

5 Cutting tools

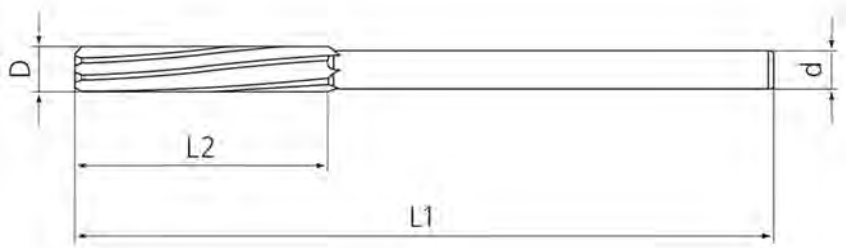
- 5.3** HSS & carbide reamers
- 5.16** Knurling rolls
- 5.18** Carbide drills - End mills
- 5.67** Taps
- 5.80** Carbide cutting taps and Whirling tools
- 5.89** Cutting dies
- 5.97** Taps holder
- 5.98** Gauges
- 5.104** Solid carbide slitting saws
- 5.109** Solid carbide rods
- 5.110** Diamond tools





HSS & carbide reamers

Machine reamers DIN 212 HSS-E Ø 0.60 - 2.65



Coating available :

ACUREA

Precision machine reamers HSS-E with or without ACUREA hard surface coating, straight NC-shank h6, left hand spiral 7-8°, right hand cutting, Ø from 0.60 mm up to 2.65 mm in 0.01 mm increments. (also in H7 tolerance and 0.005 mm).

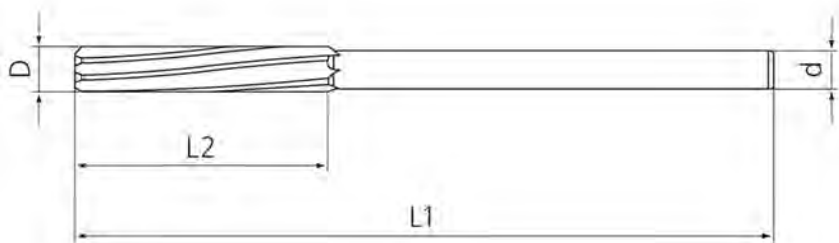
- Tol. 0/+0,003 mm
- bevel lead 60°



D	L1	L2	d	Z
0.60 - 0.79	35.00	10.00	1.20	4
0.80 - 1.32	40.00	15.00	1.20	4
1.33 - 1.50	40.00	15.00	1.50	4
1.51 - 2.12	50.00	20.00	2.00	4
2.13 - 2.65	50.00	20.00	2.50	4

HSS & carbide reamers

Machine reamers DIN 212 HSS-E Ø 2.66 - 3.75



Coating available :

ACUREA

Precision machine reamers HSS-E with or without ACUREA hard surface coating, straight NC-shank h6, left hand spiral 7-8°, right hand cutting, Ø from 2.66 up to 3.75 mm in 0.01 mm increments. (also in H7 tolerance and 0.005 mm).

Option :

through coolant (available from Ø 3.5 mm up to 16 mm, for orders of minimum 3 pieces per diameter).

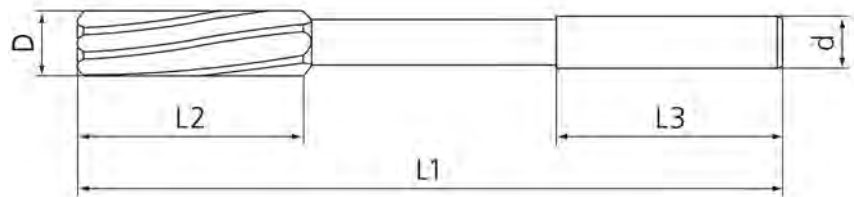
- Tol. 0/+0,004 mm
- Bevel lead 45°
- female centres



D	L1	L2	d	Z
2.66 - 3.05	61.00	20.00	2.50	6
3.06 - 3.35	65.00	25.00	3.00	6
3.36 - 3.75	70.00	25.00	3.00	6

HSS & carbide reamers

Machine reamers DIN 212 HSS-E Ø 3.76 - 20.05



Coating available :

ACUREA

Precision machine reamers HSS-E with or without ACUREA hard surface coating, straight NC-shank h6, left hand spiral 7-8°, right hand cutting, Ø from 3.76 up to 20.05 mm in 0.01 mm increments. [also in H7 tolerance and 0.005 mm].

Option :

through coolant (available from Ø 3.5 mm up to 16 mm, for orders of minimum 3 pieces per diameter).

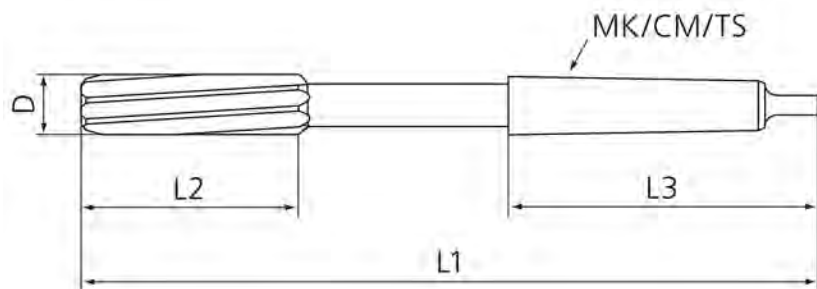
- Tol. 0/+0,004 mm
- Bevel lead 45°
- female centers



D	L1	L2	L3	d	Z
3.76 - 4.25	75.00	25.00	32.00	4.00	6
4.26 - 4.75	80.00	28.00	32.00	4.50	6
4.76 - 5.30	86.00	28.00	34.00	5.00	6
5.31 - 6.05	93.00	32.00	36.00	5.50	6
6.06 - 6.70	101.00	32.00	38.00	6.00	6
6.71 - 7.55	109.00	32.00	40.00	7.00	6
7.56 - 8.50	117.00	33.00	42.00	8.00	6
8.51 - 9.50	125.00	36.00	42.00	9.00	6
9.51 - 10.60	133.00	38.00	44.00	10.00	6
10.61 - 11.80	142.00	41.00	44.00	10.00	6
11.81 - 13.20	151.00	44.00	44.00	10.00	6
13.21 - 14.05	160.00	47.00	50.00	12.50	8
14.06 - 15.05	162.00	50.00	50.00	12.50	8
15.06 - 16.05	170.00	52.00	50.00	12.50	8
16.06 - 17.05	175.00	54.00	52.00	14.00	8
17.06 - 18.05	182.00	56.00	52.00	14.00	8
18.06 - 19.05	189.00	58.00	58.00	16.00	8
19.06 - 20.05	195.00	60.00	58.00	16.00	8

HSS & carbide reamers

Machine reamers DIN 208 HSS-E



Coating available :

ACUREA

Machine reamers HSS-E with or without ACUREA hard surface coating, taper shank, left hand spiral 7-8°, right hand cutting.

Other dimensions available on request.

- Tol. 0/+0.004
- Lead angle 45°
- female centers



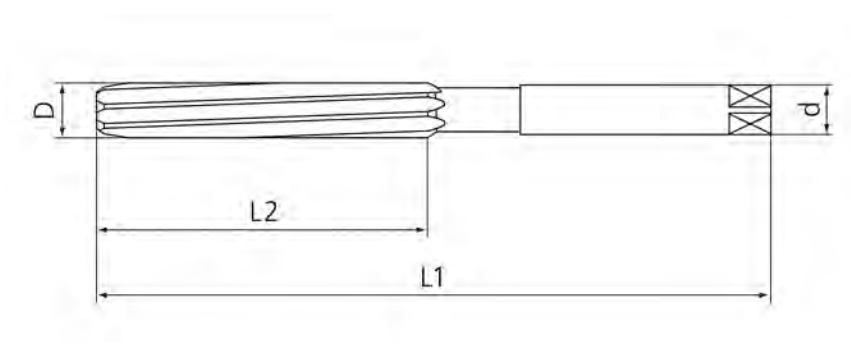
D	L1	L2	L3	Z	MK/CM/TS
9.06 - 10.05	168.00	38.00	62.00	6	1
10.06 - 11.05	175.00	41.00	62.00	6	1
11.06 - 12.05	182.00	44.00	62.00	6	1
12.06 - 13.05	182.00	44.00	62.00	8	1
13.06 - 14.05	189.00	47.00	62.00	8	1
14.06 - 15.05	204.00	50.00	75.00	8	2
15.06 - 16.05	214.00	52.00	75.00	8	2
16.06 - 17.05	214.00	54.00	75.00	8	2
17.06 - 18.05	219.00	56.00	75.00	8	2
18.06 - 19.05	223.00	58.00	75.00	8	2
19.06 - 20.05	228.00	60.00	75.00	8	2
20.06 - 21.05	232.00	62.00	75.00	8	2
21.06 - 22.05	237.00	64.00	75.00	8	2
22.06 - 23.05	241.00	66.00	75.00	8	2
23.06 - 25.05	268.00	68.00	94.00	8	3
25.06 - 26.05	273.00	70.00	94.00	8	3
26.06 - 28.05	277.00	71.00	94.00	10	3
28.06 - 30.05	281.00	73.00	94.00	10	3

HSS & carbide reamers

Hand-reamers DIN 206 H7 HSS-E



Hand-reamers HSS-E, tolerance H7, straight shank with square end, left hand spiral 7-8°, right hand cutting.

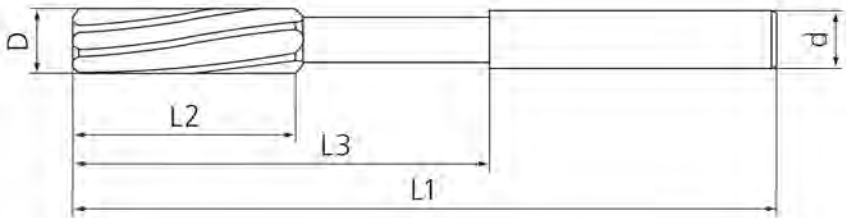


5 Cutting tools

D	L1	L2	d	Z
2	50.00	25.00	1.60	4
2.5	58.00	29.00	2.00	4
3	62.00	31.00	2.24	6
3.5	71.00	35.00	2.80	6
4	76.00	38.00	3.15	6
4.5	81.00	41.00	3.55	6
5	87.00	44.00	4.00	6
5.5 / 6	93.00	47.00	4.50	6
6.5	100.00	50.00	5.00	6
7 / 7.5	107.00	54.00	5.60	6
8 / 8.5	115.00	58.00	6.30	6
9 / 9.5	124.00	62.00	7.10	6
10 / 10.5	133.00	66.00	8.00	6
11 / 11.5	142.00	71.00	9.00	6
12 / 12.5 / 13	152.00	76.00	10.00	6
13.5 / 14 / 14.5 / 15	163.00	81.00	11.20	6
15.5 / 16 / 16.5	175.00	87.00	12.50	8
17 / 17.5 / 18 / 18.5 / 19	188.00	93.00	14.00	8
19.5 / 20	201.00	100.00	16.00	8
22	215.00	107.00	18.00	8
24 / 25 / 26	231.00	115.00	20.00	8
28 / 30	247.00	124.00	22.40	10

HSS & carbide reamers

Carbide Machine reamers DIN 8093



Coating available :

ACUREA

Carbide machine reamers K10 Micrograin with or without ACUREA hard surface coating, straight NC-Shank h6, unequal flute division 58-62-60°, left hand spiral 12°, right hand cutting.

- Tol. 0/+0,003 mm
- Beval lead 45°



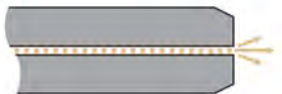
D	L1	L2	L3	d	Z
0.20 - 0.29	50.00	1.00	1.00	2.00	2
0.30 - 0.39	50.00	2.00	2.00	2.00	3
0.40 - 0.49	50.00	3.00	3.00	2.00	3
0.50 - 0.69	50.00	4.00	4.00	2.00	3
0.70 - 0.79	50.00	6.00	6.00	2.00	3
0.80 - 1.46	50.00	8.00	8.00	2.00	3
1.47 - 1.96	50.00	10.00	10.00	2.00	3
1.97 - 2.46	50.00	10.00	25.00	2.50	3
2.47 - 2.96	60.00	15.00	30.00	3.00	4
2.97 - 3.46	60.00	15.00	30.00	3.50	4
3.47 - 3.96	60.00	18.00	33.00	4.00	4
3.97 - 4.46	60.00	20.00	35.00	4.50	4
4.47 - 4.96	75.00	20.00	45.00	5.00	6
4.97 - 5.46	75.00	23.00	45.00	5.50	6
5.47 - 5.96	75.00	23.00	45.00	6.00	6
5.97 - 6.46	75.00	23.00	45.00	6.50	6
6.47 - 6.96	75.00	23.00	45.00	7.00	6
6.97 - 7.46	100.00	30.00	55.00	7.50	6
7.47 - 7.96	100.00	30.00	55.00	8.00	6
7.97 - 8.46	100.00	30.00	55.00	8.50	6
8.47 - 8.96	100.00	30.00	55.00	9.00	6
8.97 - 9.46	100.00	30.00	55.00	9.50	6
9.47 - 9.96	100.00	30.00	55.00	10.00	6
9.97 - 10.46	100.00	30.00	55.00	10.50	6
10.47 - 10.96	100.00	30.00	55.00	11.00	6
10.97 - 11.46	100.00	30.00	55.00	11.50	6
11.47 - 11.96	100.00	30.00	55.00	12.00	6
11.97 - 12.46	100.00	30.00	55.00	12.50	6
12.47 - 12.96	100.00	30.00	55.00	13.00	6
12.97 - 13.03	100.00	30.00	55.00	13.50	6

HSS & carbide reamers

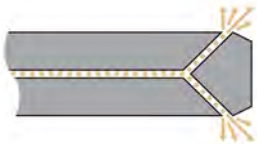
Reamers and floating holders with special features

Through coolant

For blind hole
(from Ø 3 mm)

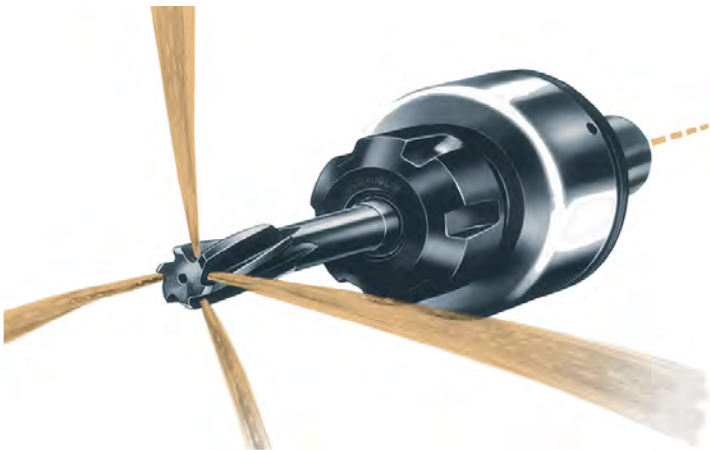


For through hole
(from Ø 3 mm)



Floating holder :

on all models PHA 8 / 9 - 11 / 12 - 16 - 20 - 25 - 32



Standard



Left hand spiral, right hand cutting (through hole)

Special



Right hand spiral, right hand cutting (blind hole)

End Cutting Reamers



from Ø 3 mm

HSS & carbide reamers

Floating holder PHA-E 12 SST

New product

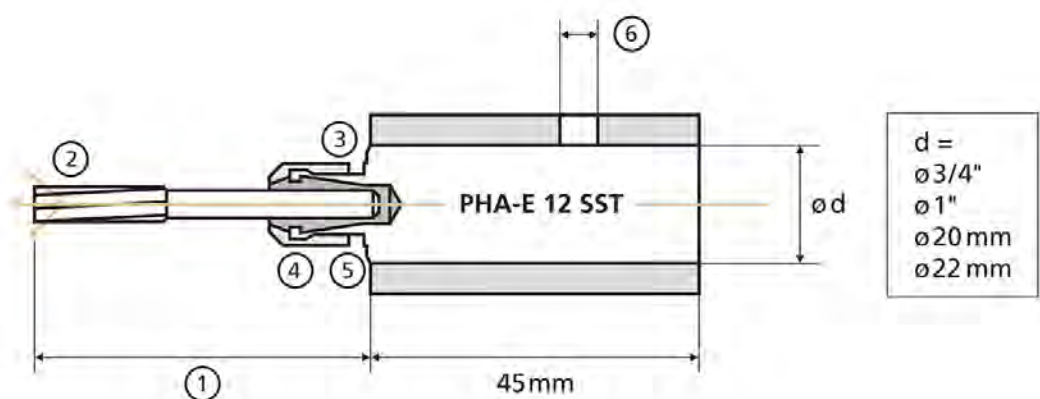
Floating holder PHA-E 12 SST with oscillation parallel to the axis, for tool holders on CNC automatic lathes.



Required tool space considerably reduced



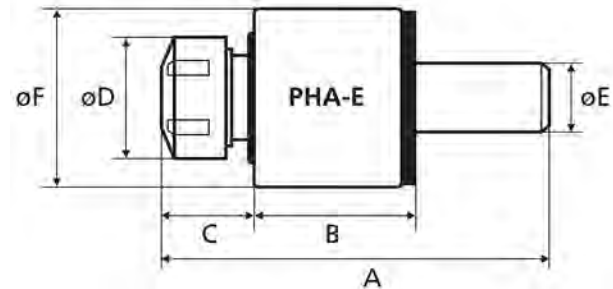
Advantages and quality



1. Length of tool outside the tool holder 30-65 mm (depending Ø)
2. With through coolant, for blind or through hole
3. Holding surface for nut
4. Nut and collets EX 12
Oscillation 0.1 - 0.2 mm
Range of chucking 1.0 - 7.0 mm
5. Screw to determine the fixing length of the reamer
6. Screw to fix the PHA in the tool holder

HSS & carbide reamers

Floating holder PHA-E



Floating holder with cylindrical, taper, VDI or HSK shank.

Axis parallel, for high performance reaming

- Accurate positioning and self centering of the reamer
- Highest accuracy and surface finish
- Improved tool life and better tolerance limitations
- Improved efficiency due to cost and time savings

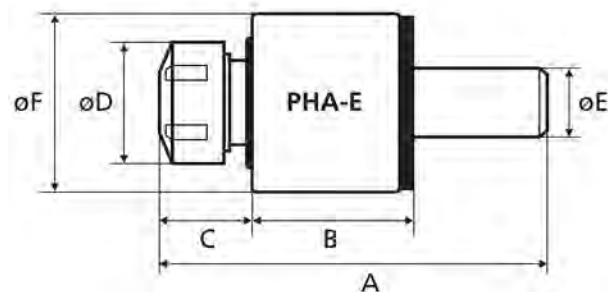


Item No	A	B	C	D	E	F
PHA-E 9						
18091000	90.00	34.00	16.00	13.50	10.00	19.50
PHA-E 12 SST						
1812S190	65.00	45.00	20.00	19.00	3/4"	19.05
1812S200	65.00	45.00	20.00	19.00	20.00	20.00
1812S220	65.00	45.00	20.00	19.00	22.00	22.00
1812S254	65.00	45.00	20.00	19.00	1"	25.40
PHA-E 12						
18121200	97.00	32.00	20.00	19.00	12.00	31.00
18121600	100.00	32.00	20.00	19.00	16.00	31.00
18122000	102.00	32.00	20.00	19.00	20.00	31.00
PHA-E 16						
18161600	85.00	35.00	20.00	35.00	16.00	50.00
18162000	85.00	35.00	20.00	35.00	20.00	50.00
18162500	105.00	35.00	20.00	35.00	25.00	50.00
PHA-E 20						
18201600	85.00	35.00	20.00	35.00	16.00	50.00
18202000	85.00	35.00	20.00	35.00	20.00	50.00
18202500	105.00	35.00	20.00	35.00	25.00	50.00
18202540	105.00	35.00	20.00	35.00	1"	50.00
18200001	122.00	35.00	20.00	35.00	MK 1	50.00
18200002	137.00	35.00	20.00	35.00	MK 2	50.00
PHA-E 25						
18252000	128.00	48.00	30.00	42.00	20.00	62.00
18252500	128.00	48.00	30.00	42.00	25.00	62.00
18252540	128.00	48.00	30.00	42.00	1"	62.00
18250002	160.00	48.00	30.00	42.00	MK 2	62.00
18250003	179.00	48.00	30.00	42.00	MK 3	62.00
PHA-E 32						
18322000	143.00	55.00	38.00	50.00	20.00	78.00
18324000	173.00	55.00	38.00	50.00	40.00	78.00

HSS & carbide reamers

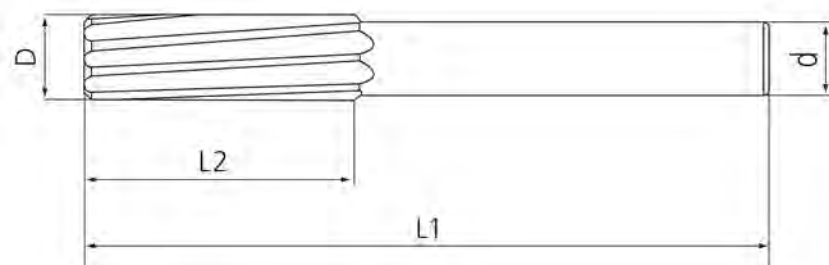
Floating holder PHA-E

continuation...



Item No	A	B	C	D	E	F
PHA-E 32						
18323175	173.00	55.00	38.00	50.00	1 1/4"	78.00
18322003	195.00	55.00	38.00	50.00	MK 3	78.00

Reamers DIN 8089 HSS-E



Coating available :

ACUREA

Stub-Reamers DIN 8089

HSS-E with or without ACUREA hard surface coating, straight NC-shank h6 in whole mm-size, in 0.01 mm increments.

