'000	0.05 - 0.30	-	□	Tisi (BQ)
Cast iron	25 - 40'000	0.05 - 0.40	□	■	Tisi (BQ)
Copper	20 - 40'000	0.05 - 0.40	□	■	Solo (DA)
Brass - Bronze	25 - 40'000	0.05 -0.40	■	■	Solo (DA)
Aluminium	25 - 40'000	0.05 - 0.50	□	■	Solo (DA)
Gold - Silver	20 - 40'000	0.05 -0.40	■	□	Solo (DA)
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Titanium	25 - 40'000	0.05 - 0.40	□	■	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances d_1: ±0.01
D : h5

Available uncoated or coated

0.02-0.30

λ 0°

CARB

If α < 30°, a double cone applies

Article number: 119-4a##d#.##
Example: End mill ref. 119-4 with 25° angle and tip diameter 0.05 mm: 119-4a25d0.05

α	d_1	D	L
15-45°	0.02-0.09	3	33
15-45°	0.10-0.30	3	33
50-140°	0.02-0.09	3	33
50-140°	0.10-0.30	3	33

Available angles: every 5° between 15° and 45°; every 10° between 50° and 140°
Available radius: every 0.01 mm between 0.02 and 0.09 mm; every 0.05mm between 0.10 and 0.30 mm

Other dimensions (angle, radius, shank) upon request

To order a coated tool, add the 2-letter coating code to the article number

Options

C01

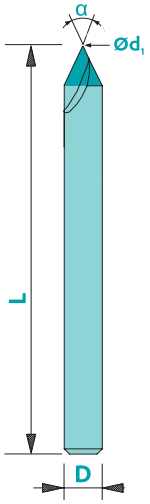
MCU ≤ ø3

701S ≤ ø3.2

Engraving mill in PCD - ¾ - flat tip

Material	n [rpm]	Ap	Uncoated
Steel < 700 N/mm²	-	-	-
Steel > 700 N/mm²	-	-	-
Stainless steel	-	-	-
Cast iron	-	-	-
Copper	20 - 40'000	0.05 - 0.40	■
Brass - Bronze	25 - 40'000	0.05 -0.40	■
Aluminium	25 - 40'000	0.05 - 0.50	■
Gold - Silver	20 - 40'000	0.05 -0.40	■
Platinum - Palladium	25 - 40'000	0.05 -0.40	■
Superalloys	-	-	-
Titanium	-	-	-
Composite	40'000	0.05 - 0.40	■

not adapted - adapted □ highly adapted ■



Tolerances d_1: ± 0.01
D: h5

Art. n°	α	d_1	D	L
4119-3a40d0.05	40°	0.05	3	33
4119-3a40d0.08	40°	0.08	3	33
4119-3a40d0.10	40°	0.10	3	33
4119-3a50d0.05	50°	0.05	3	33
4119-3a50d0.08	50°	0.08	3	33
4119-3a50d0.10	50°	0.10	3	33
4119-3a60d0.05	60°	0.05	3	33
4119-3a60d0.08	60°	0.08	3	33

Art. n°	α	d_1	D	L
4119-3a60d0.10	60°	0.10	3	33
4119-3a70d0.05	70°	0.05	3	33
4119-3a70d0.08	70°	0.08	3	33
4119-3a70d0.10	70°	0.10	3	33
4119-3a90d0.05	90°	0.05	3	33
4119-3a90d0.08	90°	0.08	3	33
4119-3a90d0.10	90°	0.10	3	33

Available uncoated only

≥ 0.02

λ 0°

PCD

If d_1 ≤ 0.5 mm, a double cone applies

☐ **Order** ☐ **Quotation request**

Angle (α):

☐ By default : 60° ☐ 30° ☐ 35° ☐ 45°

☐ Other : _____ ☐ 50° ☐ 55° ☐ 90°

Shank Ø :

☐ By default : D=3

☐ Other : D= _____

Machined material :

Quantity :

Order No :

d_1 (from 0.02 mm) :

Contact person :

Company's stamp & date :

Standard dimensions of the bars : Ø 3x L 38, Ø 4x L 38, Ø 6x L 38, Ø 6x L 51, Ø 8x L 61, Ø 10x L 72, Ø 12x L 83, Ø 16x L 92, Ø 20x L 104

Other dimensions, CVD/CBN available upon request.

Options

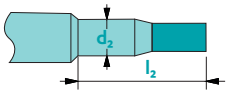
MCU ≤ Ø3

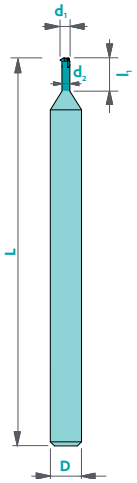
701S ≤ Ø6

5600

Whirling tools Z3 - NIHS norm 06-10

Upon request





Material	Vc	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm²	Max spindle speed	□	■	Tisi (BQ)
Steel > 700 N/mm²	Max spindle speed	□	■	Tisi (BQ)
Stainless steel	Max spindle speed	□	■	Tisi (BQ)
Cast iron	Max spindle speed	□	■	Tisi (BQ)
Copper	Max spindle speed	□	■	Solo (DA)
Brass - Bronze	Max spindle speed	■	□	Solo (DA)
Aluminium	Max spindle speed	■	■	Solo (DA)
Gold - Silver	Max spindle speed	■	■	Solo (DA)
Platinum - Palladium	Max spindle speed	-	□	Sun (DG)
Superalloys	Max spindle speed	-	■	Nemo (NO)
Titanium	Max spindle speed	■	□	Marc (ME)