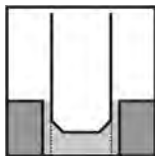
- Tol. 0/+0,004, bevel lead 45°, female centers
- Ø 3.76 à 20.05 mm left hand spiral 7-8°, right hand cutting (for through holes)
- Ø 3.76 à 13.20 mm right hand spiral 7-8°, right hand cutting (for blind holes)



D	L1	L2	d	Z
3.76 - 4.25	56.00	20.00	3.00	6
4.26 - 5.30	63.00	22.00	4.00	6
5.31 - 6.70	63.00	22.00	5.00	6
6.71 - 8.50	71.00	25.00	6.00	6
8.51 - 10.60	71.00	25.00	8.00	6
10.61 - 13.20	80.00	28.00	10.00	6
13.21 - 17.00	90.00	32.00	12.00	8
17.01 - 20.05	100.00	36.00	16.00	8

HSS & carbide reamers

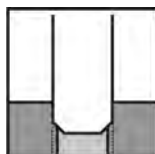
Recommendations



1. Hole oversize

- lack of coolant, edge build up on reamers
- irregular angles
- depth of cut too big, reaming tolerance too high
- axial alignment between tool and hole displaced

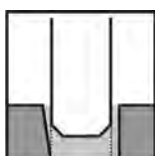
- correct alignment or use RE-AL floating holder
- check diameter and tolerance of reamer
- check coolant, increase pressure, consider using through coolant



2. Hole too small

- reamer is blunt
- depth of cut is insufficient
- workpiece springs back

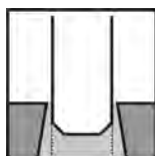
- exchange reamer
- increase depth of cut
- check coolant, increase pressure, consider using through coolant



3. Tapered hole (entrance too big)

- reamer oscillates in the axis
- drilled hole is not centered
- axial alignment displaced between tool and hole
- swarf in upper part of hole

- correct alignment or use RE-AL floating holder
- ensure alignment of working tool



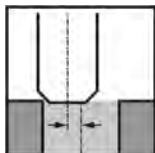
4. Tapered hole (end too big)

- axial alignment displaced between tool and hole
- swarf in lower part of hole
- reamer is bottoming the hole

- correct alignment or use RE-AL floating holder
- ensure alignment of working tool
- ream (deep) hole in 2 to 3 passes

HSS & carbide reamers

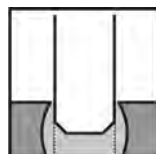
Recommendations



5. Axial displacement

- drilled hole is out of axis
- concentricity of lead angle is not correct

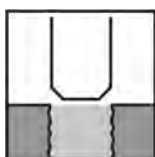
- check concentricity of drilled hole
- check concentricity of reamer axis



6. Hole is oval or convex

- workpiece moves during reaming

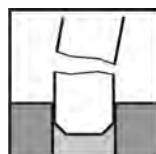
- fix workpiece precisely/constantly



7. Bad surface quality of hole (check also 8)

- reamer of hole damaged
- insufficient supply of coolant
- edge build up on reamer
- poor removal of swarf
- axial alignment displaced between hole and tool

- replace reamer
- correct alignment or use RE-AL floating holder
- consult recommendations of reaming
- check coolant and increase pressure, consider using through coolant



8. Reamer is seizing and breaking (check also 7)

- reamer land is too large
- insufficient back taper (min. 0.015 on 100 mm)
- drilled hole too small and not centered
- lead angle badly ground

- according to material/spezial alloy adapt lead angle or land
- correct alingment or use RE-AL floating holder
- material dependent (soft/normal/treated) reduce or increase reaming speed

HSS & carbide reamers

Recommendations for reaming

Auf dieser Seite finden Sie einige allgemeine Empfehlungen zum Produktions-Einsatz unserer Reibahlen und Pendelhalter. Für weitere Auskunft stehen wir gerne zur Verfügung.

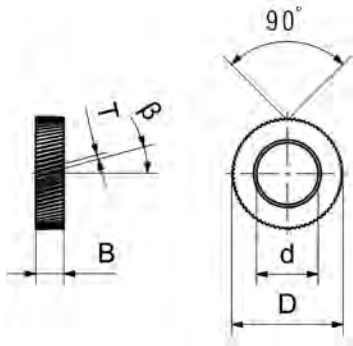
Sur cette page, vous trouvez quelques recommandations générales pour vos travaux d'usinage avec nos alésoirs et mandrins flottants. N'hésitez pas à nous contacter pour de plus amples renseignements.

On this page, you will find some general recommendations for your workshop with our reamers and floating holders. Please do not hesitate to contact us for more informations.

Werkstoff Matière Material	Härte Résistance Hardness (N/mm2)	Reibahlen Alésoirs Reamers Ø (mm)	Schnittgeschwindigkeit Vitesses de coupe Cutting speed v=(m/min)			Vorschub* Avance* Feed * f=(mm/U)			Spantiefe Matière à enlever Depth of cut (mm/Ø)		
			HSS-E	ACUREA	HM/CAR	HSS-E	ACUREA	HM/CAR	HSS-E	ACUREA	HM/CAR
Stähle, Stahlguss Aciers, Fonte Steels, Cast steel	400 - 800	1 - 3	8 - 12	20 - 40	15 - 25	0.1 - 0.2 mm			0.05 - 0.15 mm		
		4 - 9				0.15 - 0.25 mm			0.1 - 0.2 mm		
		10 - 20				0.3 - 0.5 mm			0.2 - 0.4 mm		
Stahl-Legierungen Aciers alliés Steels alloyed	800 - 1200	1 - 3	4 - 8	15 - 30	8 - 15	0.1 - 0.2 mm			0.05 - 0.15 mm		
		4 - 9				0.15 - 0.25 mm			0.1 - 0.2 mm		
		10 - 20				0.3 - 0.5 mm			0.2 - 0.4 mm		
Grauguss Fonte grise Cast iron	200	1 - 3	6 - 10	20 - 30	10 - 20	0.1 - 0.2 mm			0.05 - 0.15 mm		
		4 - 9				0.15 - 0.25 mm			0.1 - 0.2 mm		
		10 - 20				0.3 - 0.5 mm			0.2 - 0.4 mm		
Titan-Legierungen Titane, alliages de Titan, Alloyed	900 - 1200	1 - 3	10 - 15	20 - 40	15 - 20	0.1 - 0.2 mm			0.05 - 0.15 mm		
		4 - 9				0.15 - 0.25 mm			0.1 - 0.2 mm		
		10 - 20				0.2 - 0.4 mm			0.2 - 0.4 mm		
Kupfer-Legierungen Cuivre alliés Copper alloyed	350 - 700	1 - 3	8 - 12	20 - 40	15 - 20	0.1 - 0.2 mm			0.05 - 0.15 mm		
		4 - 9				0.15 - 0.25 mm			0.1 - 0.2 mm		
		10 - 20				0.3 - 0.5 mm			0.3 - 0.5 mm		
Aluminium	350 - 500	1 - 3	10 - 20	30 - 50	20 - 30	0.1 - 0.2 mm			0.05 - 0.15 mm		
		4 - 9				0.15 - 0.25 mm			0.1 - 0.2 mm		
		10 - 20				0.2 - 0.4 mm			0.2 - 0.4 mm		
Messing-Legierungen Laiton alliages Brass alloyed		1 - 3	10 - 12	25 - 50	20 - 25	0.1 - 0.2 mm			0.05 - 0.15 mm		
		4 - 9				0.15 - 0.25 mm			0.1 - 0.2 mm		
		10 - 20				0.3 - 0.5 mm			0.3 - 0.5 mm		
Kunststoff Plastiques Plastics		1 - 3	4 - 10	20 - 40	10 - 20	0.1 - 0.2 mm			0.05 - 0.15 mm		
		4 - 9				0.15 - 0.25 m			0.1 - 0.2 mm		
		10 - 20				0.3 - 0.5 mm			0.3 - 0.5 mm		
Drehzahl Tours Speed	n = U/min.	mit Pendelhalter avec mandrin flottant with floating holder			n = 2000 - 3000 U/min.						
* Vorschub * Avance * Feed	f = mm/U	je härter der Werkstoff plus dur le matériel the harder the material			f = minus f = moins f = less		je weicher der Werkstoff plus doux le matériel the softer the material			f = mehr f = plus f = more	
Rücklauf der Reibahle Retrait de l'alésoir Return feed		Eilgang à vitesse accélérée at high speed									
Kühlmittel Réfrigérant Coolant	Schneidöl / Emulsion 1:10 Huiles de coupe / émulsion 1:10 Cutting oil / soluble 1:10				auch mit Innenkühlung aussi avec refroidissement intérieur aussi avec refroidissement intérieur				10 - 40 Bar		

Knurling rolls

Knurling rolls (by cutting)



RFAA



RFBL



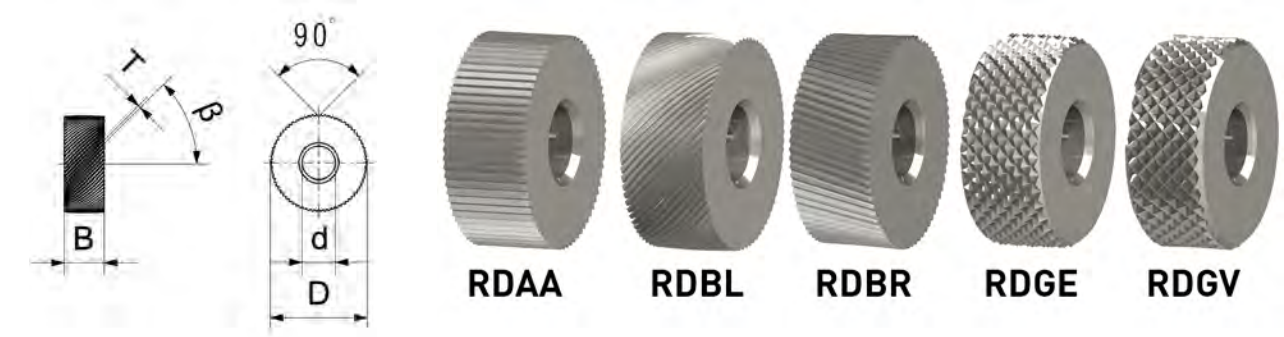
RFBR

- Please always specify :
- Roll type RFAA / RFBL / RFBR
 - Diameter D, thickness B and bore d
 - Pitch
 - Angle (00°, 15° or 30°)

D	B	d	angle	HSS Item No	Carbide Item No
8.90	2.50	4.00	00° / 15° / 30°	...-09 02 04	...-7110-090204
11.00	3.00	6.00	00° / 15° / 30°	...-11 03 06	...-7110-110306
14.50	3.00	5.00	00° / 15° / 30°	...-14 03 05	...-7110-140305
15.00	4.00	8.00	00° / 15° / 30°	...-15 04 08	...-7110-150408
15.00	4.00	9.00	00° / 15° / 30°	...-15 04 09	...-7110-150409
20.00	5.00	8.00	00° / 15° / 30°	...-20 05 08	...-7110-200508
20.00	5.00	11.00	00° / 15° / 30°	...-20 05 11	...-7110-200511
21.50	5.00	8.00	00° / 15° / 30°	...-21 05 08	...-7110-210508
25.00	5.00	11.00	00° / 15° / 30°	...-25 05 11	...-7110-250511
25.00	6.00	8.00	00° / 15° / 30°	...-25 06 08	...-7110-250608

Knurling rolls

Knurling rolls (by deformation)



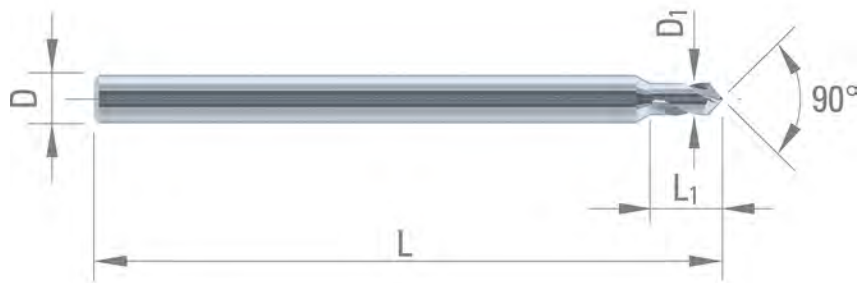
RDGV type available in HSS only

- Please always specify :
- Roll type RDAА / RDBL / RDBR / RDGE / RDGV
- Diameter D, thickness B and bore d
- Pitch
- Angle [0°, 30° oder 45°]

D	B	d	angle	HSS Item No	Carbide Item No
8.00	2.00	3.00	00° / 30° / 45°	-	...-7110-823
8.00	2.00	4.00	00° / 30° / 45°	-	...-7110-824
8.00	3.00	3.00	00° / 30° / 45°	...-08 03 03	...-7110-833
8.00	3.00	4.00	00° / 30° / 45°	-	...-7110-834
8.00	4.00	3.00	00° / 30° / 45°	...-08 04 03	...-7110-843
8.00	4.00	4.00	00° / 30° / 45°	-	...-7110-844
10.00	2.00	3.00	00° / 30° / 45°	-	...-7110-1023
10.00	2.00	4.00	00° / 30° / 45°	-	...-7110-1024
10.00	3.00	3.00	00° / 30° / 45°	...-10 03 03	...-7110-1033
10.00	3.00	4.00	00° / 30° / 45°	-	...-7110-1034
10.00	4.00	3.00	00° / 30° / 45°	...-10 04 03	...-7110-1043
10.00	4.00	4.00	00° / 30° / 45°	...-10 04 04	...-7110-1044
12.00	4.00	4.00	00° / 30° / 45°	...-12 04 04	...-7110-1244
15.00	4.00	4.00	00° / 30° / 45°	...-15 04 04	...-7110-1544
15.00	4.00	5.00	00° / 30° / 45°	-	...-7110-1545
15.00	5.00	4.00	00° / 30° / 45°	...-15 05 04	...-7110-1554
15.00	5.00	5.00	00° / 30° / 45°	...-15 05 05	...-7110-1555
15.00	6.00	4.00	00° / 30° / 45°	...-15 06 04	...-7110-1564
15.00	6.00	5.00	00° / 30° / 45°	...-15 06 05	...-7110-1565
20.00	4.00	5.00	00° / 30° / 45°	-	...-7110-2045
20.00	5.00	5.00	00° / 30° / 45°	-	...-7110-2055
20.00	6.00	6.00	00° / 30° / 45°	...-20 06 06	...-7110-2066
20.00	8.00	6.00	00° / 30° / 45°	...-20 08 06	...-7110-2086
20.00	10.00	6.00	00° / 30° / 45°	...-20 10 06	...-7110-20106

Carbide drills - End mills

Carbide spotting drills type 1106 R 90° Z2



Reinforced shank Ø 1.00 - 2.00 mm

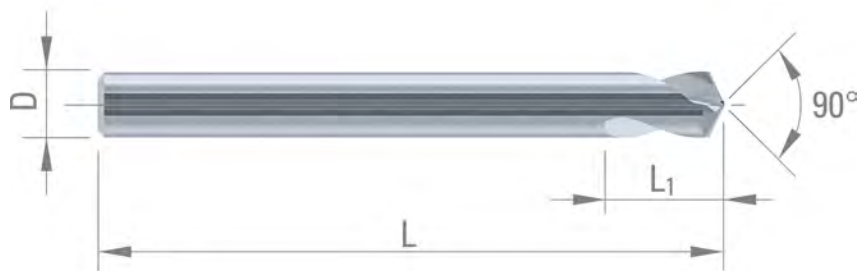
Coating available : TIALN

- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Plastic

Carbide item No	TiALN item No	D1 h6	D h5	L1	L
956799	957230	1.00	3.00	3.00	38.00
956800	957231	1.50	3.00	5.00	38.00
956801	957232	2.00	3.00	5.00	38.00

Carbide drills - End mills

Carbide spotting drills type 1106 R 90° Z2



Shank Ø 1.00 - 20.00 mm

- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Plastic

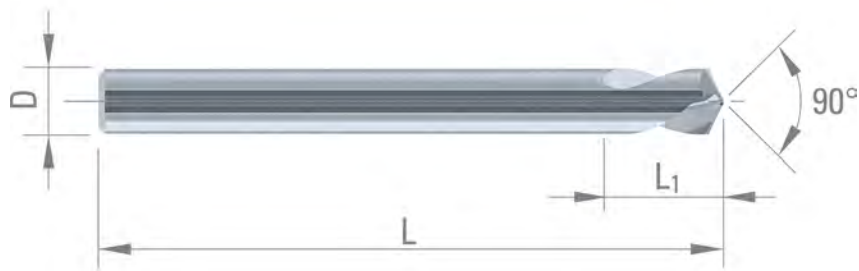
Coating available : TIALN

5 Cutting tools

Carbide item No	TIALN item No	D h5	L1	L
953781	953780	1.00	3.00	32.00
953778	953779	1.50	5.00	32.00
47101	62892	2.00	5.00	32.00
43231	34090	3.00	9.00	38.00
36911	61280	4.00	10.00	50.00
47716	63736	5.00	13.00	50.00
42788	63757	6.00	13.00	57.00
42789	63758	8.00	27.00	63.00
43233	61561	10.00	30.00	72.00
43064	41463	12.00	35.00	83.00
43234	63759	16.00	46.00	92.00
43235	63760	20.00	52.00	104.00

Carbide drills - End mills

Carbide spotting drills type 1106 L 90° Z2 - left hand



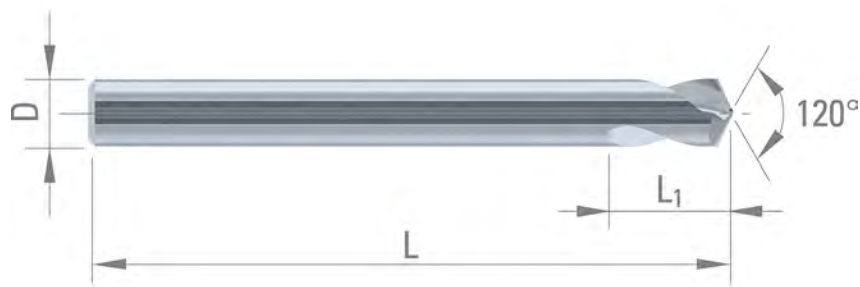
5 Cutting tools

- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Plastic

Carbide item No	D h5	L1	L
47714	4.00	10.00	50.00
47715	5.00	13.00	50.00
48813	6.00	13.00	57.00

Carbide drills - End mills

Carbide spotting drills type 1107 R 120° Z2



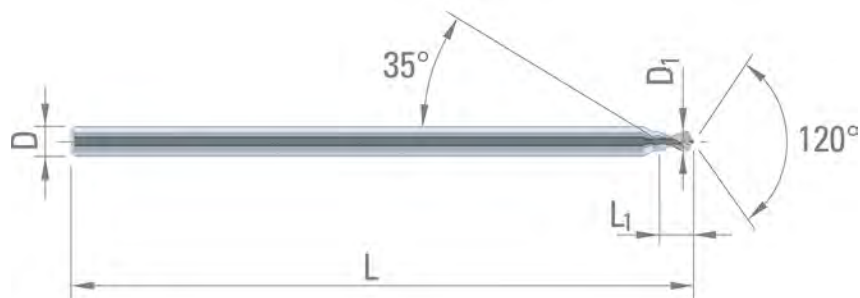
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Plastic

5 Cutting tools

Carbide item No	D h5	L1	L
985118	1.00	3.00	38.00
985120	2.00	5.00	38.00
43236	3.00	9.00	38.00
36914	4.00	10.00	50.00
43238	6.00	13.00	57.00
43239	8.00	27.00	63.00
43240	10.00	30.00	72.00
43241	12.00	35.00	83.00
43242	16.00	46.00	92.00
43243	20.00	52.00	104.00

Carbide drills - End mills

Carbide spotting drills type 1109 R 120° Z2



Coating available : DICUT

Reinforced shank

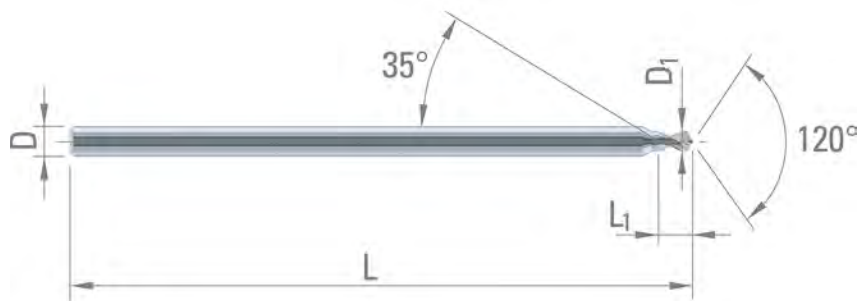
- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Plastic

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
62674	67354	0.50	1.50	1.00	30.00
62675	67355	0.55	1.50	1.00	30.00
62676	67356	0.60	1.50	1.20	30.00
62677	67357	0.65	1.50	1.20	30.00
62678	67358	0.70	1.50	1.50	30.00
62679	67359	0.75	1.50	1.50	30.00
52126	60989	0.80	1.50	2.00	30.00
52127	67360	0.85	1.50	2.00	30.00
52128	60990	0.90	1.50	2.00	30.00
52129	67361	0.95	1.50	2.00	30.00
52130	60991	1.00	1.50	2.00	30.00
52131	67362	1.05	1.50	2.00	30.00
52132	60992	1.10	1.50	2.00	30.00
52133	62487	1.15	1.50	2.40	30.00
52134	60993	1.20	1.50	2.40	30.00
52135	67363	1.25	1.50	2.40	30.00
52136	60994	1.30	1.50	2.40	30.00
52137	67364	1.35	1.50	2.40	30.00
52138	63485	1.40	1.50	2.40	30.00
52139	67365	1.45	1.50	2.40	30.00
981825	981839	1.50	2.00	3.00	32.00
981826	981840	1.55	2.00	3.00	32.00
981827	981841	1.60	2.00	3.00	32.00
981828	981842	1.65	2.00	3.00	32.00
981829	981843	1.70	2.00	3.00	32.00
981830	981844	1.75	2.00	3.50	32.00
981831	981845	1.80	2.00	3.50	32.00
981832	981847	1.85	2.00	3.50	32.00
981833	981848	1.90	2.00	3.50	32.00
981834	981849	1.95	2.00	3.50	32.00

Carbide drills - End mills

Carbide spotting drills type 1109 R 120° Z2

continuation ...



Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
981317	981325	2.00	2.50	4.00	32.00
981835	981850	2.10	2.50	4.00	32.00
981836	981852	2.20	2.50	4.00	32.00
981837	981853	2.30	2.50	4.00	32.00
981838	981854	2.40	2.50	4.00	32.00
981320	981327	2.50	2.50	4.00	32.00

5 Cutting tools

Carbide drills - End mills

Carbide spotting and chamfering drills type 1110 R 120°



DIXI
polytool

5 Cutting tools

Reinforced shank

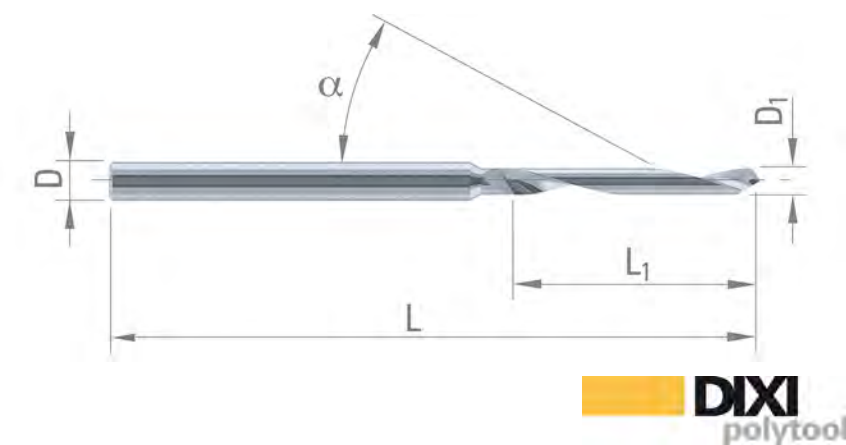
- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Plastic

Coating available : TiALN

Carbide item No	TiALN item No	D1 0/-0.004	D h5	L1	L
60268	64055	0.80	3.00	2.00	38.00
60269	67239	0.85	3.00	2.00	38.00
60270	64000	0.90	3.00	2.00	38.00
60271	67240	0.95	3.00	2.00	38.00
60272	64056	1.00	3.00	2.00	38.00
60273	67241	1.05	3.00	2.00	38.00
60274	63523	1.10	3.00	2.00	38.00
60275	67242	1.15	3.00	2.40	38.00
60276	64001	1.20	3.00	2.40	38.00
60277	67243	1.25	3.00	2.40	38.00
60278	67244	1.30	3.00	2.40	38.00
60279	67245	1.35	3.00	2.40	38.00
60280	64002	1.40	3.00	2.40	38.00
60281	67246	1.45	3.00	2.40	38.00

Carbide drills - End mills

Carbide helical gun drills type 1111 R Z1



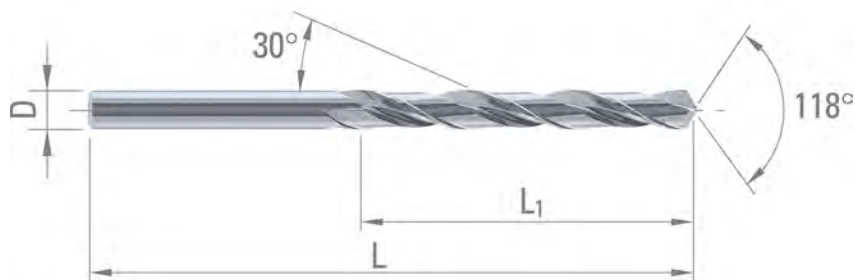
Other diameters until Ø 5.99 on request

- Steel <600Mpa
- Cu alloy / Silver / Gold
- Al

Carbide item No	D1 0/-0.004	D h5	L1	L
955371	0.10	1.00	0.70	30.00
955374	0.15	1.00	1.00	30.00
955375	0.20	1.00	1.00	30.00
955377	0.25	1.00	1.00	30.00
955378	0.30	1.00	1.50	30.00
955379	0.35	1.00	1.50	30.00
955380	0.40	1.00	2.00	30.00
955381	0.45	1.00	3.60	30.00
955382	0.50	1.00	4.00	30.00
955383	0.55	1.00	4.50	30.00
955384	0.60	1.00	4.50	30.00
955385	0.65	1.00	5.00	30.00
955386	0.70	1.00	5.60	30.00
955387	0.75	1.00	5.60	30.00
955388	0.80	1.50	6.30	30.00
955389	0.85	1.50	6.30	30.00
955390	0.90	1.50	7.10	30.00
955391	0.95	1.50	7.10	30.00
955392	1.00	1.50	9.00	30.00
955393	1.05	1.50	9.00	30.00
955394	1.10	1.50	9.00	30.00
955395	1.15	1.50	9.00	30.00
955396	1.20	1.50	10.00	30.00
965839	1.30	1.50	10.00	30.00
965840	1.40	1.50	11.20	30.00
965841	1.45	1.50	11.20	30.00
961881	1.50	2.00	12.00	38.00
965842	1.60	2.00	12.00	38.00
965843	1.65	2.00	12.00	38.00
961882	1.70	2.00	12.00	38.00
965844	1.75	2.00	12.00	38.00
961883	1.80	2.00	12.00	38.00
959038	2.00	2.50	12.00	43.00

Carbide drills - End mills

Carbide twist drills type 1126 R Z2



Coating available : DICUT

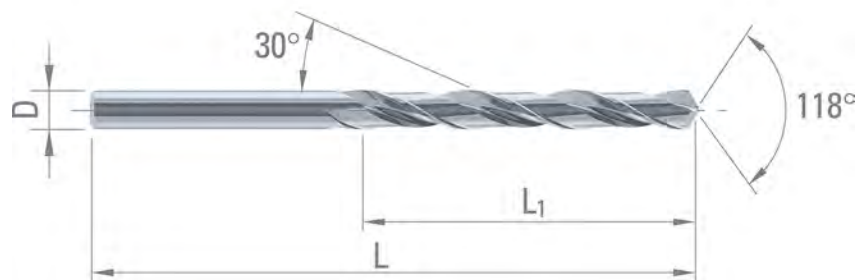
- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Graphite
- Plastic

Carbide item No	DICUT Item No	D h5	L1	L
40244	53697	1.00	12.00	34.00
40656	53698	1.10	14.00	36.00
40657	53699	1.20	16.00	38.00
40658	53700	1.30	16.00	38.00
40659	53701	1.40	18.00	40.00
40077	53702	1.50	18.00	40.00
40703	53703	1.60	20.00	43.00
38677	53704	1.70	20.00	43.00
41510	53705	1.80	22.00	46.00
41370	53706	1.90	22.00	46.00
41593	53707	2.00	24.00	49.00
40707	53708	2.10	24.00	49.00
40125	53709	2.20	27.00	53.00
43515	53710	2.30	27.00	53.00
45074	53711	2.40	30.00	57.00
40978	53712	2.50	30.00	57.00
40607	53713	2.60	30.00	57.00
41318	53714	2.70	33.00	61.00
41024	54284	2.80	33.00	61.00
40608	53715	2.90	33.00	61.00
40059	53716	3.00	33.00	61.00
40173	53717	3.10	36.00	65.00
41511	53718	3.20	36.00	65.00
40575	53736	3.30	36.00	65.00
41247	53737	3.40	39.00	70.00
41451	53738	3.50	39.00	70.00
40078	53739	3.60	39.00	70.00
40174	53740	3.70	39.00	70.00
40060	53741	3.80	43.00	75.00
43676	53742	3.90	43.00	75.00

Carbide drills - End mills

Carbide twist drills type 1126 R Z2

continuation ...



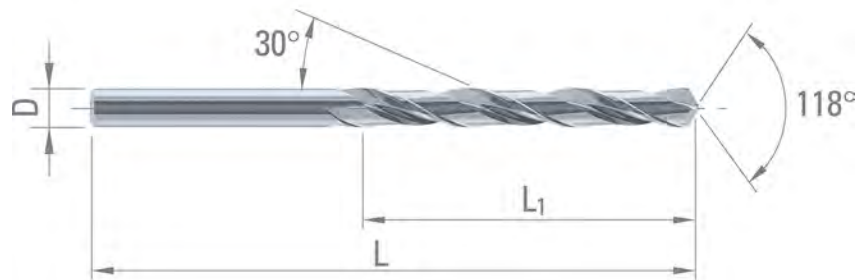
Carbide item No	DICUT Item No	D h5	L1	L
43497	53743	4.00	43.00	75.00
41218	53744	4.10	43.00	75.00
41295	53745	4.20	43.00	75.00
41452	53746	4.30	47.00	80.00
42866	53747	4.40	47.00	80.00
40263	53748	4.50	47.00	80.00
41991	53749	4.60	47.00	80.00
34710	53750	4.70	47.00	80.00
40126	53751	4.80	52.00	86.00
42661	53752	4.90	52.00	86.00
40061	53753	5.00	52.00	86.00
42022	53754	5.10	52.00	86.00
40062	53755	5.20	52.00	86.00
40063	53756	5.30	52.00	86.00
40064	53757	5.40	57.00	93.00
40065	53758	5.50	57.00	93.00
41992	53759	5.60	57.00	93.00
43357	53760	5.70	57.00	93.00
40864	53761	5.80	57.00	93.00
40258	53762	5.90	57.00	93.00
39996	53763	6.00	57.00	93.00
40704	54264	6.10	63.00	101.00
40066	54267	6.20	63.00	101.00
40067	54283	6.30	63.00	101.00
40068	54287	6.40	63.00	101.00
40069	54290	6.50	63.00	101.00
40070	54293	6.60	63.00	101.00
40071	54304	6.70	63.00	101.00
40943	54306	6.80	69.00	109.00
41512	54309	6.90	69.00	109.00
40072	54312	7.00	69.00	109.00
40912	54315	7.50	69.00	109.00
53196	54318	7.70	75.00	117.00
45792	54321	7.80	75.00	117.00
40073	54324	8.00	75.00	117.00
40074	54811	8.50	75.00	117.00
40075	54778	9.00	81.00	125.00
41641	54781	9.50	81.00	125.00
40812	54784	10.00	87.00	133.00
40944	54787	10.20	87.00	133.00
34732	54790	10.50	87.00	133.00
40127	54793	11.00	94.00	142.00
40865	54795	11.50	94.00	142.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1126 R Z2

continuation ...

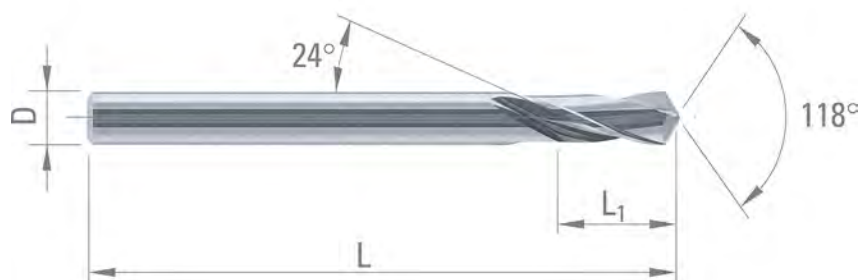


Carbide item No	DICUT Item No	D h5	L1	L
41513	54798	12.00	101.00	151.00
41642	54801	12.50	101.00	151.00
40660	54804	13.00	101.00	151.00
40076	54807	13.50	108.00	160.00
40771	54810	14.00	108.00	160.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1130 R Z2



- Steel + Pb
- Low alloyed steel
- High alloyed steel
- Cast iron
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Graphite
- Plastic

Coating available : DICUT

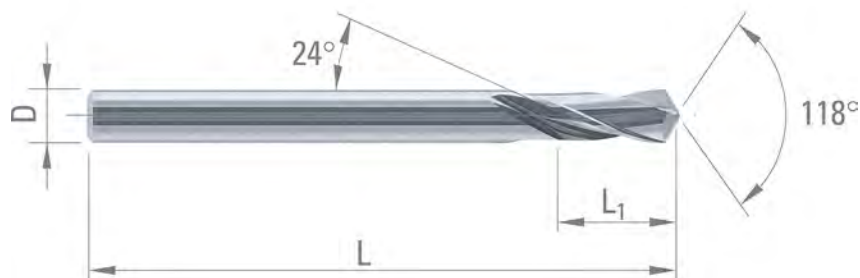
5 Cutting tools

Carbide item No	DICUT Item No	D h5	L1	L
24828	953165	0.30	5.00	30.00
37861	953167	0.35	5.00	30.00
244	953169	0.40	6.00	30.00
245	953171	0.45	6.00	30.00
246	54480	0.50	6.00	30.00
247	54481	0.55	6.00	30.00
248	54482	0.60	6.00	30.00
249	54483	0.65	6.00	30.00
250	54484	0.70	6.00	30.00
251	54485	0.75	6.00	30.00
252	54487	0.80	7.00	30.00
253	54486	0.85	7.00	30.00
254	54528	0.90	7.00	30.00
255	54488	0.95	7.00	30.00
256	54490	1.00	7.00	30.00
257	54491	1.05	8.00	30.00
258	54492	1.10	8.00	30.00
259	54493	1.15	8.00	30.00
260	54494	1.20	8.00	30.00
261	54495	1.25	8.00	30.00
262	54496	1.30	8.00	30.00
263	54497	1.35	8.00	30.00
264	54498	1.40	8.00	30.00
265	54499	1.45	8.00	30.00
266	54500	1.50	8.00	30.00
267	54501	1.55	9.00	38.00
268	54502	1.60	9.00	38.00
269	54503	1.65	9.00	38.00
270	54504	1.70	9.00	38.00
271	54505	1.75	9.00	38.00
272	54506	1.80	9.00	38.00
32277	54507	1.85	9.00	38.00

Carbide drills - End mills

Carbide twist drills type 1130 R Z2

continuation ...



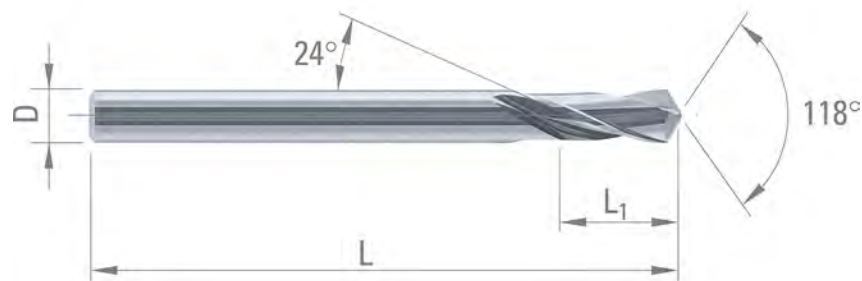
5 Cutting tools

Carbide item No	DICUT Item No	D h5	L1	L
274	54509	1.90	9.00	38.00
275	54508	1.95	9.00	38.00
276	54510	2.00	9.00	38.00
39575	54511	2.05	9.00	38.00
39757	54512	2.10	9.00	38.00
33192	54513	2.15	10.00	40.00
39655	54514	2.20	10.00	40.00
4562	54516	2.25	10.00	40.00
43350	54529	2.30	10.00	40.00
1756	54530	2.35	10.00	40.00
42869	54531	2.40	11.00	43.00
4563	54532	2.45	11.00	43.00
43351	54533	2.50	11.00	43.00
41514	54534	2.55	11.00	43.00
41874	54535	2.60	11.00	43.00
4564	54536	2.65	11.00	43.00
42139	54539	2.70	12.00	46.00
4565	54537	2.75	12.00	46.00
42339	54538	2.80	12.00	46.00
42522	54540	2.85	12.00	46.00
41911	54541	2.90	12.00	46.00
41501	54542	2.95	12.00	46.00
41840	54543	3.00	12.00	46.00
4607	54544	3.05	14.00	49.00
41456	54545	3.10	14.00	49.00
1757	54546	3.15	14.00	49.00
42023	54547	3.20	14.00	49.00
3356	54548	3.25	14.00	49.00
290	54549	3.30	14.00	49.00
4567	54550	3.35	14.00	49.00
42200	54551	3.40	15.00	52.00
4020	54552	3.45	15.00	52.00
41534	54553	3.50	15.00	52.00
4568	54554	3.55	15.00	52.00
41535	54556	3.60	15.00	52.00
42523	54557	3.65	15.00	52.00
43037	54558	3.70	15.00	52.00
4570	54560	3.75	15.00	52.00
4610	54562	3.80	17.00	55.00
4571	54563	3.85	17.00	55.00
4142	54565	3.90	17.00	55.00
42870	54567	3.95	17.00	55.00
42093	54568	4.00	17.00	55.00

Carbide drills - End mills

Carbide twist drills type 1130 R Z2

continuation ...



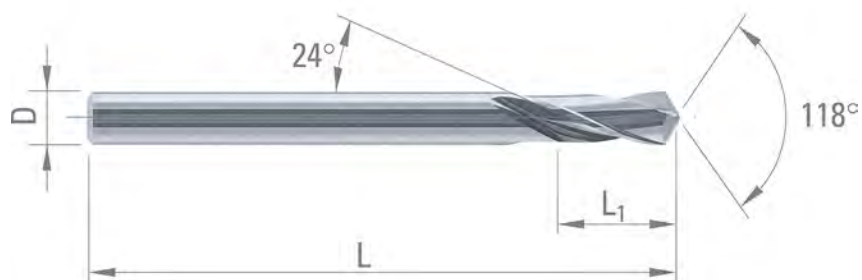
Carbide item No	DICUT Item No	D h5	L1	L
42871	54569	4.05	17.00	55.00
42652	54570	4.10	17.00	55.00
15177	54571	4.15	17.00	55.00
42340	54572	4.20	17.00	55.00
39938	54573	4.25	17.00	55.00
301	54574	4.30	18.00	58.00
39939	54575	4.35	18.00	58.00
29689	54576	4.40	18.00	58.00
4616	54577	4.45	18.00	58.00
303	54578	4.50	18.00	58.00
40790	54579	4.55	18.00	58.00
39013	54580	4.60	18.00	58.00
19790	54581	4.65	18.00	58.00
42170	54582	4.70	18.00	58.00
40791	54583	4.75	18.00	58.00
29756	54584	4.80	20.00	62.00
42524	54585	4.85	20.00	62.00
41914	54586	4.90	20.00	62.00
39997	54587	4.95	20.00	62.00
29758	54588	5.00	20.00	62.00
29759	54589	5.10	20.00	62.00
29760	54590	5.20	20.00	62.00
29761	54593	5.30	20.00	62.00
29693	54594	5.40	21.00	66.00
29694	54595	5.50	21.00	66.00
41594	54596	5.60	21.00	66.00
45724	54597	5.70	21.00	66.00
316	54599	5.80	21.00	66.00
28594	54600	5.90	21.00	66.00
42173	54601	6.00	21.00	66.00
29762	54602	6.10	23.00	70.00
41457	54618	6.20	23.00	70.00
29764	54619	6.30	23.00	70.00
42171	54620	6.40	23.00	70.00
42220	54621	6.50	23.00	70.00
41515	54622	6.60	23.00	70.00
41680	54623	6.70	23.00	70.00
326	54624	6.80	25.00	74.00
327	54625	6.90	25.00	74.00
328	54626	7.00	25.00	74.00
8646	54627	7.10	25.00	74.00
50671	54628	7.20	25.00	74.00
53054	54629	7.30	25.00	74.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1130 R Z2

continuation ...

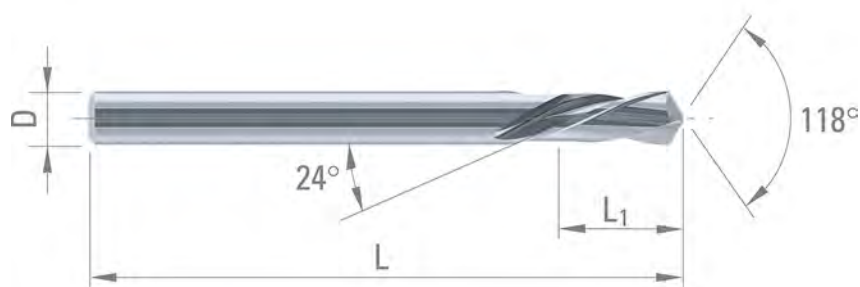


5 Cutting tools

Carbide item No	DICUT Item No	D h5	L1	L
53055	54630	7.40	25.00	74.00
5389	54631	7.50	25.00	74.00
53056	54632	7.60	27.00	79.00
22351	54633	7.70	27.00	79.00
50331	54634	7.80	27.00	79.00
53057	54635	7.90	27.00	79.00
42821	54636	8.00	27.00	79.00
53058	54639	8.10	27.00	79.00
25291	54640	8.20	27.00	79.00
53479	54641	8.30	27.00	79.00
53059	54642	8.40	27.00	79.00
42653	54643	8.50	27.00	79.00
57852	59399	8.80	29.00	84.00
35325	54644	9.00	29.00	84.00
57851	59401	9.20	29.00	84.00
39660	54645	9.50	29.00	84.00
57853	963531	9.80	31.00	89.00
7958	54646	10.00	31.00	89.00
34340	54647	10.20	31.00	89.00
30130	54648	10.50	31.00	89.00
28591	54649	11.00	33.00	95.00
41092	54650	11.50	33.00	95.00
14939	54651	12.00	35.00	102.00
25347	54652	12.50	35.00	102.00
21462	54653	13.00	35.00	102.00
45725	54654	13.50	37.00	107.00
23729	54655	14.00	37.00	107.00
48489	54656	16.00	38.00	115.00

Carbide drills - End mills

Carbide twist drills type 1130 L Z2 - left hand



- Steel + Pb
- Low alloyed steel
- High alloyed steel
- Cast iron
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Graphite
- Plastic

Coating available : DICUT

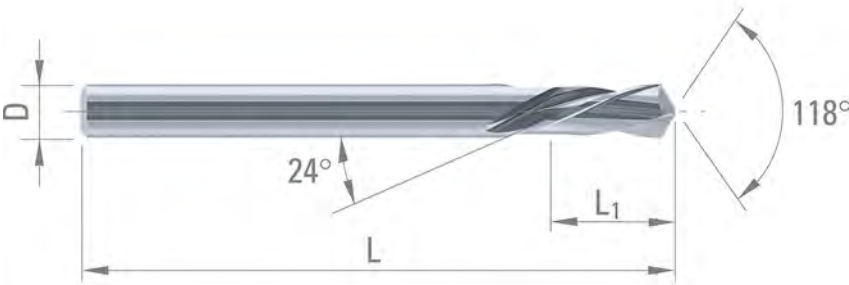
5 Cutting tools

Carbide item No	DICUT Item No	D h5	L1	L
37906	953748	0.30	5.00	30.00
37907	953752	0.35	5.00	30.00
330	953754	0.40	6.00	30.00
331	953758	0.45	6.00	30.00
332	54659	0.50	6.00	30.00
333	54660	0.55	6.00	30.00
334	54661	0.60	6.00	30.00
335	54662	0.65	6.00	30.00
336	54663	0.70	6.00	30.00
37908	54664	0.75	6.00	30.00
338	54665	0.80	8.00	30.00
339	54666	0.85	8.00	30.00
340	54667	0.90	8.00	30.00
341	54668	0.95	8.00	30.00
29560	54669	1.00	8.00	30.00
343	54670	1.05	10.00	30.00
344	54671	1.10	10.00	30.00
345	54672	1.15	10.00	30.00
346	54673	1.20	10.00	30.00
347	54674	1.25	10.00	30.00
348	54675	1.30	10.00	30.00
349	54676	1.35	10.00	30.00
350	54677	1.40	10.00	30.00
351	54678	1.45	10.00	30.00
352	54679	1.50	10.00	30.00
38634	54680	1.55	16.00	38.00
38826	54681	1.60	16.00	38.00
39127	54682	1.65	16.00	38.00
39126	54683	1.70	16.00	38.00
38827	54684	1.75	16.00	38.00
395	54685	1.80	16.00	38.00
38921	54686	1.85	16.00	38.00

Carbide drills - End mills

Carbide twist drills type 1130 L Z2 - left hand

continuation ...