not adapted - adapted □ highly adapted ■

Tolerances D: h5

Available uncoated or coated

Z3

CARB

Art. n°	Ø nominal	Pitch	d_1	l_1	d_2	D	L
5600S0.80	S0.80	0.200	0.60	2.00	0.38	3	38
5600S0.90	S0.90	0.225	0.68	2.25	0.43	3	38
5600S1.00	S1.00	0.250	0.76	2.50	0.48	3	38
5600S1.20	S1.20	0.250	0.94	2.50	0.66	3	38
5600S1.40	S1.40	0.300	1.10	3.00	0.76	3	38
5600M1.00	M1.00	0.250	0.76	2.50	0.48	3	38
5600M1.20	M1.20	0.250	0.94	2.50	0.66	3	38
5600M1.40	M1.40	0.300	1.10	3.00	0.76	3	38
5600M1.60	M1.60	0.350	1.25	3.50	0.85	3	38
5600M1.80	M1.80	0.350	1.45	3.50	1.05	3	38
5600M2.00	M2.00	0.400	1.60	4.00	1.15	3	38
5600M2.20	M2.20	0.450	1.70	4.50	1.19	3	38
5600M2.50	M2.50	0.450	2.00	5.00	1.49	3	38
5600M3.00	M3.00	0.500	2.40	5.50	1.84	3	38

To order a coated tool, add the 2-letter coating code to the article number.

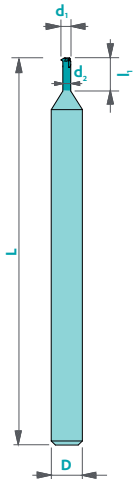
Options

C01

MCU ≤ ø3

701S ≤ ø6

PCD Whirling tools



Material	Vc	Uncoated
Steel < 700 N/mm²	Max spindle speed	-
Steel > 700 N/mm²	Max spindle speed	-
Stainless steel	Max spindle speed	-
Cast iron	Max spindle speed	-
Copper	Max spindle speed	■
Brass - Bronze	Max spindle speed	■
Aluminium	Max spindle speed	■
Gold - Silver	Max spindle speed	■
Platinum - Palladium	Max spindle speed	■
Superalloys	Max spindle speed	-
Titanium	Max spindle speed	-
Composite	Max spindle speed	□

not adapted - adapted □ highly adapted ■

Tolerances D: h5

Art. n°	Ø nominal	pitch	d_1	l_2	d_2	D	L
45600S0.60	S0.60	0.150	0.45	1.50	0.29	3	38
45600S0.70	S0.70	0.175	0.54	1.75	0.34	3	38
45600S0.80	S0.80	0.200	0.60	2.00	0.38	3	38
45600S0.90	S0.90	0.225	0.68	2.25	0.43	3	38
45600S1.00	S1.00	0.250	0.76	2.50	0.48	3	38
45600S1.20	S1.20	0.250	0.94	2.50	0.66	3	38
45600S1.40	S1.40	0.300	1.10	3.00	0.76	3	38
45600M1.00	M1.00	0.250	0.76	2.50	0.48	3	38
45600M1.20	M1.20	0.250	0.94	2.50	0.66	3	38
45600M1.40	M1.40	0.300	1.10	3.00	0.76	3	38
45600M1.60	M1.60	0.350	1.25	3.50	0.85	3	38
45600M1.80	M1.80	0.350	1.45	3.50	1.05	3	38
45600M2.00	M2.00	0.400	1.60	4.00	1.15	3	38
45600M2.20	M2.20	0.450	1.70	4.50	1.19	3	38
45600M2.50	M2.50	0.450	2.00	5.00	1.49	3	38
45600M3.00	M3.00	0.500	2.40	5.50	1.84	3	38

Z3

PCD

Options

MCU ≤ ø3

701S ≤ ø6

Since 1948

Louis BELET SA is a family business of about 180 employees and is in the heart of the land of luxury and precision. The company is run by the two grandchildren of the founder, Mrs Roxane Piquerez and Mr Arnaud Maître.

LOUIS BELET SA

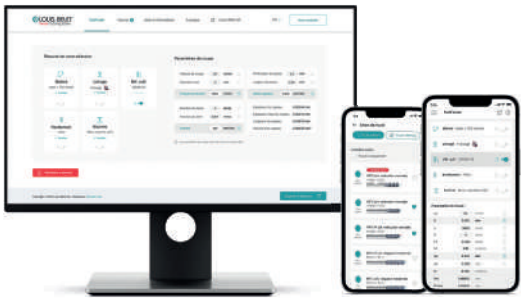
Les Gasses 11
CH - 2943 Vendlincourt
Tél. +41 (0) 32 474 04 10
Fax +41 (0) 32 474 45 42
www.louisbelet.ch
info@louisbelet.ch

The quest of excellence

Bélet's spirit relies on the quest of excellence. In all our activities, we constantly focus on finding the best solutions, for our customers and our employees.

Quality and environmental management are testified by our ISO 9001:2008 and ISO 14001:2004 certifications.

Toolfinder



Simplify your life and find the right tool for your application in just a few clicks! Simply enter the material to be machined and the dimensions and you will get our recommended cutting parameters in just a few clicks.

E-shop

View stock levels live and online for all standard products. You can also check the available quantities for the products you have been allocated! The e-shop option allows you to purchase the desired products directly online.

List of authorized distributors available on www.louisbelet.ch

01.2024