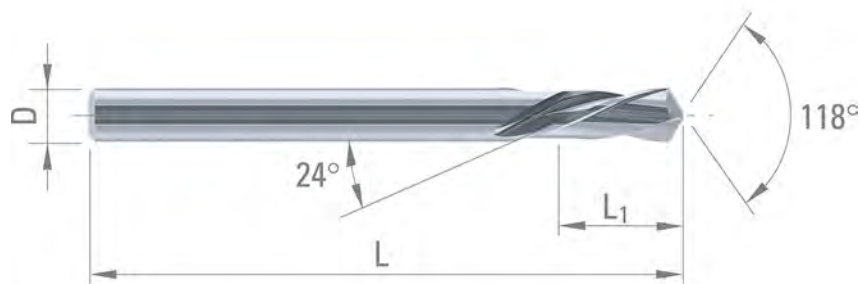
5 Cutting tools

Carbide item No	DICUT Item No	D h5	L1	L
30637	54687	1.90	16.00	38.00
38997	54688	1.95	16.00	38.00
35181	54689	2.00	16.00	38.00
27526	54690	2.05	16.00	38.00
39657	54691	2.10	16.00	38.00
39041	54692	2.15	16.00	40.00
38965	54693	2.20	16.00	40.00
40245	54694	2.25	16.00	40.00
38769	54695	2.30	16.00	40.00
26575	54696	2.35	16.00	40.00
23429	54698	2.40	16.00	43.00
45720	54699	2.45	16.00	43.00
43245	54700	2.50	16.00	43.00
41034	54701	2.55	16.00	43.00
39043	54702	2.60	16.00	43.00
4026	54703	2.65	16.00	43.00
40247	54704	2.70	16.00	46.00
43036	54705	2.75	16.00	46.00
370	54706	2.80	16.00	46.00
40266	54707	2.85	16.00	46.00
40793	54708	2.90	16.00	46.00
40511	54709	2.95	16.00	46.00
42787	54710	3.00	16.00	46.00
40079	54711	3.05	18.00	49.00
40661	54712	3.10	18.00	49.00
40794	54713	3.15	18.00	49.00
40267	54714	3.20	18.00	49.00
40080	54715	3.25	18.00	49.00
375	54716	3.30	18.00	49.00
40296	54717	3.35	18.00	49.00
376	54718	3.40	20.00	50.00
37957	54719	3.45	20.00	50.00
377	54720	3.50	20.00	50.00
41596	54721	3.55	20.00	50.00
40662	54722	3.60	20.00	50.00
40797	54723	3.65	20.00	50.00
379	54724	3.70	20.00	50.00
38922	54725	3.75	20.00	50.00
40172	54726	3.80	22.00	50.00
37960	54727	3.85	22.00	50.00
38923	54728	3.90	22.00	50.00
37962	54729	3.95	22.00	50.00
382	54730	4.00	22.00	50.00

Carbide drills - End mills

Carbide twist drills type 1130 L Z2 - left hand

continuation ...

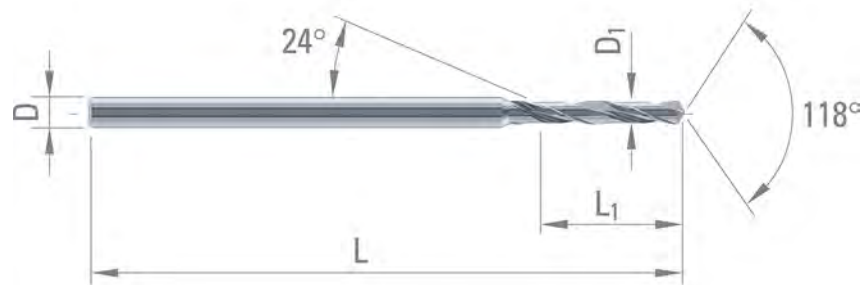


Carbide item No	DICUT Item No	D h5	L1	L
40801	54731	4.05	22.00	50.00
383	54732	4.10	22.00	50.00
40576	54733	4.15	22.00	50.00
384	54734	4.20	22.00	50.00
39658	54735	4.25	22.00	50.00
385	54736	4.30	24.00	50.00
37966	54737	4.35	24.00	50.00
37967	54738	4.40	24.00	50.00
27518	54739	4.45	24.00	50.00
387	54740	4.50	24.00	50.00
37968	54741	4.55	24.00	50.00
388	54742	4.60	24.00	50.00
37969	54743	4.65	24.00	50.00
39936	54744	4.70	24.00	50.00
37970	54745	4.75	24.00	50.00
390	54746	4.80	25.00	50.00
37971	54747	4.85	25.00	50.00
391	54748	4.90	25.00	50.00
37972	54749	4.95	25.00	50.00
392	54750	5.00	25.00	50.00
393	54751	5.10	25.00	50.00
4141	54752	5.20	25.00	50.00
25304	54753	5.30	25.00	50.00
37977	54754	5.40	25.00	50.00
27042	54755	5.50	25.00	50.00
27041	54756	5.60	25.00	50.00
37981	54757	5.70	25.00	50.00
26676	54758	5.80	25.00	50.00
6489	54759	5.90	25.00	50.00
43390	54760	6.00	28.00	66.00
43915	54761	6.10	31.00	70.00
43720	54762	6.20	31.00	70.00
43765	54763	6.30	31.00	70.00
45723	54764	6.40	31.00	70.00
37994	54765	6.50	31.00	70.00
37996	54766	6.60	31.00	70.00
45721	54767	6.70	31.00	70.00
43847	953776	6.80	34.00	74.00
45722	54769	6.90	34.00	74.00
43721	54770	7.00	34.00	74.00
38021	54771	7.50	34.00	74.00
26530	54772	8.00	37.00	79.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1131 R Z2



Coating available : DICUT / DLC

Reinforced shank

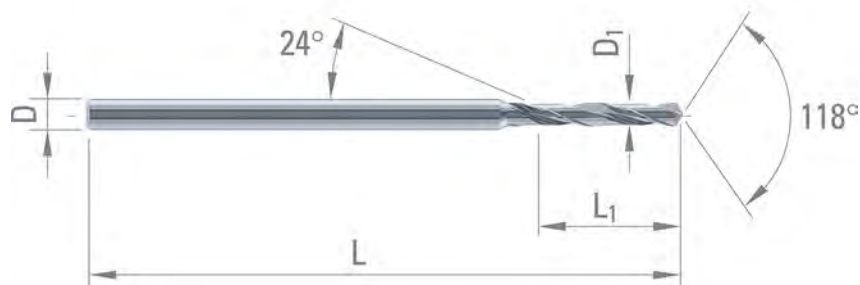
- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Graphite
- Plastic

Carbide item No	DICUT Item No	DLC item No	D1 0/-0.004	D h5	L1	L
962703			0.05	1.00	0.35	30.00
962702			0.06	1.00	0.40	30.00
962701			0.07	1.00	0.50	30.00
962700			0.08	1.00	0.60	30.00
962699			0.09	1.00	0.65	30.00
36792			0.10	1.00	0.70	30.00
40829			0.11	1.00	0.70	30.00
40627			0.12	1.00	0.70	30.00
40628			0.13	1.00	0.70	30.00
40629			0.14	1.00	0.70	30.00
35600			0.15	1.00	1.00	30.00
38658			0.16	1.00	1.00	30.00
38659			0.17	1.00	1.00	30.00
38660			0.18	1.00	1.00	30.00
38661			0.19	1.00	1.00	30.00
26824	952580	955953	0.20	1.00	1.00	30.00
29609	952581	955954	0.21	1.00	1.00	30.00
29610	952582	955955	0.22	1.00	1.00	30.00
29611	950087	955956	0.23	1.00	1.00	30.00
62513	952583	962712	0.23>	1.00	2.20	30.00
25957	952496	955957	0.24	1.00	1.00	30.00
62514	952584	962713	0.24>	1.00	2.20	30.00
28712	950088	955958	0.25	1.00	1.00	30.00
38282	952585	962714	0.25>	1.00	2.20	30.00
38665	952587	955959	0.26	1.00	1.00	30.00
37358	952588	955960	0.27	1.00	1.00	30.00
37258	952589	955961	0.28	1.00	1.00	30.00
30568	952590	955962	0.29	1.00	1.00	30.00
28713	952591	955963	0.30	1.00	1.50	30.00

Carbide drills - End mills

Carbide twist drills type 1131 R Z2

continuation ...



DIXI
polytool

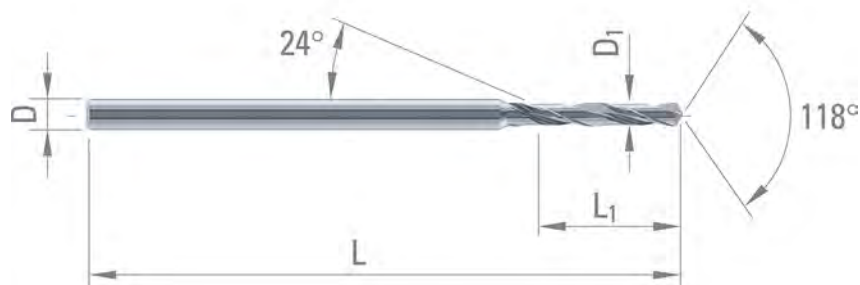
Carbide item No	DICUT Item No	DLC item No	D1 0/-0.004	D h5	L1	L
35421	952592	955964	0.31	1.00	1.50	30.00
38662	952593	955965	0.32	1.00	1.50	30.00
62515	952594	962715	0.32>	1.00	3.00	30.00
38663	952595	955966	0.33	1.00	1.50	30.00
62516	952596	962716	0.33>	1.00	3.00	30.00
29570	952597	955967	0.34	1.00	1.50	30.00
62517	952598	962717	0.34>	1.00	3.00	30.00
31747	952599	955968	0.35	1.00	1.50	30.00
39018	952600	955970	0.36	1.00	1.50	30.00
40633	952601	955971	0.37	1.00	1.50	30.00
40634	952602	955972	0.38	1.00	1.50	30.00
40635	952603	955973	0.39	1.00	1.50	30.00
25992	63706	955974	0.40	1.00	2.00	30.00
29571	952604	955975	0.41	1.00	2.00	30.00
38419	952605	955976	0.42	1.00	2.00	30.00
35804	950186	955977	0.43	1.00	2.00	30.00
40636	952606	955978	0.44	1.00	2.00	30.00
45726	59562	955979	0.45	1.00	3.60	30.00
45727	952607	955980	0.46	1.00	3.60	30.00
45728	952497	955981	0.47	1.00	3.60	30.00
45729	952608	955982	0.48	1.00	3.60	30.00
45730	952609	955983	0.49	1.00	4.00	30.00
25994	55141	955984	0.50	1.00	4.00	30.00
45731	55142	955985	0.51	1.00	4.00	30.00
45732	55143	955986	0.52	1.00	4.00	30.00
45733	55144	955987	0.53	1.00	4.00	30.00
40640	55145	955988	0.54	1.00	4.50	30.00
28375	55146	955989	0.55	1.00	4.50	30.00
41925	55147	955990	0.56	1.00	4.50	30.00
40641	55148	955991	0.57	1.00	4.50	30.00
40642	55149	955993	0.58	1.00	4.50	30.00
40643	55150	955997	0.59	1.00	4.50	30.00
29643	55151	956048	0.60	1.00	4.50	30.00
37639	55152	956049	0.61	1.00	5.00	30.00
25270	55153	956050	0.62	1.00	5.00	30.00
40644	55154	956051	0.63	1.00	5.00	30.00
40645	55155	956052	0.64	1.00	5.00	30.00
41679	55156	956053	0.65	1.00	5.00	30.00
41886	55157	956054	0.66	1.00	5.00	30.00
42286	55158	956055	0.67	1.00	5.00	30.00
42287	55159	956056	0.68	1.00	5.60	30.00
41788	55160	956057	0.69	1.00	5.60	30.00
32099	55161	956058	0.70	1.00	5.60	30.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1131 R Z2

continuation ...



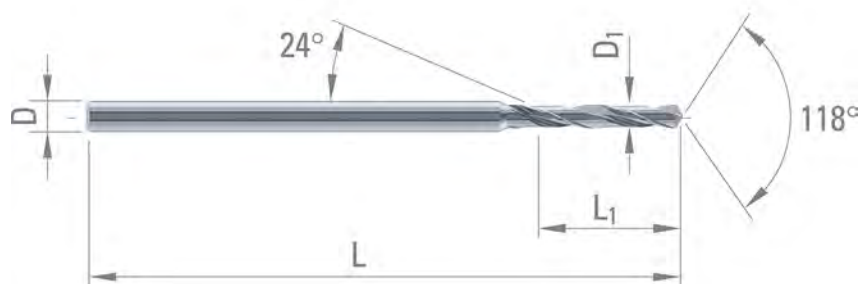
5 Cutting tools

Carbide item No	DICUT Item No	DLC item No	D1 0/-0.004	D h5	L1	L
42288	55162	956059	0.71	1.00	5.60	30.00
40983	55163	956060	0.72	1.00	5.60	30.00
35422	55164	956061	0.73	1.00	5.60	30.00
36102	55165	956062	0.74	1.00	5.60	30.00
35423	55166	956063	0.75	1.00	5.60	30.00
18579	55167	956064	0.76	1.00	6.30	30.00
42706	55168	956065	0.77	1.00	6.30	30.00
41887	55169	956066	0.78	1.00	6.30	30.00
36640	55170	956068	0.79	1.00	6.30	30.00
402	55171	956069	0.80	1.50	6.30	30.00
36144	55172	956070	0.81	1.50	6.30	30.00
34510	55173	956071	0.82	1.50	6.30	30.00
42290	55174	956072	0.83	1.50	6.30	30.00
27400	55175	956074	0.84	1.50	6.30	30.00
35551	55176	956075	0.85	1.50	6.30	30.00
29254	55177	956076	0.86	1.50	7.10	30.00
42291	55178	956077	0.87	1.50	7.10	30.00
19601	55179	956080	0.88	1.50	7.10	30.00
41789	55180	956081	0.89	1.50	7.10	30.00
32100	55181	956082	0.90	1.50	7.10	30.00
42292	55182	956083	0.91	1.50	7.10	30.00
36859	55183	956084	0.92	1.50	7.10	30.00
42293	55184	956085	0.93	1.50	7.10	30.00
42167	55185	956086	0.94	1.50	7.10	30.00
35183	55186	956087	0.95	1.50	7.10	30.00
37741	55188	956088	0.96	1.50	8.00	30.00
29255	55189	956089	0.97	1.50	8.00	30.00
42294	55190	956091	0.98	1.50	8.00	30.00
41790	55191	956092	0.99	1.50	8.00	30.00
406	55192	956093	1.00	1.50	9.00	30.00
34996	55193	956094	1.01	1.50	9.00	30.00
42876	55195	956095	1.02	1.50	9.00	30.00
34778	55196	956096	1.03	1.50	9.00	30.00
43984	55200	956097	1.04	1.50	9.00	30.00
4774	55201	956098	1.05	1.50	9.00	30.00
43985	55202	956099	1.06	1.50	9.00	30.00
42228	55203	956100	1.07	1.50	9.00	30.00
43198	55204	956101	1.08	1.50	9.00	30.00
28779	55205	956102	1.09	1.50	9.00	30.00
407	55206	956103	1.10	1.50	9.00	30.00
43986	55207	956104	1.11	1.50	9.00	30.00
43347	55208	956105	1.12	1.50	9.00	30.00
42853	55209	956106	1.13	1.50	9.00	30.00

Carbide drills - End mills

Carbide twist drills type 1131 R Z2

continuation ...



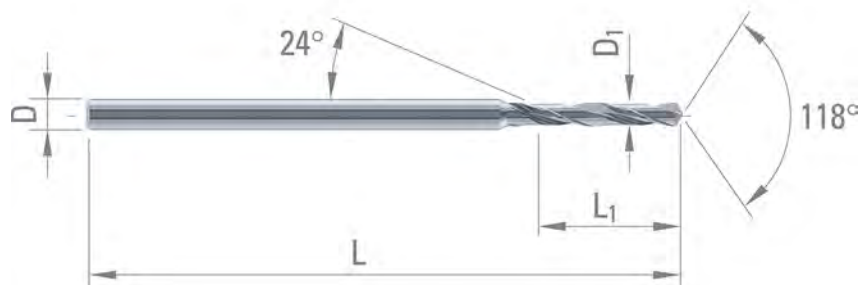
Carbide item No	DICUT Item No	DLC item No	D1 0/-0.004	D h5	L1	L
43987	55210	956107	1.14	1.50	9.00	30.00
3530	55211	956108	1.15	1.50	9.00	30.00
22712	55212	956109	1.16	1.50	9.00	30.00
4775	55213	956110	1.17	1.50	9.00	30.00
42230	55214	956111	1.18	1.50	9.00	30.00
41791	55215	956112	1.19	1.50	10.00	30.00
408	55216	956113	1.20	1.50	10.00	30.00
42168	55217	956114	1.21	1.50	10.00	30.00
25751	55218	956115	1.22	1.50	10.00	30.00
23285	55219	956116	1.23	1.50	10.00	30.00
45524	55220	956118	1.24	1.50	10.00	30.00
3531	55221	956119	1.25	1.50	10.00	30.00
42005	55222	956120	1.26	1.50	10.00	30.00
3761	55223	956121	1.27	1.50	10.00	30.00
42169	55224	956122	1.28	1.50	10.00	30.00
37694	55225	956124	1.29	1.50	10.00	30.00
409	55226	956125	1.30	1.50	10.00	30.00
45525	55227	956128	1.31	1.50	10.00	30.00
29712	55228	956130	1.32	1.50	10.00	30.00
34695	55229	956131	1.33	1.50	11.20	30.00
45526	55230	956132	1.34	1.50	11.20	30.00
3532	55231	956133	1.35	1.50	11.20	30.00
45527	55232	956134	1.36	1.50	11.20	30.00
35556	55233	956135	1.37	1.50	11.20	30.00
45055	55234	956136	1.38	1.50	11.20	30.00
45297	55235	956137	1.39	1.50	11.20	30.00
410	55236	956138	1.40	1.50	11.20	30.00
33499	55237	956139	1.41	1.50	11.20	30.00
43348	55238	956140	1.42	1.50	11.20	30.00
45056	55239	956141	1.43	1.50	11.20	30.00
45528	55240	956142	1.44	1.50	11.20	30.00
36006	55241	956143	1.45	1.50	11.20	30.00
45529	55242	956144	1.46	1.50	11.20	30.00
45530	55243	956145	1.47	1.50	11.20	30.00
45057	55244	956146	1.48	1.50	11.20	30.00
35681	55245	956147	1.49	1.50	11.20	30.00
411	55246	956148	1.50	2.00	11.20	38.00
27735	55247	956149	1.51	2.00	12.00	38.00
27736	55248	956150	1.52	2.00	12.00	38.00
23286	55249	956151	1.53	2.00	12.00	38.00
45909	55250	956152	1.54	2.00	12.00	38.00
25686	55251	956153	1.55	2.00	12.00	38.00
58194	58196	956154	1.56	2.00	12.00	38.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1131 R Z2

continuation ...



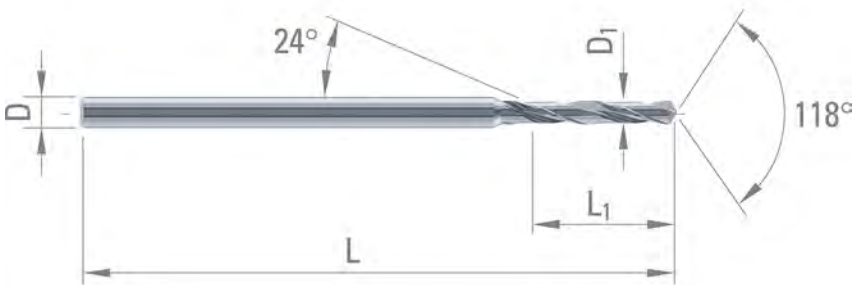
5 Cutting tools

Carbide item No	DICUT Item No	DLC item No	D1 0/-0.004	D h5	L1	L
55541	58193	956155	1.57	2.00	12.00	38.00
39953	55252	956156	1.58	2.00	12.00	38.00
34993	55253	956157	1.59	2.00	12.00	38.00
412	55254	956158	1.60	2.00	12.00	38.00
40288	55255	956159	1.61	2.00	12.00	38.00
46968	55256	956160	1.62	2.00	12.00	38.00
45605	55257	956161	1.63	2.00	12.00	38.00
45910	55258	956162	1.64	2.00	12.00	38.00
32283	55259	956163	1.65	2.00	12.00	38.00
47198	55260	956164	1.66	2.00	12.00	38.00
50763	55261	956165	1.67	2.00	12.00	38.00
31684	55262	956166	1.68	2.00	12.00	38.00
45339	55263	956167	1.69	2.00	12.00	38.00
413	55264	956169	1.70	2.00	12.00	38.00
45911	55265	956175	1.71	2.00	12.00	38.00
27925	55266	956177	1.72	2.00	12.00	38.00
42609	55267	956178	1.73	2.00	12.00	38.00
45912	55268	956179	1.74	2.00	12.00	38.00
45734	55269	956180	1.75	2.00	12.00	38.00
45913	55270	956181	1.76	2.00	12.00	38.00
38757	61408	956182	1.77	2.00	12.00	38.00
46957	55271	956183	1.78	2.00	12.00	38.00
45340	55272	956185	1.79	2.00	12.00	38.00
31497	55273	956186	1.80	2.00	12.00	38.00
45914	55274	956187	1.81	2.00	12.00	38.00
46969	55275	956188	1.82	2.00	12.00	38.00
58717	61407	956189	1.83	2.00	12.00	38.00
46970	55276	956190	1.84	2.00	12.00	38.00
36793	55277	956191	1.85	2.00	12.00	38.00
50761	55278	956192	1.86	2.00	12.00	38.00
36487	55279	956195	1.87	2.00	12.00	38.00
45801	55280	956196	1.88	2.00	12.00	38.00
45341	55281	956197	1.89	2.00	12.00	38.00
415	55282	956198	1.90	2.00	12.00	38.00
45915	55283	956200	1.91	2.00	12.00	38.00
45916	55284	956201	1.92	2.00	12.00	38.00
44853	55285	956202	1.93	2.00	12.00	38.00
45917	55286	956203	1.94	2.00	12.00	38.00
32284	55287	956204	1.95	2.00	12.00	38.00
60692	61404	956205	1.96	2.00	12.00	38.00
50332	61401	956206	1.97	2.00	12.00	38.00
46959	55288	956207	1.98	2.00	12.00	38.00
45342	55289	956208	1.99	2.00	12.00	38.00

Carbide drills - End mills

Carbide twist drills type 1131 R Z2

continuation ...



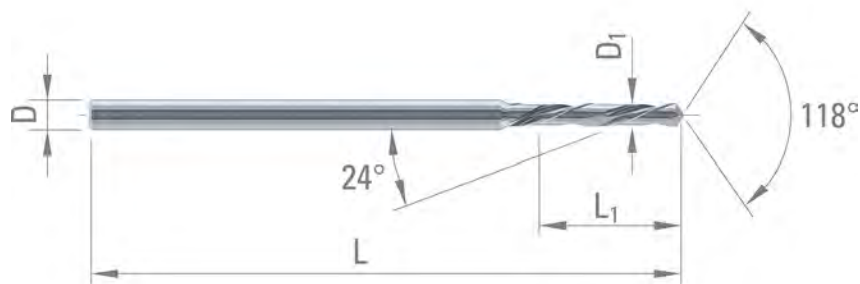
Carbide item No	DICUT Item No	DLC item No	D1 0/-0.004	D h5	L1	L
416	55290	956209	2.00	2.50	12.00	43.00
45498	55291	956210	2.01	2.50	12.00	43.00
48962	61399	956211	2.02	2.50	12.00	43.00
50685	55292	956212	2.03	2.50	12.00	43.00
60958	60962	956213	2.04	2.50	12.00	43.00
40813	55293	956214	2.05	2.50	12.00	43.00
42295	55294	956215	2.10	2.50	12.00	43.00
40814	55295	956216	2.15	2.50	12.00	43.00
418	55296	956217	2.20	2.50	12.00	43.00
40815	55297	956218	2.25	2.50	12.00	43.00
419	55298	956219	2.30	2.50	12.00	43.00
955569	955572	956228	2.34	2.50	12.00	43.00
6341	55299	956220	2.35	2.50	12.00	43.00
420	55300	956221	2.40	2.50	12.00	43.00
40816	55301	956222	2.45	2.50	12.00	43.00

5

Cutting tools

Carbide drills - End mills

Carbide twist drills type 1131 L Z2 - left hand



Coating available : DICUT

Reinforced shank

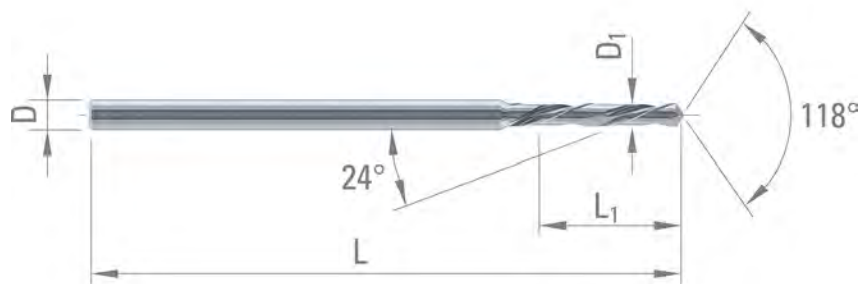
- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Graphite
- Plastic

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
36916		0.10	1.00	0.70	30.00
36917		0.11	1.00	0.70	30.00
36918		0.12	1.00	0.70	30.00
36919		0.13	1.00	0.70	30.00
36920		0.14	1.00	0.70	30.00
36921		0.15	1.00	1.00	30.00
36922		0.16	1.00	1.00	30.00
38654		0.17	1.00	1.00	30.00
36924		0.18	1.00	1.00	30.00
36925		0.19	1.00	1.00	30.00
36926	952652	0.20	1.00	1.00	30.00
36927	952653	0.21	1.00	1.00	30.00
36928	952654	0.22	1.00	1.00	30.00
36929	952655	0.23	1.00	1.00	30.00
36930	952656	0.24	1.00	1.00	30.00
36931	952657	0.25	1.00	1.00	30.00
36932	952658	0.26	1.00	1.00	30.00
36933	952659	0.27	1.00	1.00	30.00
36934	952660	0.28	1.00	1.00	30.00
36935	952661	0.29	1.00	1.00	30.00
36936	952662	0.30	1.00	1.50	30.00
36937	952663	0.31	1.00	1.50	30.00
36938	952664	0.32	1.00	1.50	30.00
36939	952665	0.33	1.00	1.50	30.00
36940	952666	0.34	1.00	1.50	30.00
36941	952667	0.35	1.00	1.50	30.00
36942	952669	0.36	1.00	1.50	30.00
36943	952672	0.37	1.00	1.50	30.00
36944	952673	0.38	1.00	1.50	30.00

Carbide drills - End mills

Carbide twist drills type 1131 L Z2 - left hand

continuation ...



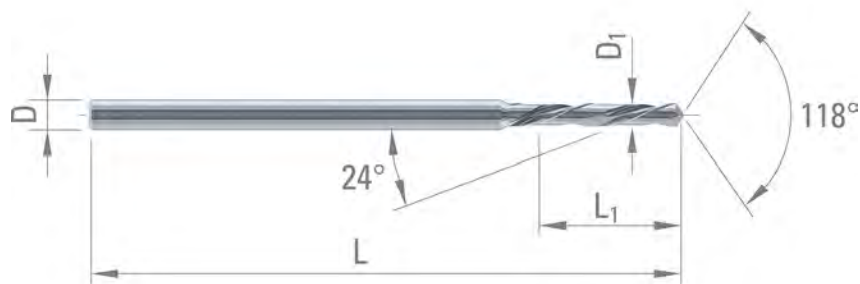
Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
36945	952674	0.39	1.00	1.50	30.00
15026	952676	0.40	1.00	2.00	30.00
35708	952677	0.41	1.00	2.00	30.00
36946	952678	0.42	1.00	2.00	30.00
36947	952679	0.43	1.00	2.00	30.00
36948	952680	0.44	1.00	2.00	30.00
38054	952681	0.45	1.00	3.60	30.00
38057	952682	0.46	1.00	3.60	30.00
38059	952683	0.47	1.00	3.60	30.00
38062	952684	0.48	1.00	3.60	30.00
38063	952685	0.49	1.00	4.00	30.00
38065	55302	0.50	1.00	4.00	30.00
38066	55303	0.51	1.00	4.00	30.00
38068	55304	0.52	1.00	4.00	30.00
38069	55305	0.53	1.00	4.00	30.00
38245	55306	0.54	1.00	4.50	30.00
38246	55307	0.55	1.00	4.50	30.00
38190	55308	0.56	1.00	4.50	30.00
38187	55309	0.57	1.00	4.50	30.00
38103	55310	0.58	1.00	4.50	30.00
38070	55311	0.59	1.00	4.50	30.00
38188	55312	0.60	1.00	4.50	30.00
38247	55313	0.61	1.00	5.00	30.00
38364	55314	0.62	1.00	5.00	30.00
38072	55315	0.63	1.00	5.00	30.00
38073	55316	0.64	1.00	5.00	30.00
38075	55317	0.65	1.00	5.00	30.00
36966	55318	0.66	1.00	5.00	30.00
36838	55319	0.67	1.00	5.00	30.00
21766	55320	0.68	1.00	5.60	30.00
4021	55321	0.69	1.00	5.60	30.00
450	55322	0.70	1.00	5.60	30.00
38078	55323	0.71	1.00	5.60	30.00
38182	55324	0.72	1.00	5.60	30.00
22294	55325	0.73	1.00	5.60	30.00
38080	55326	0.74	1.00	5.60	30.00
36975	55327	0.75	1.00	5.60	30.00
36976	55328	0.76	1.00	6.30	30.00
40866	55329	0.77	1.00	6.30	30.00
36978	55330	0.78	1.00	6.30	30.00
38082	55331	0.79	1.00	6.30	30.00
38317	55332	0.80	1.50	6.30	30.00
36981	55333	0.81	1.50	6.30	30.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1131 L Z2 - left hand

continuation ...



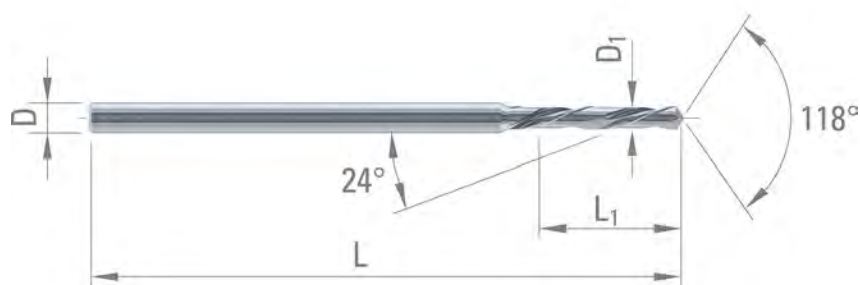
5 Cutting tools

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
36982	55334	0.82	1.50	6.30	30.00
36983	55335	0.83	1.50	6.30	30.00
38292	55336	0.84	1.50	6.30	30.00
38293	55337	0.85	1.50	6.30	30.00
38294	55338	0.86	1.50	7.10	30.00
38251	55339	0.87	1.50	7.10	30.00
36988	55340	0.88	1.50	7.10	30.00
36989	55341	0.89	1.50	7.10	30.00
24182	55342	0.90	1.50	7.10	30.00
38295	55343	0.91	1.50	7.10	30.00
36360	55344	0.92	1.50	7.10	30.00
35871	55345	0.93	1.50	7.10	30.00
38086	55346	0.94	1.50	7.10	30.00
455	55347	0.95	1.50	7.10	30.00
38296	55348	0.96	1.50	8.00	30.00
36996	55349	0.97	1.50	8.00	30.00
36997	55350	0.98	1.50	8.00	30.00
36998	55351	0.99	1.50	8.00	30.00
36999	55352	1.00	1.50	9.00	30.00
37000	55353	1.01	1.50	9.00	30.00
37001	55354	1.02	1.50	9.00	30.00
37002	55355	1.03	1.50	9.00	30.00
37003	55356	1.04	1.50	9.00	30.00
37004	55357	1.05	1.50	9.00	30.00
37005	55358	1.06	1.50	9.00	30.00
37006	55359	1.07	1.50	9.00	30.00
37007	55360	1.08	1.50	9.00	30.00
37008	55361	1.09	1.50	9.00	30.00
457	55362	1.10	1.50	9.00	30.00
37009	55363	1.11	1.50	9.00	30.00
37010	55364	1.12	1.50	9.00	30.00
14573	55365	1.13	1.50	9.00	30.00
37011	55366	1.14	1.50	9.00	30.00
19337	55367	1.15	1.50	9.00	30.00
37012	55368	1.16	1.50	9.00	30.00
37013	55369	1.17	1.50	9.00	30.00
37014	55370	1.18	1.50	9.00	30.00
37015	55371	1.19	1.50	10.00	30.00
37016	55372	1.20	1.50	10.00	30.00
26225	55373	1.21	1.50	10.00	30.00
37017	55374	1.22	1.50	10.00	30.00
45717	55375	1.23	1.50	10.00	30.00
37019	55376	1.24	1.50	10.00	30.00

Carbide drills - End mills

Carbide twist drills type 1131 L Z2 - left hand

continuation ...



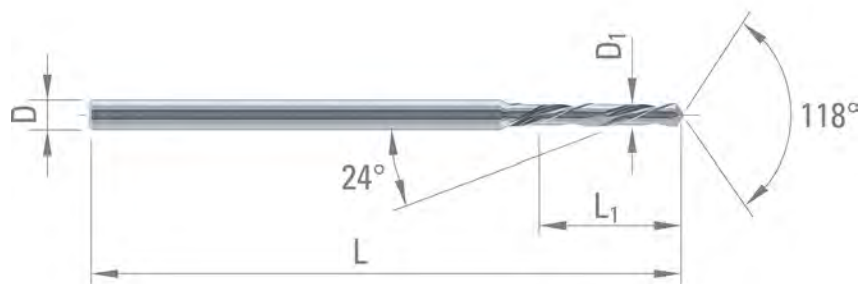
Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
26763	55377	1.25	1.50	10.00	30.00
27862	55378	1.26	1.50	10.00	30.00
6197	55379	1.27	1.50	10.00	30.00
25663	55380	1.28	1.50	10.00	30.00
27863	55381	1.29	1.50	10.00	30.00
459	55382	1.30	1.50	10.00	30.00
37020	55383	1.31	1.50	10.00	30.00
37021	55384	1.32	1.50	10.00	30.00
37022	55385	1.33	1.50	11.20	30.00
45718	55386	1.34	1.50	11.20	30.00
37024	55387	1.35	1.50	11.20	30.00
37025	55388	1.36	1.50	11.20	30.00
37026	55389	1.37	1.50	11.20	30.00
37027	55390	1.38	1.50	11.20	30.00
37028	55391	1.39	1.50	11.20	30.00
460	55392	1.40	1.50	11.20	30.00
26226	55393	1.41	1.50	11.20	30.00
37029	55394	1.42	1.50	11.20	30.00
37030	55395	1.43	1.50	11.20	30.00
37031	55396	1.44	1.50	11.20	30.00
26459	55397	1.45	1.50	11.20	30.00
37032	55398	1.46	1.50	11.20	30.00
37033	55399	1.47	1.50	11.20	30.00
37034	55400	1.48	1.50	11.20	30.00
37035	55401	1.49	1.50	11.20	30.00
461	55402	1.50	2.00	11.20	38.00
38089	55403	1.51	2.00	12.00	38.00
38962	55404	1.52	2.00	12.00	38.00
38938	55405	1.53	2.00	12.00	38.00
45531	55406	1.54	2.00	12.00	38.00
38090	55407	1.55	2.00	12.00	38.00
45532	55408	1.56	2.00	12.00	38.00
45351	55409	1.57	2.00	12.00	38.00
38252	55410	1.58	2.00	12.00	38.00
45533	55411	1.59	2.00	12.00	38.00
37234	55412	1.60	2.00	12.00	38.00
40655	55413	1.61	2.00	12.00	38.00
29286	55414	1.62	2.00	12.00	38.00
40910	55415	1.63	2.00	12.00	38.00
41297	55416	1.64	2.00	12.00	38.00
37235	55417	1.65	2.00	12.00	38.00
45534	55418	1.66	2.00	12.00	38.00
44015	55419	1.67	2.00	12.00	38.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1131 L Z2 - left hand

continuation ...

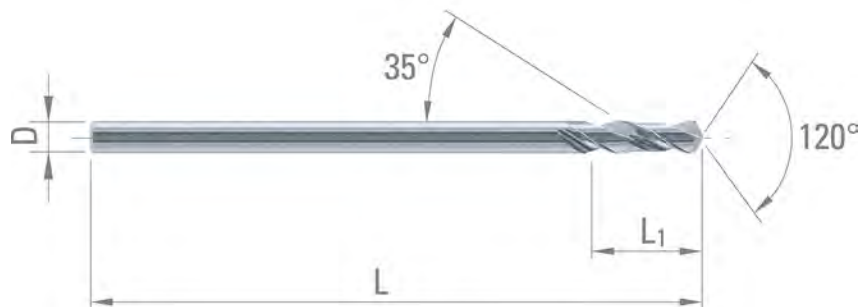


5 Cutting tools

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
38092	55420	1.68	2.00	12.00	38.00
45535	55421	1.69	2.00	12.00	38.00
463	55422	1.70	2.00	12.00	38.00
45536	55423	1.71	2.00	12.00	38.00
45075	55424	1.72	2.00	12.00	38.00
43415	55425	1.73	2.00	12.00	38.00
45537	55426	1.74	2.00	12.00	38.00
38093	55427	1.75	2.00	12.00	38.00
58052	58054	1.76	2.00	12.00	38.00
42174	55428	1.77	2.00	12.00	38.00
57881	57888	1.78	2.00	12.00	38.00
58197	58199	1.79	2.00	12.00	38.00
464	55429	1.80	2.00	12.00	38.00
58636	61392	1.81	2.00	12.00	38.00
26183	55430	1.82	2.00	12.00	38.00
61388	61390	1.83	2.00	12.00	38.00
50611	55431	1.84	2.00	12.00	38.00
38094	55432	1.85	2.00	12.00	38.00
61385	61387	1.86	2.00	12.00	38.00
42119	55433	1.87	2.00	12.00	38.00
61382	61384	1.88	2.00	12.00	38.00
50657	55434	1.89	2.00	12.00	38.00
41217	55435	1.90	2.00	12.00	38.00
61150	61367	1.91	2.00	12.00	38.00
48963	57890	1.92	2.00	12.00	38.00
50158	58056	1.93	2.00	12.00	38.00
60780	60782	1.94	2.00	12.00	38.00
45719	55436	1.95	2.00	12.00	38.00
61368	61370	1.96	2.00	12.00	38.00
61372	61371	1.97	2.00	12.00	38.00
44254	57892	1.98	2.00	12.00	38.00
58741	60784	1.99	2.00	12.00	38.00
466	55437	2.00	2.50	12.00	43.00
38096	55438	2.01	2.50	12.00	43.00
47857	55439	2.02	2.50	12.00	43.00
61256	61375	2.03	2.50	12.00	43.00
61376	61378	2.04	2.50	12.00	43.00
61379	61381	2.05	2.50	12.00	43.00
467	55440	2.10	2.50	12.00	43.00
47858	55441	2.12	2.50	12.00	43.00
38097	55442	2.15	2.50	12.00	43.00
38098	55443	2.45	2.50	12.00	43.00

Carbide drills - End mills

Carbide twist drills type 1132 R Z2



- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Graphit
- Plastic

Coating available : DICUT

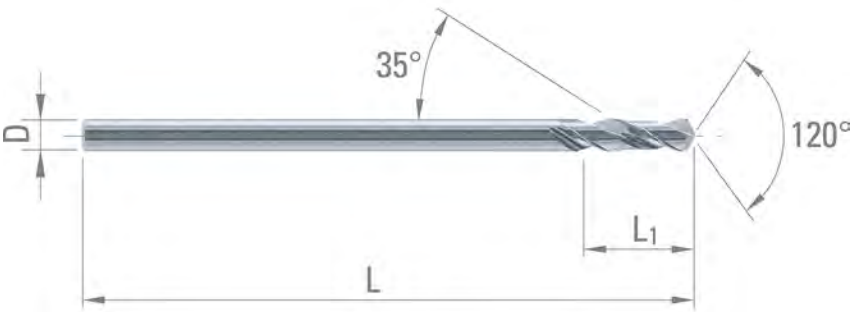
5 Cutting tools

Carbide item No	DICUT Item No	D h5	L1	L
197	953186	0.40	6.00	30.00
198	58925	0.45	6.00	30.00
199	53585	0.50	6.00	30.00
200	53586	0.55	6.00	30.00
201	53582	0.60	6.00	30.00
202	53588	0.65	6.00	30.00
203	53589	0.70	6.00	30.00
204	53587	0.75	6.00	30.00
205	53590	0.80	7.00	30.00
206	53591	0.85	7.00	30.00
207	53592	0.90	7.00	30.00
208	53593	0.95	7.00	30.00
40275	53583	1.00	7.00	30.00
210	53594	1.05	8.00	30.00
41502	53595	1.10	8.00	30.00
212	53596	1.15	8.00	30.00
41150	53597	1.20	8.00	30.00
41319	53598	1.25	8.00	30.00
215	53599	1.30	8.00	30.00
41320	53600	1.35	8.00	30.00
217	53584	1.40	8.00	30.00
218	53601	1.45	8.00	30.00
219	53602	1.50	8.00	30.00
220	53604	1.55	9.00	38.00
221	53605	1.60	9.00	38.00
5418	53606	1.65	9.00	38.00
222	53607	1.70	9.00	38.00
42537	53608	1.75	9.00	38.00
223	53609	1.80	9.00	38.00
42538	53610	1.85	9.00	38.00

Carbide drills - End mills

Carbide twist drills type 1132 R Z2

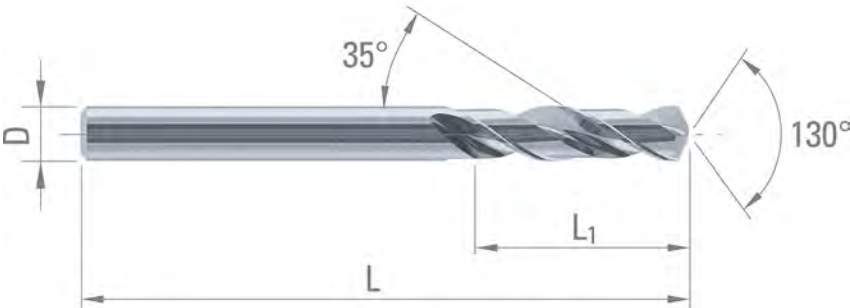
continuation ...



Carbide item No	DICUT Item No	D h5	L1	L
224	53611	1.90	9.00	38.00
42539	53612	1.95	9.00	38.00
225	53613	2.00	9.00	38.00

Carbide drills - End mills

Carbide twist drills type 1133 R Z2



- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Titanium, Titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Plastic

Coating available : DICUT

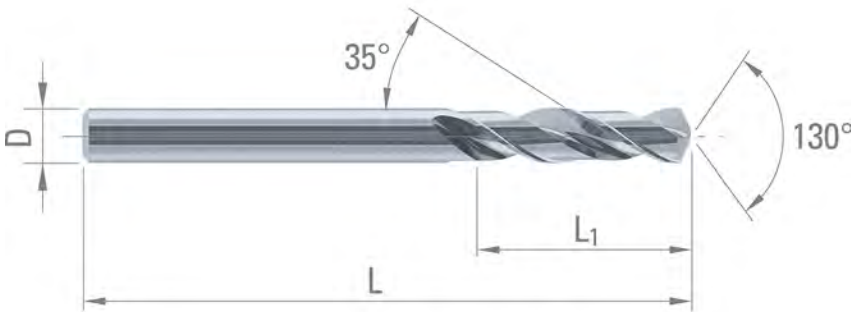
5 Cutting tools

Carbide item No	DICUT Item No	D h5	L1	L
91	57557	0.50	9.00	38.00
92	57558	0.55	9.00	38.00
93	57559	0.60	13.00	38.00
94	57560	0.65	13.00	38.00
95	55471	0.70	13.00	38.00
96	55473	0.75	13.00	38.00
97	55475	0.80	13.00	38.00
98	55482	0.85	13.00	38.00
99	55599	0.90	16.00	38.00
100	55601	0.95	16.00	38.00
101	55603	1.00	16.00	38.00
102	55605	1.05	16.00	38.00
103	55607	1.10	16.00	38.00
104	55609	1.15	16.00	38.00
105	55611	1.20	16.00	38.00
106	55613	1.25	16.00	38.00
107	55615	1.30	16.00	38.00
108	55617	1.35	16.00	38.00
109	55619	1.40	16.00	38.00
110	55621	1.45	16.00	38.00
111	55623	1.50	16.00	38.00
2972	55625	1.55	16.00	38.00
112	55627	1.60	16.00	38.00
3360	55629	1.65	16.00	38.00
113	55631	1.70	16.00	38.00
3361	55633	1.75	16.00	38.00
114	55635	1.80	16.00	38.00
115	55637	1.85	16.00	38.00
116	55639	1.90	16.00	38.00
3362	55641	1.95	16.00	38.00
117	55643	2.00	16.00	38.00
118	55645	2.10	16.00	38.00

Carbide drills - End mills

Carbide twist drills type 1133 R Z2

continuation ...

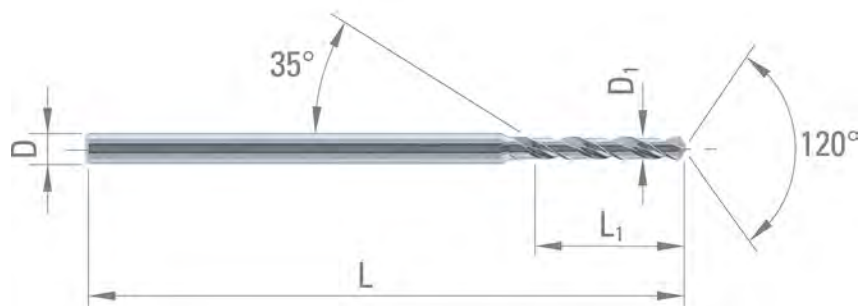


5 Cutting tools

Carbide item No	DICUT Item No	D h5	L1	L
119	55647	2.20	16.00	40.00
120	55649	2.30	16.00	40.00
121	55651	2.40	16.00	43.00
122	55653	2.50	16.00	43.00
35575	55655	2.60	16.00	43.00
35726	55657	3.00	16.00	46.00
35665	55659	3.30	18.00	49.00
35727	55661	3.50	20.00	50.00
34062	55663	4.00	22.00	55.00
35728	55665	4.20	22.00	55.00
35729	55667	4.50	24.00	58.00
35730	55669	5.00	26.00	62.00
45735	55671	5.50	28.00	66.00
45736	55673	6.00	28.00	66.00

Carbide drills - End mills

Carbide twist drills type 1134 R Z2



Reinforced shank

- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al

Coating available : DICUT

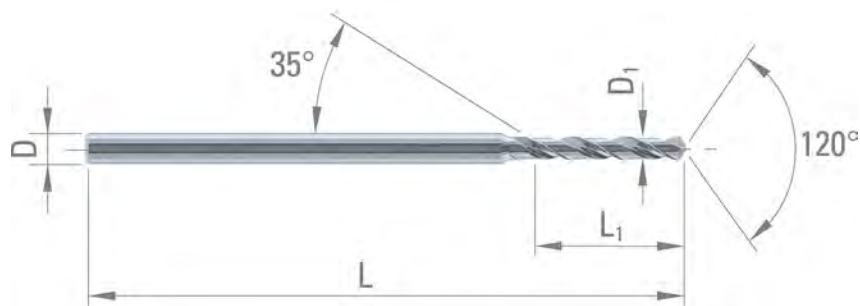
5 Cutting tools

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
21228	57565	0.50	1.00	4.00	30.00
39029	57566	0.55	1.00	4.50	30.00
176	57567	0.60	1.00	4.50	30.00
39030	57568	0.65	1.00	5.00	30.00
178	55679	0.70	1.00	5.60	30.00
39031	55681	0.75	1.00	5.60	30.00
180	55683	0.80	1.50	6.30	30.00
957990	957991	0.81	1.50	6.30	30.00
957040	957994	0.82	1.50	6.30	30.00
45775	957802	0.83	1.50	6.30	30.00
45776	957804	0.84	1.50	6.30	30.00
181	55685	0.85	1.50	6.30	30.00
957995	957996	0.86	1.50	7.10	30.00
957998	957999	0.87	1.50	7.10	30.00
958001	958002	0.88	1.50	7.10	30.00
56626	957806	0.89	1.50	7.10	30.00
182	55687	0.90	1.50	7.10	30.00
958006	958007	0.91	1.50	7.10	30.00
957949	958004	0.92	1.50	7.10	30.00
957042	957808	0.93	1.50	7.10	30.00
957043	957810	0.94	1.50	7.10	30.00
39032	55689	0.95	1.50	7.10	30.00
49329	957812	0.96	1.50	9.00	30.00
957045	957829	0.97	1.50	9.00	30.00
43498	957831	0.98	1.50	9.00	30.00
61003	957834	0.99	1.50	9.00	30.00
184	55691	1.00	1.50	9.00	30.00
48709	957865	1.01	1.50	9.00	30.00
58334	957867	1.02	1.50	9.00	30.00
958010	958011	1.03	1.50	9.00	30.00
958013	958015	1.04	1.50	9.00	30.00

Carbide drills - End mills

Carbide twist drills type 1134 R Z2

continuation ...



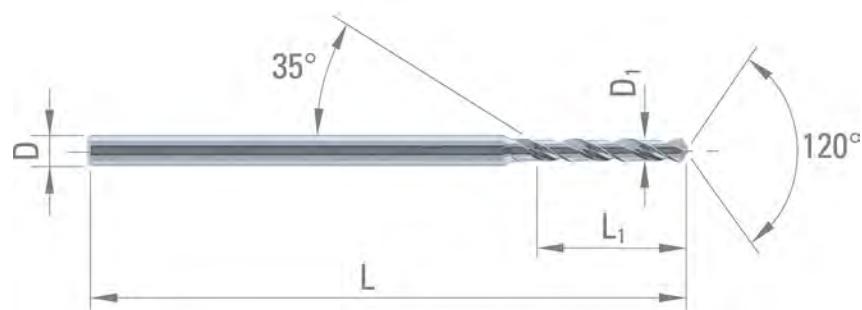
5 Cutting tools

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
39033	55757	1.05	1.50	9.00	30.00
958017	958018	1.06	1.50	9.00	30.00
58335	957879	1.07	1.50	9.00	30.00
57722	957884	1.08	1.50	9.00	30.00
958020	958021	1.09	1.50	9.00	30.00
39034	55759	1.10	1.50	9.00	30.00
45752	957887	1.11	1.50	9.00	30.00
62921	954726	1.12	1.50	9.00	30.00
957889	954727	1.13	1.50	9.00	30.00
958023	958024	1.14	1.50	9.00	30.00
39035	55761	1.15	1.50	9.00	30.00
50299	957893	1.16	1.50	10.00	30.00
52449	957895	1.17	1.50	10.00	30.00
58333	957897	1.18	1.50	10.00	30.00
958026	958027	1.19	1.50	10.00	30.00
39036	55762	1.20	1.50	10.00	30.00
50233	957899	1.21	1.50	10.00	30.00
59610	957901	1.22	1.50	10.00	30.00
46797	957902	1.23	1.50	10.00	30.00
958029	958030	1.24	1.50	10.00	30.00
39037	55764	1.25	1.50	10.00	30.00
65858	50057	1.26	1.50	10.00	30.00
50558	957912	1.27	1.50	10.00	30.00
958032	958033	1.28	1.50	10.00	30.00
958035	958037	1.29	1.50	10.00	30.00
187	55766	1.30	1.50	10.00	30.00
958199	958200	1.31	1.50	11.20	30.00
50068	957914	1.32	1.50	11.20	30.00
44387	957916	1.33	1.50	11.20	30.00
53518	958203	1.34	1.50	11.20	30.00
39038	55768	1.35	1.50	11.20	30.00
58147	957921	1.36	1.50	11.20	30.00
958205	958206	1.37	1.50	11.20	30.00
958208	958209	1.38	1.50	11.20	30.00
958211	958212	1.39	1.50	11.20	30.00
188	55777	1.40	1.50	11.20	30.00
39039	55779	1.45	1.50	11.20	30.00
39040	55780	1.50	2.00	11.20	38.00
52209	55782	1.55	2.00	12.00	38.00
52210	55786	1.60	2.00	12.00	38.00
52211	54986	1.65	2.00	12.00	38.00
191	55789	1.70	2.00	12.00	38.00
52212	55791	1.75	2.00	12.00	38.00

Carbide drills - End mills

Carbide twist drills type 1134 R Z2

continuation ...

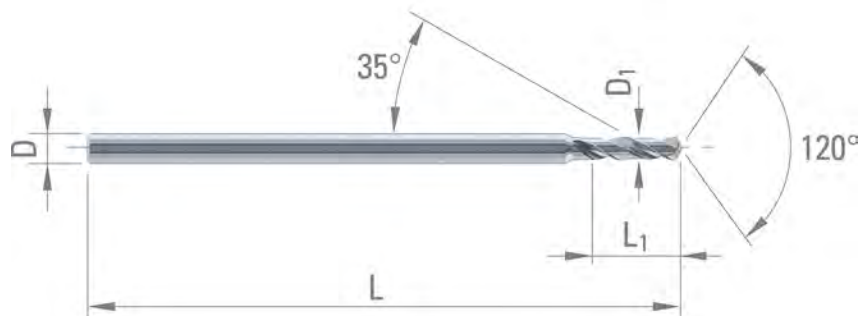


Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
49082	55793	1.80	2.00	12.00	38.00
52213	55795	1.85	2.00	12.00	38.00
193	55797	1.90	2.00	12.00	38.00
52214	55799	1.95	2.00	12.00	38.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1135 R Z2



Reinforced shank

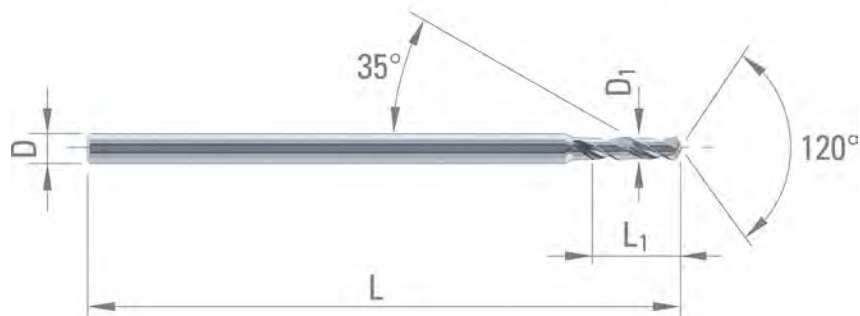
- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
950342	950234	0.20	1.50	1.50	30.00
950235	950248	0.21	1.50	1.50	30.00
950236	950249	0.22	1.50	1.50	30.00
950240	950250	0.23	1.50	1.50	30.00
950241	950251	0.24	1.50	1.50	30.00
950253	950278	0.25	1.50	2.00	30.00
950254	950279	0.26	1.50	2.00	30.00
950255	950280	0.27	1.50	2.00	30.00
950256	950281	0.28	1.50	2.00	30.00
950084	950282	0.29	1.50	2.00	30.00
950276	950283	0.30	1.50	2.00	30.00
950284	950299	0.31	1.50	2.50	30.00
950285	950301	0.32	1.50	2.50	30.00
950286	950302	0.33	1.50	2.50	30.00
950287	950303	0.34	1.50	2.50	30.00
950288	950304	0.35	1.50	2.50	30.00
950085	950305	0.36	1.50	2.50	30.00
950289	950306	0.37	1.50	2.50	30.00
950290	950307	0.38	1.50	2.50	30.00
950308	950330	0.39	1.50	3.00	30.00
950309	950331	0.40	1.50	3.00	30.00
950310	950332	0.41	1.50	3.00	30.00
950311	950333	0.42	1.50	3.00	30.00
950312	950334	0.43	1.50	3.00	30.00
950313	950335	0.44	1.50	3.00	30.00
950314	950336	0.45	1.50	3.00	30.00
950315	950337	0.46	1.50	3.00	30.00
950316	950338	0.47	1.50	3.00	30.00
950317	950339	0.48	1.50	3.00	30.00
950318	950340	0.49	1.50	3.00	30.00
60922	61017	0.50	1.50	4.00	30.00

Carbide drills - End mills

Carbide twist drills type 1135 R Z2

continuation ...



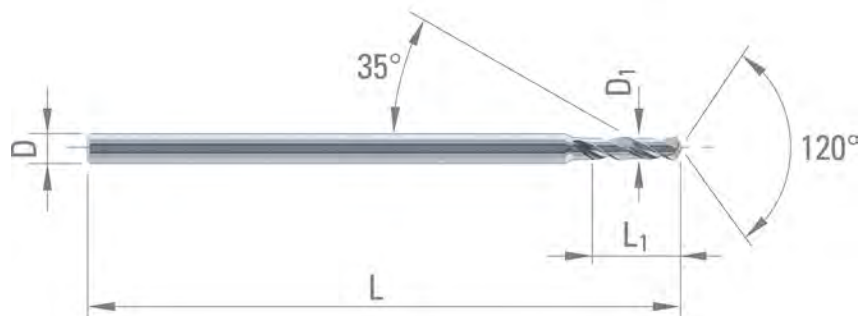
Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
60923	61018	0.51	1.50	4.00	30.00
60924	61020	0.52	1.50	4.00	30.00
60925	61021	0.53	1.50	4.00	30.00
60926	61022	0.54	1.50	4.00	30.00
60927	61023	0.55	1.50	4.00	30.00
60928	61024	0.56	1.50	4.00	30.00
60929	61025	0.57	1.50	4.00	30.00
60930	61026	0.58	1.50	4.00	30.00
60931	61027	0.59	1.50	4.00	30.00
60932	61028	0.60	1.50	4.50	30.00
60933	61029	0.61	1.50	4.50	30.00
60934	61030	0.62	1.50	4.50	30.00
60935	61031	0.63	1.50	4.50	30.00
60936	61032	0.64	1.50	4.50	30.00
60937	61033	0.65	1.50	4.50	30.00
60938	61034	0.66	1.50	4.50	30.00
60939	61035	0.67	1.50	4.50	30.00
56623	61036	0.68	1.50	4.50	30.00
60940	61037	0.69	1.50	4.50	30.00
56364	57571	0.70	1.50	4.50	30.00
56365	57573	0.71	1.50	4.50	30.00
56366	57575	0.72	1.50	4.50	30.00
56367	57577	0.73	1.50	4.50	30.00
56368	57587	0.74	1.50	4.50	30.00
56369	57589	0.75	1.50	4.50	30.00
56370	57579	0.76	1.50	4.50	30.00
56371	57581	0.77	1.50	4.50	30.00
56372	57583	0.78	1.50	4.50	30.00
56373	57585	0.79	1.50	4.50	30.00
52140	55801	0.80	1.50	5.00	30.00
52141	55803	0.81	1.50	5.00	30.00
52142	55805	0.82	1.50	5.00	30.00
52143	55807	0.83	1.50	5.00	30.00
52144	55809	0.84	1.50	5.00	30.00
52145	55811	0.85	1.50	5.00	30.00
52146	55813	0.86	1.50	5.00	30.00
52147	55815	0.87	1.50	5.00	30.00
52148	55817	0.88	1.50	5.00	30.00
52149	55819	0.89	1.50	5.00	30.00
52150	55821	0.90	1.50	5.00	30.00
52151	55823	0.91	1.50	5.00	30.00
52152	55825	0.92	1.50	5.00	30.00
52153	55827	0.93	1.50	5.00	30.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1135 R Z2

continuation ...



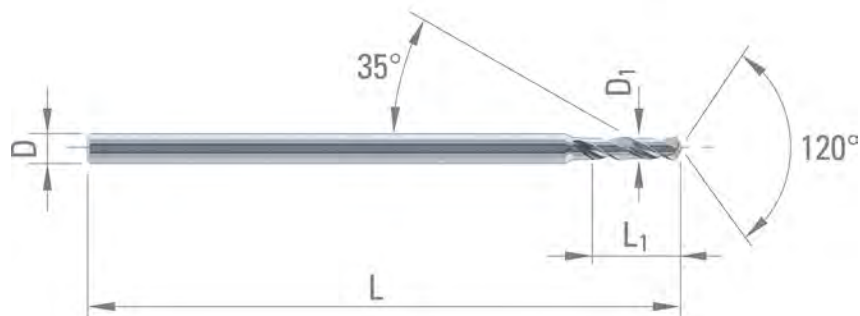
5 Cutting tools

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
52154	55829	0.94	1.50	5.00	30.00
52155	55831	0.95	1.50	5.00	30.00
52156	55833	0.96	1.50	5.00	30.00
52157	55835	0.97	1.50	5.00	30.00
52158	55837	0.98	1.50	5.00	30.00
52159	55839	0.99	1.50	5.00	30.00
52160	55841	1.00	1.50	5.00	30.00
52161	55842	1.01	1.50	5.00	30.00
52162	55844	1.02	1.50	5.00	30.00
52163	55848	1.03	1.50	5.00	30.00
52164	55850	1.04	1.50	5.00	30.00
52165	55852	1.05	1.50	5.00	30.00
52166	55854	1.06	1.50	5.00	30.00
52167	55856	1.07	1.50	5.00	30.00
52168	55858	1.08	1.50	5.00	30.00
52169	55860	1.09	1.50	5.00	30.00
52170	55861	1.10	1.50	5.00	30.00
52171	55863	1.11	1.50	5.00	30.00
52172	55865	1.12	1.50	5.00	30.00
52173	55871	1.13	1.50	5.00	30.00
52174	55872	1.14	1.50	5.00	30.00
52175	55873	1.15	1.50	5.00	30.00
52176	55875	1.16	1.50	5.00	30.00
52177	55877	1.17	1.50	5.00	30.00
52178	55878	1.18	1.50	5.00	30.00
52179	55893	1.19	1.50	5.00	30.00
52180	55880	1.20	1.50	6.00	30.00
52181	55882	1.21	1.50	6.00	30.00
52182	55884	1.22	1.50	6.00	30.00
52183	55886	1.23	1.50	6.00	30.00
52184	55896	1.24	1.50	6.00	30.00
52185	55898	1.25	1.50	6.00	30.00
52186	55900	1.26	1.50	6.00	30.00
52187	55902	1.27	1.50	6.00	30.00
52188	55904	1.28	1.50	6.00	30.00
52189	55906	1.29	1.50	6.00	30.00
52190	55908	1.30	1.50	6.00	30.00
52191	55910	1.31	1.50	6.00	30.00
52192	55912	1.32	1.50	6.00	30.00
52193	55914	1.33	1.50	6.00	30.00
52194	55916	1.34	1.50	6.00	30.00
52195	55918	1.35	1.50	6.00	30.00
52196	55920	1.36	1.50	6.00	30.00

Carbide drills - End mills

Carbide twist drills type 1135 R Z2

continuation ...



DIXI
polytool

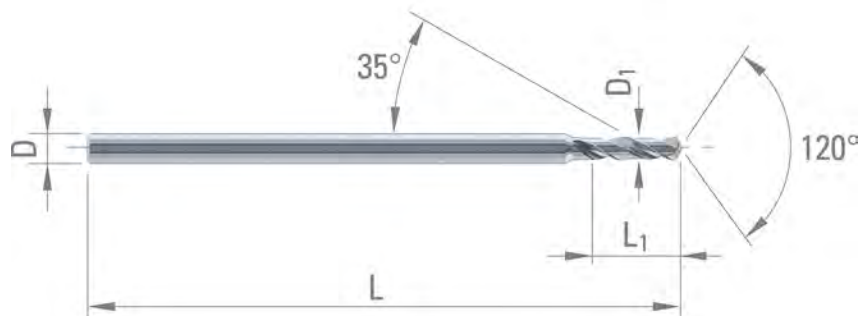
Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
52197	55922	1.37	1.50	6.00	30.00
52198	55924	1.38	1.50	6.00	30.00
52199	55926	1.39	1.50	6.00	30.00
52200	55929	1.40	1.50	6.00	30.00
52201	55932	1.41	1.50	6.00	30.00
52202	55934	1.42	1.50	6.00	30.00
52203	55936	1.43	1.50	6.00	30.00
52204	55938	1.44	1.50	6.00	30.00
52205	55940	1.45	1.50	6.00	30.00
52206	55942	1.46	1.50	6.00	30.00
52207	55944	1.47	1.50	6.00	30.00
52208	55946	1.48	1.50	6.00	30.00
52216	55948	1.49	1.50	6.00	30.00
56431	57591	1.50	2.00	7.00	38.00
56374	57593	1.51	2.00	7.00	38.00
56375	57595	1.52	2.00	7.00	38.00
56376	57597	1.53	2.00	7.00	38.00
56377	57599	1.54	2.00	7.00	38.00
56378	57601	1.55	2.00	7.00	38.00
56379	57603	1.56	2.00	7.00	38.00
56380	57605	1.57	2.00	7.00	38.00
56381	57607	1.58	2.00	7.00	38.00
56382	57609	1.59	2.00	7.00	38.00
56383	57611	1.60	2.00	7.00	38.00
56384	57613	1.61	2.00	7.00	38.00
56385	57615	1.62	2.00	7.00	38.00
56386	57617	1.63	2.00	7.00	38.00
56387	57619	1.64	2.00	7.00	38.00
56388	57621	1.65	2.00	7.00	38.00
56389	57623	1.66	2.00	7.00	38.00
56390	57625	1.67	2.00	7.00	38.00
56391	57627	1.68	2.00	7.00	38.00
56392	57629	1.69	2.00	7.00	38.00
56393	57631	1.70	2.00	7.00	38.00
56394	57633	1.71	2.00	7.00	38.00
56395	57635	1.72	2.00	7.00	38.00
56396	57637	1.73	2.00	7.00	38.00
56397	57639	1.74	2.00	7.00	38.00
56398	57641	1.75	2.00	7.00	38.00
56399	57643	1.76	2.00	8.00	38.00
56400	57645	1.77	2.00	8.00	38.00
56401	57647	1.78	2.00	8.00	38.00
56402	57649	1.79	2.00	8.00	38.00

5 Cutting tools

Carbide drills - End mills

Carbide twist drills type 1135 R Z2

continuation ...



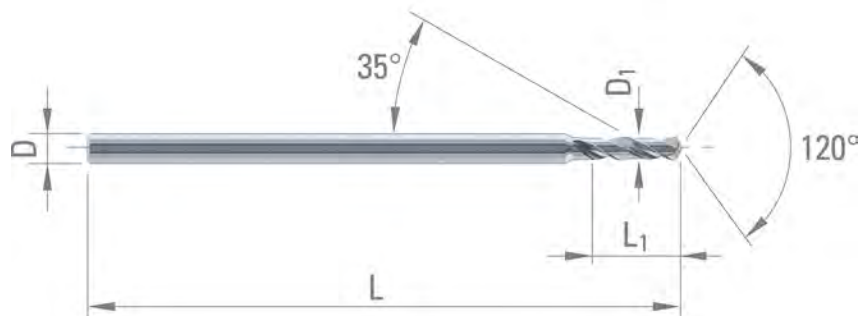
5 Cutting tools

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
56403	57651	1.80	2.00	8.00	38.00
56404	57653	1.81	2.00	8.00	38.00
56405	57655	1.82	2.00	8.00	38.00
56406	57657	1.83	2.00	8.00	38.00
56407	57659	1.84	2.00	8.00	38.00
56408	57661	1.85	2.00	8.00	38.00
56409	57663	1.86	2.00	8.00	38.00
56410	57665	1.87	2.00	8.00	38.00
56411	57667	1.88	2.00	8.00	38.00
56412	57669	1.89	2.00	8.00	38.00
56413	57671	1.90	2.00	8.00	38.00
56414	57673	1.91	2.00	8.00	38.00
56415	57675	1.92	2.00	8.00	38.00
56416	57677	1.93	2.00	8.00	38.00
56417	57679	1.94	2.00	8.00	38.00
56418	57681	1.95	2.00	8.00	38.00
56419	57683	1.96	2.00	8.00	38.00
56420	57685	1.97	2.00	8.00	38.00
56421	57687	1.98	2.00	8.00	38.00
56422	57689	1.99	2.00	8.00	38.00
951030	951165	2.00	2.50	9.00	43.00
951034	951166	2.01	2.50	9.00	43.00
951035	951167	2.02	2.50	9.00	43.00
951036	951168	2.03	2.50	9.00	43.00
951039	951169	2.04	2.50	9.00	43.00
59122	951170	2.05	2.50	9.00	43.00
951040	951171	2.06	2.50	9.00	43.00
951041	951172	2.07	2.50	9.00	43.00
951042	951173	2.08	2.50	9.00	43.00
951043	951214	2.09	2.50	9.00	43.00
951058	951215	2.10	2.50	9.00	43.00
951059	951216	2.11	2.50	9.00	43.00
951060	951217	2.12	2.50	9.00	43.00
951061	951218	2.13	2.50	9.00	43.00
951062	951219	2.14	2.50	9.00	43.00
951063	951220	2.15	2.50	9.00	43.00
951064	951621	2.16	2.50	9.00	43.00
951065	951622	2.17	2.50	9.00	43.00
951066	951624	2.18	2.50	9.00	43.00
951067	951625	2.19	2.50	9.00	43.00
951068	951626	2.20	2.50	9.00	43.00
951069	951627	2.21	2.50	9.00	43.00
951070	951628	2.22	2.50	9.00	43.00

Carbide drills - End mills

Carbide twist drills type 1135 R Z2

continuation ...



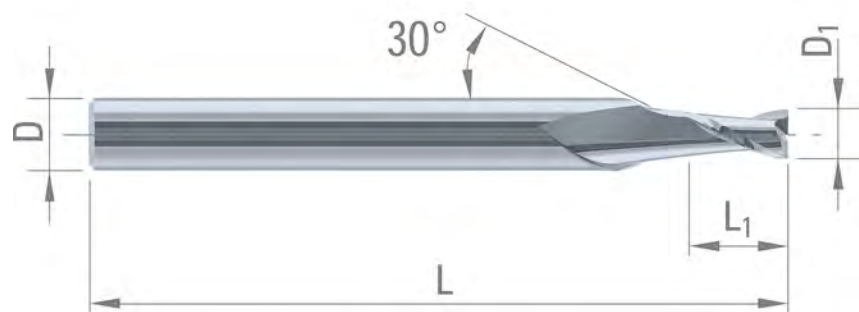
DIXI
polytool

Carbide item No	DICUT Item No	D1 0/-0.004	D h5	L1	L
951071	951629	2.23	2.50	9.00	43.00
951072	951630	2.24	2.50	9.00	43.00
951073	951631	2.25	2.50	9.00	43.00
951074	951632	2.26	2.50	9.00	43.00
951075	951633	2.27	2.50	9.00	43.00
951076	951634	2.28	2.50	9.00	43.00
951077	951636	2.29	2.50	9.00	43.00
951078	951637	2.30	2.50	9.00	43.00
951079	951638	2.31	2.50	9.00	43.00
951080	951639	2.32	2.50	9.00	43.00
951081	951640	2.33	2.50	9.00	43.00
951082	951641	2.34	2.50	9.00	43.00
951083	951642	2.35	2.50	9.00	43.00
951084	951643	2.36	2.50	9.00	43.00
951085	951644	2.37	2.50	9.00	43.00
951086	951645	2.38	2.50	9.00	43.00
951087	951646	2.39	2.50	9.00	43.00
951089	951647	2.40	2.50	9.00	43.00
951090	951648	2.41	2.50	9.00	43.00
951091	951649	2.42	2.50	9.00	43.00
951092	951650	2.43	2.50	9.00	43.00
951093	951651	2.44	2.50	9.00	43.00
951094	951652	2.45	2.50	9.00	43.00
951095	951653	2.46	2.50	9.00	43.00
951096	951654	2.47	2.50	9.00	43.00
951097	951655	2.48	2.50	9.00	43.00
951098	951656	2.49	2.50	9.00	43.00

5 Cutting tools

Carbide drills - End mills

Carbide end mill type 7242 Z2



5 Cutting tools

Reinforced shank

- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Plastic

Coating available : TiALN

- Ø < 2.00 [0/-0.01]
- Ø < 3.00 [0/-0.02]
- Ø > 3.00 (e8)

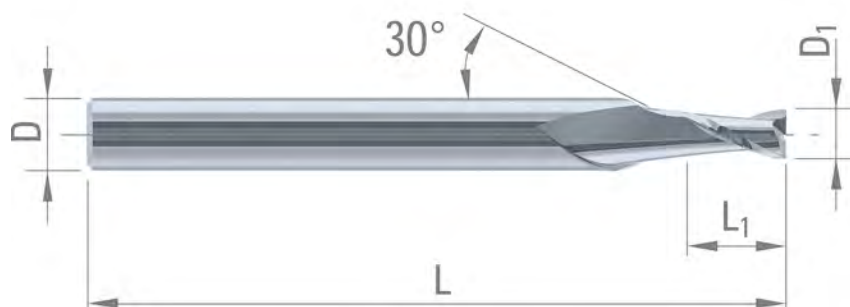
Carbide item No	TiALN item No	D1 h6	D h5	L1	L
52628	64920	0.15	3.00	0.30	38.00
45705	60021	0.20	3.00	0.40	38.00
47916	64921	0.25	3.00	0.60	38.00
42172	60121	0.30	3.00	0.60	38.00
48850	60122	0.30>	3.00	1.00	38.00
47917	950699	0.35	3.00	0.80	38.00
42126	60123	0.40	3.00	0.80	38.00
48851	60124	0.40>	3.00	2.00	38.00
47918	952421	0.45	3.00	1.00	38.00
35241	36230	0.50	3.00	1.00	38.00
48852	60125	0.50>	3.00	2.50	38.00
47921	952422	0.55	3.00	1.20	38.00
35242	36231	0.60	3.00	1.20	38.00
48853	60126	0.60>	3.00	3.00	38.00
47922	952423	0.65	3.00	1.40	38.00
35243	36232	0.70	3.00	1.40	38.00
48854	57162	0.70>	3.00	3.50	38.00
47923	57163	0.75	3.00	1.60	38.00
35244	36233	0.80	3.00	1.60	38.00
48855	57164	0.80>	3.00	4.00	38.00
47066	57165	0.85	3.00	1.80	38.00
35245	36234	0.90	3.00	1.80	38.00
48856	57166	0.90>	3.00	4.50	38.00
42846	57167	0.95	3.00	2.00	38.00
35246	36235	1.00	3.00	2.00	38.00
42735	55950	1.00>	3.00	5.00	38.00
47924	57168	1.05	3.00	2.20	38.00
35247	57169	1.10	3.00	2.20	38.00
47925	57170	1.15	3.00	2.40	38.00
35248	36237	1.20	3.00	2.40	38.00
48857	57171	1.20>	3.00	6.00	38.00



Carbide drills - End mills

Carbide end mill type 7242 Z2

continuation ...

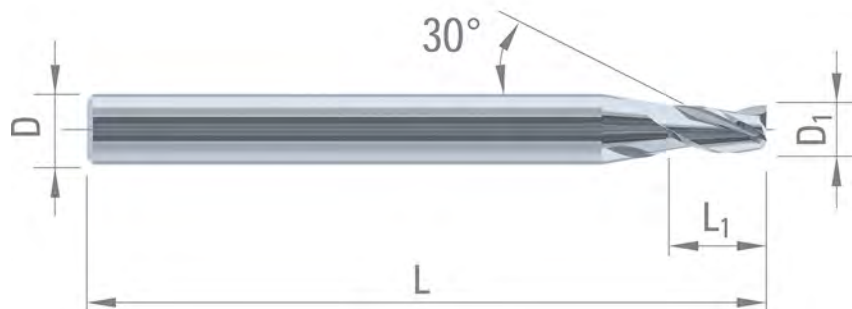


Carbide item No	TiALN item No	D1 h6	D h5	L1	L
47926	57172	1.25	3.00	2.60	38.00
35249	57173	1.30	3.00	2.60	38.00
47927	57174	1.35	3.00	2.80	38.00
35250	36239	1.40	3.00	2.80	38.00
47928	57175	1.45	3.00	3.00	38.00
38489	36240	1.50	3.00	3.00	38.00
48858	57176	1.50	3.00	7.00	38.00
38490	57177	1.60	3.00	3.20	38.00
38491	44939	1.70	3.00	3.40	38.00
42096	38613	1.80	3.00	3.60	38.00
38493	57178	1.90	3.00	4.00	38.00
42784	39577	2.00	3.00	6.00	38.00
44058	64794	2.10	3.00	7.00	38.00
43956	64795	2.20	3.00	7.00	38.00
44877	60627	2.30	3.00	7.00	38.00
43527	64796	2.40	3.00	7.00	38.00
42201	36242	2.50	3.00	7.00	38.00
41806	46440	3.00	6.00	7.00	57.00
43353	57179	3.50	6.00	7.00	57.00
41856	57180	4.00	6.00	8.00	57.00
42202	57181	4.50	6.00	8.00	57.00
41996	36247	5.00	6.00	10.00	57.00
41807	57182	5.50	6.00	10.00	57.00
41907	57183	6.00	6.00	10.00	57.00
28932	57184	6.50	8.00	13.00	63.00
28933	57185	7.00	8.00	13.00	63.00
28934	57186	7.50	8.00	16.00	63.00
42271	57187	8.00	8.00	16.00	63.00
28936	57195	8.50	10.00	16.00	72.00
28937	57196	9.00	10.00	16.00	72.00
43038	57197	9.50	10.00	19.00	72.00
42352	57198	10.00	10.00	19.00	72.00
39944	57199	12.00	12.00	22.00	83.00
42353	57200	14.00	14.00	22.00	83.00
42354	57201	16.00	16.00	26.00	92.00
42355	57202	18.00	18.00	26.00	92.00
42356	57203	20.00	20.00	32.00	104.00

5 Cutting tools

Carbide drills - End mills

Carbide end mill type 7243 Z3



Reinforced shank

- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al
- Plastic

Coating available : TiAlN

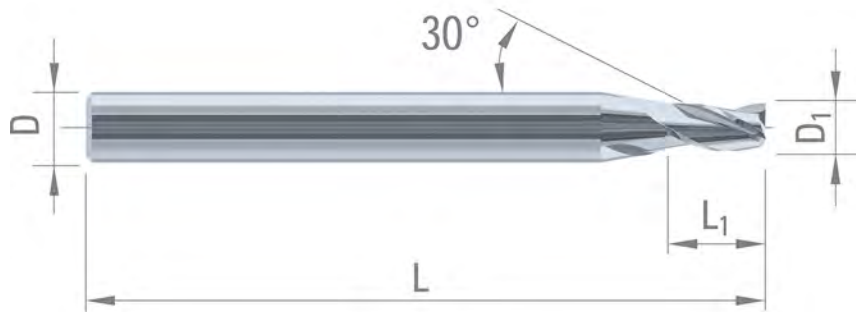
- $\varnothing < 2.00$ [0/-0.01]
- $\varnothing < 3.00$ [0/-0.02]
- $\varnothing > 3.00$ (e8)

Carbide item No	TiAlN item No	D1 h6	D h5	L1	L
956955	956956	0.35	3.00	1.00	38.00
956957	956958	0.40	3.00	1.20	38.00
48089	60914	0.50	3.00	1.50	38.00
61842	61841	0.60	3.00	1.80	38.00
61843	61844	0.70	3.00	2.10	38.00
48090	57205	0.75	3.00	2.40	38.00
66799	61845	0.80	3.00	2.40	38.00
60383	952308	0.90	3.00	2.70	38.00
48091	57206	1.00	3.00	3.00	38.00
59356	950790	1.10	3.00	3.30	38.00
39932	61352	1.20	3.00	3.60	38.00
48092	57207	1.25	3.00	3.90	38.00
49835	950044	1.30	3.00	3.90	38.00
60201	952191	1.40	3.00	4.20	38.00
48093	57208	1.50	3.00	4.50	38.00
64985	950045	1.60	3.00	4.80	38.00
57785	67283	1.70	3.00	5.10	38.00
48094	57209	1.75	3.00	5.40	38.00
50297	66988	1.80	3.00	5.40	38.00
66798	952309	1.90	3.00	5.70	38.00
42203	40868	2.00	3.00	6.00	38.00
45168	64847	2.10	3.00	7.00	38.00
57873	67276	2.20	3.00	7.00	38.00
40848	67277	2.30	3.00	7.00	38.00
42329	64809	2.40	3.00	7.00	38.00
41909	42105	2.50	3.00	7.00	38.00
41855	42106	3.00	6.00	7.00	57.00
41928	57210	3.50	6.00	7.00	57.00
41880	42341	4.00	6.00	8.00	57.00
41808	57211	4.50	6.00	8.00	57.00
41858	42107	5.00	6.00	10.00	57.00

Carbide drills - End mills

Carbide end mill type 7243 Z3

continuation ...



Carbide item No	TiALN item No	D1 h6	D h5	L1	L
41910	57690	5.50	6.00	10.00	57.00
41908	35589	6.00	6.00	10.00	57.00
43409	57214	6.00	8.00	12.00	63.00
28948	57691	6.50	8.00	13.00	63.00
42562	57217	7.00	8.00	13.00	63.00
43920	57218	7.50	8.00	16.00	63.00
28951	57692	8.00	8.00	16.00	63.00
41809	36267	8.00	10.00	15.00	63.00
43215	57220	8.50	10.00	16.00	72.00
28953	57221	9.00	10.00	16.00	72.00
28954	57222	9.50	10.00	19.00	72.00
42357	57223	10.00	10.00	19.00	72.00
39945	57224	12.00	12.00	22.00	83.00
27781	57225	14.00	14.00	22.00	83.00
42358	57226	16.00	16.00	26.00	92.00
42359	57227	18.00	18.00	26.00	92.00
42360	57228	20.00	20.00	32.00	104.00

5 Cutting tools

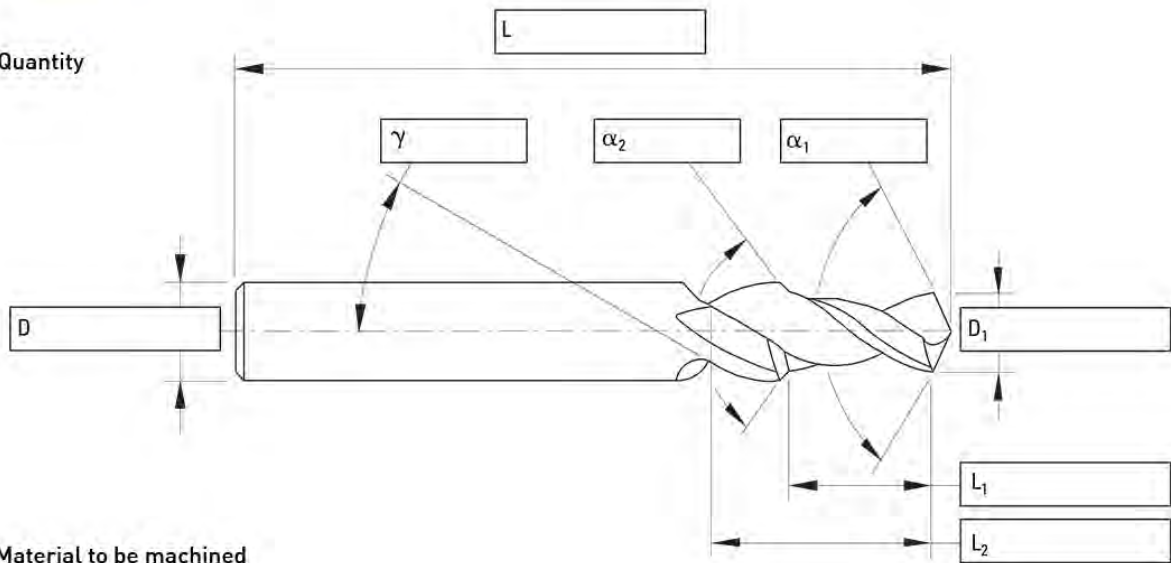
Carbide drills - End mills

Drawings for custom made tools

1501 R ☐ L ☐

Z =

Quantity

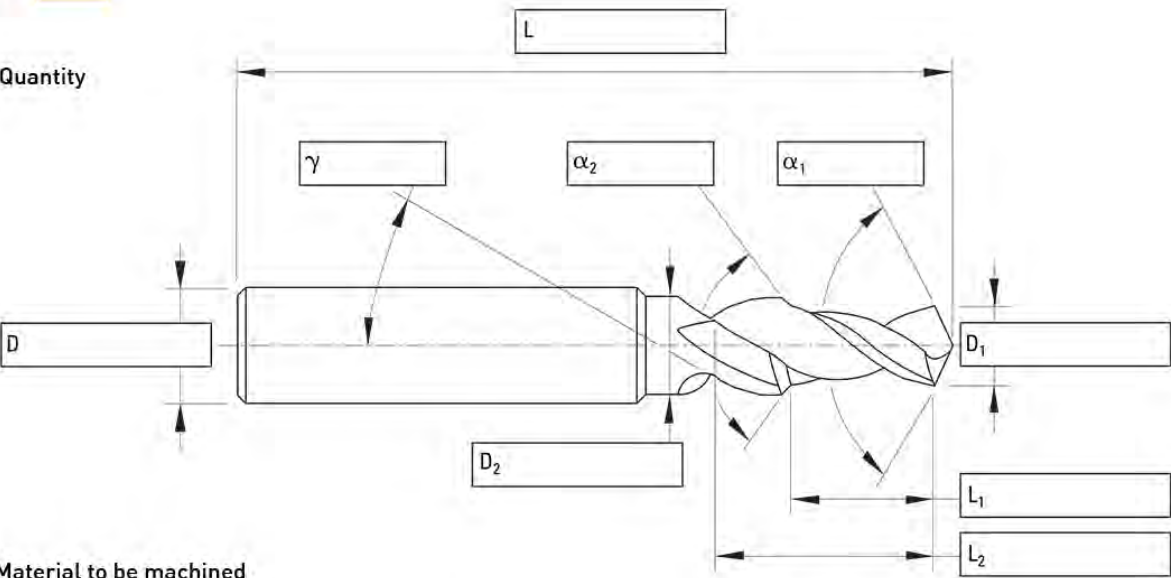


Material to be machined

1502 R ☐ L ☐

Z =

Quantity



Material to be machined

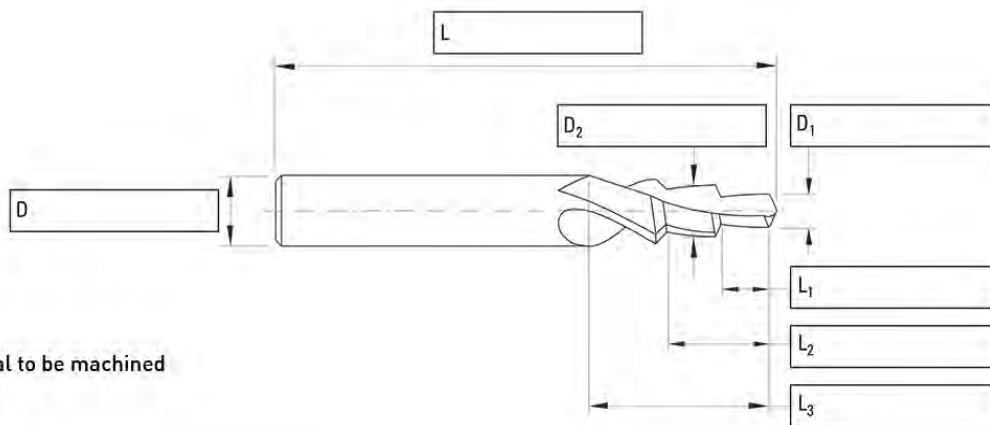
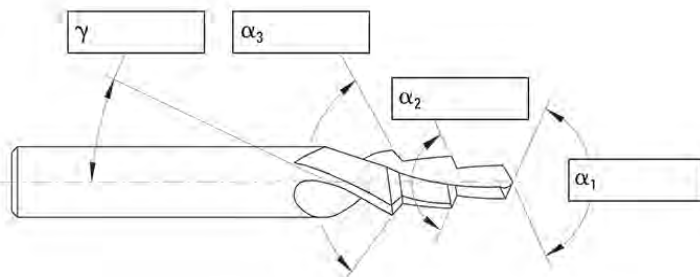
Carbide drills - End mills

Drawings for custom made tools

1503 R ☐ L ☐

Z =

Quantity

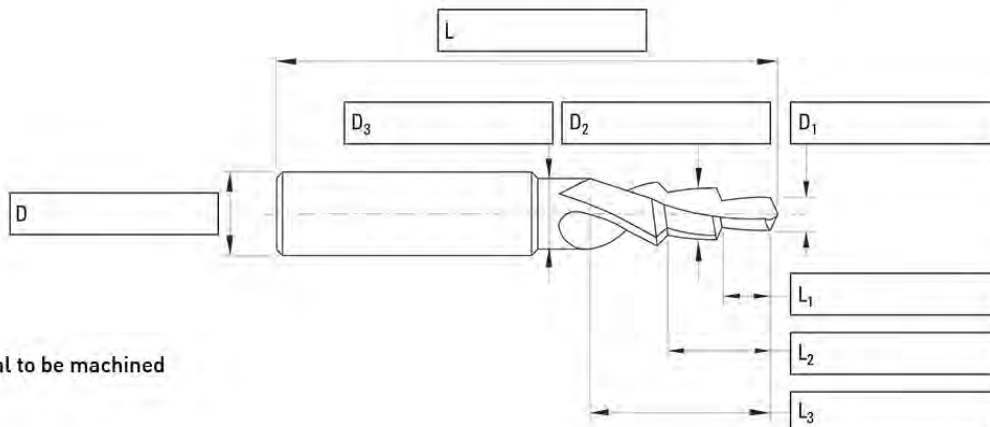
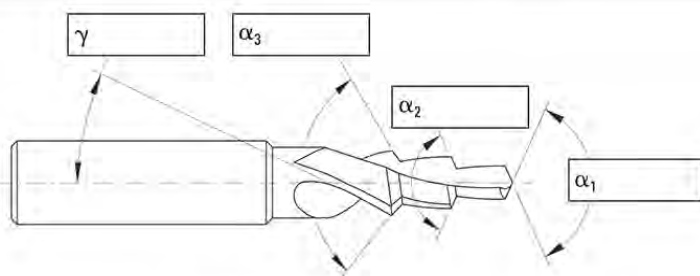


Material to be machined

1504 R ☐ L ☐

Z =

Quantity



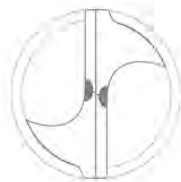
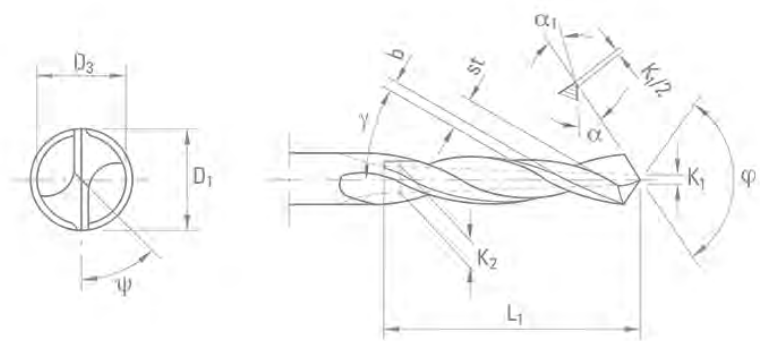
Material to be machined

Carbide drills - End mills

Drill geometry

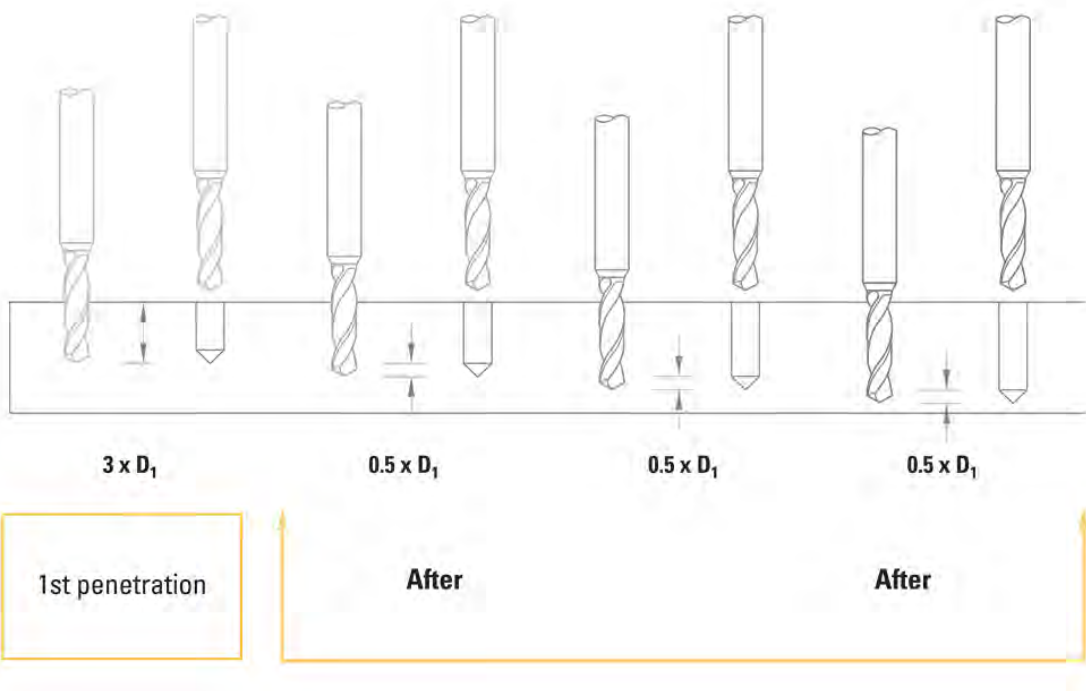
DRILL GEOMETRY

The geometrical nomenclature of our twist drills for general use is illustrated alongside. Straight or reinforced shanks are available.



WEB THINNING

SOLUTION FOR DIFFICULT DRILLING



Taps

Summary of taps types

Materials :	Aluminium	Steel <900N/mm2	SST	Steel >900N/mm2	Cast iron
Rings colours :					
type of taps :	Ultra	Ultra Vap	Inox	Jet	GG (on demand)



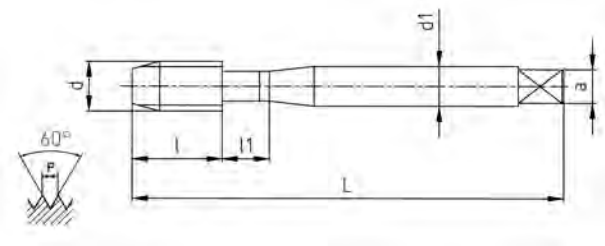
1 ring= single piece (manual)

2 rings = CNC



Taps

Taps 105/4 Ultra HSS-E - ALU



For through hole

Tolerance ISO 2 (6H)



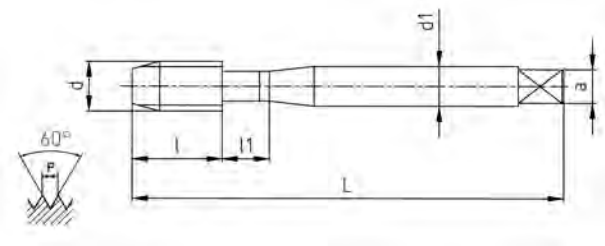
TDC manigley

5 Cutting tools

Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
51994	M1.0	0.25	0.75	40.00		5.50	2.50	2.10
51995	M1.2	0.25	0.95	40.00		5.50	2.50	2.10
51996	M1.4	0.30	1.10	40.00		7.00	2.50	2.10
51997	M1.6	0.35	1.25	40.00		8.00	2.50	2.10
51998	M1.8	0.35	1.45	40.00		8.00	2.50	2.10
78727	M2.0	0.40	1.60	45.00		8.00	2.80	2.10
78735	M2.5	0.45	2.05	50.00		9.00	2.80	2.10
78743	M3.0	0.50	2.50	56.00	7.00	11.00	3.50	2.70
78751	M4.0	0.70	3.30	63.00	8.00	13.00	4.50	3.40
78778	M5.0	0.80	4.20	70.00	9.00	16.00	6.00	4.90
78786	M6.0	1.00	5.00	80.00	11.00	19.00	6.00	4.90
78700	M7.0	1.00	6.00	80.00	11.00	19.00	7.00	5.50
78794	M8.0	1.25	6.80	90.00	13.00	22.00	8.00	6.20
78808	M10	1.50	8.50	100.00	15.00	24.00	10.00	8.00
DIN 376								
78816	M3.0	0.50	2.50	56.00	7.00	11.00	2.20	1.80
78824	M4.0	0.70	2.10	63.00	8.00	13.00	2.80	2.10
78832	M5.0	0.80	4.20	70.00	9.00	16.00	3.50	2.70
78840	M6.0	1.00	5.00	80.00	11.00	19.00	4.50	3.40
78859	M8.0	1.25	6.80	90.00	13.00	22.00	6.00	4.90
78867	M10.0	1.50	8.50	100.00	15.00	24.00	7.00	5.50
78875	M12.0	1.75	10.2	110.00		29.00	9.00	7.00

Taps

Taps 131/3 Ultra HSS-E - ALU



For blind hole

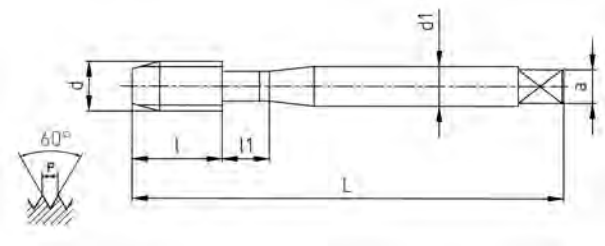
Tolerance ISO 2 (6H)



Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
78948	M2.0	0.40	1.60	45.00		8.00	2.80	
32794	M2.5	0.45	2.05	50.00		9.00	2.80	
79189	M3.0	0.50	2.50	56.00	11.00	6.00	3.50	2.20
79197	M4.0	0.70	3.30	63.00	13.00	7.50	4.50	2.80
79200	M5.0	0.80	4.20	70.00	16.00	9.00	6.00	3.50
79219	M6.0	1.00	5.00	80.00	18.00	11.00	6.00	4.50
71587	M7.0	1.00	6.00	80.00			7.00	
79227	M8.0	1.25	6.80	90.00	21.00	13.00	8.00	4.90
79235	M10.0	1.50	8.50	100.00	22.00	16.00	10.00	5.50
DIN 376								
44202	M4.0	0.70	3.30	63.00	13.00	7.50	4.50	2.10
79316	M5.0	0.80	4.20	70.00	16.00	9.00	6.00	2.70
79324	M6.0	1.00	5.00	80.00	18.00	11.00	6.00	3.40
79332	M8.0	1.00	6.80	90.00	21.00	13.00	8.00	4.90
79340	M10.0	1.25	8.50	100.00	22.00	16.00	10.00	5.50
79359	M12.0	1.50	10.20	110.00		18.00		7.00

Taps

Taps 105/4 Ultra Vap HSS-E PM - STEEL



For through hole

Tolerance ISO 2 (6H)

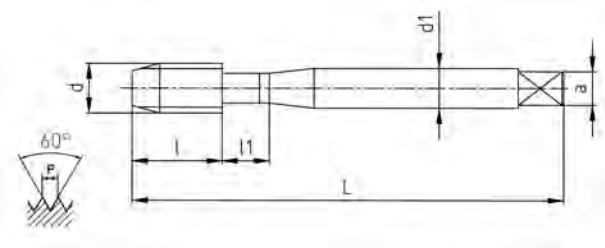


5 Cutting tools

Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
10552	M1.0	0.25	0.75	40.00		5.50	2.50	2.10
10555	M1.2	0.25	0.95	40.00		5.50	2.50	2.10
10557	M1.4	0.30	1.10	40.00		7.00	2.50	2.10
10559	M1.6	0.35	1.25	40.00		8.00	2.50	2.10
10562	M1.8	0.35	1.45	40.00		8.00	2.50	2.10
11600	M2.0	0.40	1.60	45.00		8.00	2.80	2.10
11601	M2.5	0.45	2.05	50.00		9.00	2.80	2.10
11602	M3.0	0.50	2.50	56.00	7.00	11.00	3.50	2.70
11603	M4.0	0.70	3.30	63.00	8.00	13.00	4.50	3.40
11604	M5.0	0.80	4.20	70.00	9.00	16.00	6.00	4.90
11605	M6.0	1.00	5.00	80.00	11.00	19.00	6.00	4.90
76872	M7.0	1.00	6.00	80.00	11.00	19.00	7.00	5.50
11607	M8.0	1.25	6.80	90.00	13.00	22.00	8.00	6.20
11608	M10.0	1.50	8.50	100.00	15.00	24.00	10.00	8.00
DIN 376								
10563	M3.0	0.50	2.50	56.00	7.00	11.00	3.50	2.70
11609	M4.0	0.70	3.30	63.00	8.00	13.00	4.50	3.40
11610	M5.0	0.80	4.20	70.00	9.00	16.00	6.00	4.90
11611	M6.0	1.00	5.00	80.00	11.00	19.00	6.00	4.90
11612	M7.0	1.00	6.00	80.00	11.00	19.00	7.00	5.50
11613	M8.0	1.25	6.80	90.00	13.00	22.00	8.00	6.20
11615	M10.0	1.50	8.50	100.00	15.00	24.00	10.00	8.00

Taps

Taps 131/3 Ultra Vap HSS-E PM - STEEL



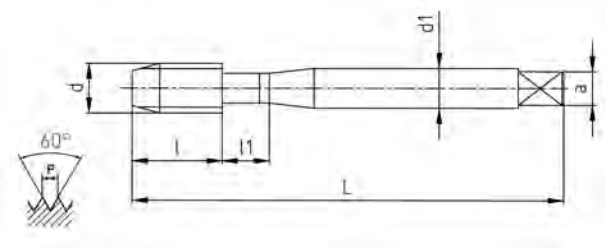
For blind hole
Tolerance ISO 2 (6H)



Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
11625	M2.0	0.40	1.60	45.00		8.00		
11626	M2.5	0.45	2.05	50.00		9.00		
11627	M3.0	0.50	2.50	56.00	11.00	6.00	3.50	1.80
11628	M4.0	0.70	3.30	63.00	13.00	7.50	4.50	2.10
11629	M5.0	0.80	4.20	70.00	16.00	9.00	6.00	2.70
11631	M6.0	1.00	5.00	80.00	18.00	11.00	6.00	3.40
11223	M7.0	1.00	1.00	63.00		7.50	7.00	
11632	M8.0	1.25	1.25	90.00	21.00	13.00	8.00	4.90
11633	M10.0	1.50	1.50	100.00	22.00	16.00	10.00	5.50
DIN 376								
11274	M4.0	0.70	3.30	63.00	13.00	7.50	4.50	2.10
11634	M5.0	0.80	4.20	70.00	16.00	9.00	6.00	2.70
11635	M6.0	1.00	5.00	80.00	18.00	11.00	6.00	3.40
11636	M8.0	1.25	6.80	90.00	21.00	13.00	6.00	4.90
11637	M10	1.50	8.50	100.00	22.00	16.00	7.00	5.50
11638	M12	1.75	10.20	110.00		29.00	9.00	7.00

Taps

Taps 105/4 Ultra Vap HSS-E PM - STAINLESS



For through hole

Tolerance ISO 2 (6H)

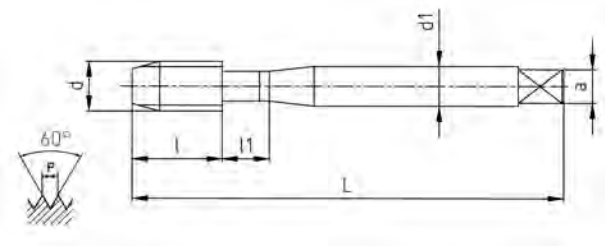


TDC manigley

Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
11151	M2.0	0.40	1.60	45.00		8.00	2.80	2.10
11152	M2.5	0.45	2.05	50.00		9.00	2.80	2.10
11153	M3.0	0.50	2.50	56.00	7.00	11.00	3.50	2.70
11155	M4.0	0.70	3.30	63.00	8.00	13.00	4.50	3.40
11156	M5.0	0.80	4.20	70.00	9.00	16.00	6.00	4.90
11157	M6.0	1.00	5.00	80.00	11.00	19.00	6.00	4.90
11159	M8.0	1.25	6.80	90.00	13.00	22.00	8.00	6.20
11161	M10.0	1.50	8.50	100.00	15.00	24.00	10.00	8.00
DIN 376								
11162	M12.0	1.75	10.20	110.00		29.00	9.00	7.00
11163	M14.0	2.00	12.00	110.00		30.00	11.00	9.00
11164	M16.0	2.00	14.00	110.00		32.00	12.00	9.00
11165	M18.0	2.50	15.50	125.00		34.00	14.00	11.00
11166	M20.0	2.50	17.50	140.00		34.00	16.00	12.00
11167	M22.0	2.50	19.50	140.00		34.00	18.00	14.50
11168	M24.0	3.00	21.00	160.00		38.00	18.00	14.50

Taps

Taps 131/3 Ultra Vap HSS-E PM - STAINLESS



For blind hole

Tolerance ISO 2 (6H)

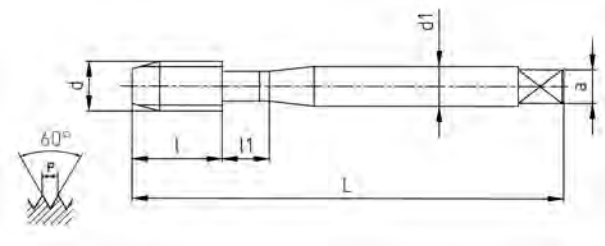


TDC manigley

Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
51730	M2.0	0.40	1.60	45.00		8.00	2.80	2.10
51731	M2.5	0.45	2.05	50.00		9.00	2.80	2.10
51732	M3.0	0.50	2.50	56.00	11.00	6.00	3.50	2.70
51734	M4.0	0.70	3.30	63.00	13.00	7.50	4.50	3.40
51735	M5.0	0.80	4.20	70.00	16.00	9.00	6.00	4.90
51736	M6.0	1.00	5.00	80.00	18.00	11.00	6.00	4.90
51738	M8.0	1.25	6.80	90.00	21.00	13.00	8.00	6.20
51739	M10.0	1.50	8.50	100.00	22.00	16.00	10.00	8.00
DIN 376								
51740	M12.0	1.75	10.20	110.00		18.00	9.00	7.00
51741	M14.0	2.00	12.00	110.00		20.00	11.00	9.00
51742	M16.0	2.00	14.00	110.00		20.00	12.00	9.00
51743	M18.0	2.50	15.50	125.00		22.00	14.00	11.00
51744	M20.0	2.50	17.50	140.00		25.00	16.00	12.00
51745	M22.0	2.50	19.50	140.00		25.00	18.00	14.50
51746	M24.0	3.00	21.00	160.00		28.00	18.00	14.50
51747	M27.0	3.00	24.00	160.00		32.00	20.00	16.00
51749	M30.0	3.50	26.50	180.00		36.00	22.00	18.00

Taps

Taps 105/4 Jet HSS-E PM - STEEL > 900 N/mm2



For Through hole
Tolerance ISO 2 (6H)

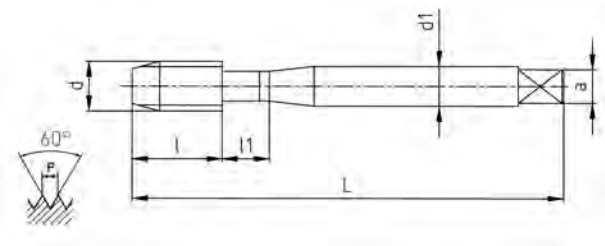


5 Cutting tools

Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
51102	M2.0	0.40	1.60	45.00		8.00	2.80	2.10
51103	M2.5	0.45	2.05	50.00		9.00	2.80	2.10
51104	M3.0	0.50	2.50	56.00	7.00	11.00	3.50	2.70
51105	M4.0	0.70	3.30	63.00	8.00	13.00	4.50	3.40
51106	M5.0	0.80	4.20	70.00	9.00	16.00	6.00	4.90
51107	M6.0	1.00	5.00	80.00	11.00	19.00	6.00	4.90
51108	M8.0	1.25	6.80	90.00	13.00	22.00	8.00	6.20
51109	M10.0	1.50	8.50	100.00	15.00	24.00	10.00	8.00
DIN 376								
51110	M12.0	1.75	10.2	110.00		29.00	9.00	7.00
51111	M14.0	2.00	12.0	110.00		30.00	11.00	9.00
51112	M16.0	2.00	14.0	110.00		32.00	12.00	9.00
51113	M18.0	2.50	15.5	125.00		34.00	14.00	11.00
51114	M20.0	2.50	17.5	140.00		34.00	16.00	12.00
51115	M22.0	2.50	19.5	140.00		34.00	18.00	14.50
51116	M24.0	3.00	21.0	160.00		38.00	18.00	14.50

Taps

Taps 131/3 Jet HSS-E PM - STEEL > 900 N/mm2



For blind hole
Tolerance ISO 2 (6H)

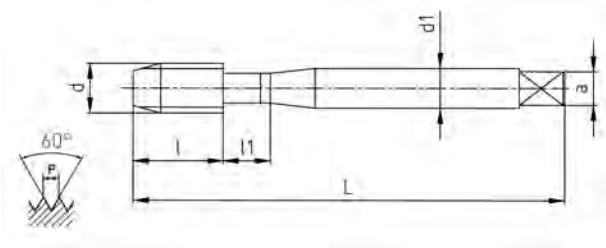


TDC manigley

Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
61582	M2.0	0.40	1.60	45.00		8.00	2.80	2.10
61583	M2.5	0.45	2.05	50.00		9.00	2.80	2.10
61584	M3.0	0.50	2.50	56.00	11.00	6.00	3.50	2.70
61585	M4.0	0.70	3.30	63.00	13.00	7.50	4.50	3.40
61586	M5.0	0.80	4.20	70.00	16.00	9.00	6.00	4.90
61587	M6.0	1.00	5.00	80.00	18.00	11.00	6.00	4.90
61589	M8.0	1.25	6.80	90.00	21.00	13.00	8.00	6.20
61590	M10.0	1.50	8.50	100.00	22.00	16.00	10.00	8.00
DIN 376								
61591	M12.0	1.75	10.20	110.00		18.00	9.00	7.00
61592	M14.0	2.00	12.00	110.00		20.00	11.00	9.00
61593	M16.0	2.00	14.00	110.00		20.00	12.00	9.00
61594	M18.0	2.50	15.50	125.00		22.00	14.00	11.00
61595	M20.0	2.50	17.50	140.00		25.00	16.00	12.00
61596	M22.0	2.50	19.50	140.00		25.00	18.00	14.50
61597	M24.0	3.00	21.00	160.00		28.00	18.00	14.50
61598	M27.0	3.00	24.00	160.00		32.00	20.00	16.00
61599	M30.0	3.50	16.50	180.00		36.00	22.00	18.00

Taps

Thread former 123/4 Ultra Vap HSS-E - STEEL - STAINLESS



Through hole 1x Ø

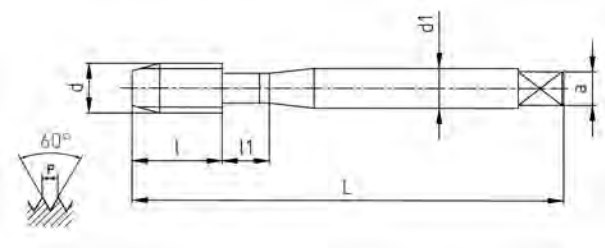


5 Cutting tools

Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
10615	M1.00	0.25	0.75	40.00		5.50	2.50	2.10
10616	M1.20	0.25	0.95	40.00		5.50	2.50	2.10
10617	M1.40	0.30	1.10	40.00		7.00	2.50	2.10
10619	M1.60	0.35	1.25	40.00		8.00	2.50	2.10
10620	M1.80	0.35	1.45	40.00		8.00	2.50	2.10
10621	M2.00	0.40	1.60	45.00		8.00	2.80	2.10
10624	M2.50	0.45	2.05	50.00		9.00	2.80	2.10
10627	M3.00	0.50	2.50	56.00	7.00	10.00	3.50	2.70
10629	M4.00	0.70	3.30	63.00	8.00	12.00	4.50	3.40
10630	M5.00	0.80	4.20	70.00	9.00	14.00	6.00	4.90
10631	M6.00	1.00	5.00	80.00	11.00	16.00	6.00	4.90
10632	M8.00	1.25	6.80	90.00	13.00	18.00	8.00	6.20
10633	M10.00	1.50	8.50	100.00	15.00	20.00	10.00	8.00
DIN 376								
10635	M12.00	1.75	10.20	110.00		22.00	9.00	7.00

Taps

Thread former 116 Ultra Vap HSS-E



For surface treatment ask us



Item No	d	P	Drill Ø	L	l1	l	d1	a
DIN 371								
73180	M1.00	0.25	0.90	40.00	2.00	5.50	2.50	2.10
73199	M1.20	0.25	1.10	40.00	2.00	5.50	2.50	2.10
73202	M1.40	0.30	1.26	40.00	3.00	7.00	2.50	2.10
74470	M1.60	0.35	1.45	40.00	3.00	8.00	2.50	2.10
74489	M1.80	0.35	1.65	40.00	3.00	8.00	2.60	2.10
53317	M2.00	0.40	1.85	45.00		8.00	2.80	2.10
53341	M2.50	0.45	2.30	50.00		9.00	2.80	2.10
53368	M3.00	0.50	2.80	56.00	7.00	11.00	3.50	2.70
53384	M4.00	0.70	3.70	63.00	8.00	13.00	4.50	3.40
53392	M5.00	0.80	4.65	70.00	9.00	16.00	6.00	4.90
53406	M6.00	1.00	5.55	80.00	11.00	19.00	6.00	4.90
12235	M8.00	1.25	7.40	90.00	13.00	22.00	8.00	6.20
12236	M10.00	1.50	9.30	100.00	15.00	24.00	10.00	8.00
DIN 376								
53430	M12.00	1.75	11.20	110.00		29.00		7.00
85596	M14.00	2.00	13.00	110.00		30.00		9.00
85618	M16.00	2.00	15.00	110.00		32.00		9.00

Taps

Full boxes with set of taps



Stainless - JET on request

Item No	type	Blind hole	Through hole	DIN 371/376	Content
12228	105/4	no	yes	M3-M12	Ultra
12230	105/4	no	yes	M3-M12	Ultra-Vap
12271	131/3	yes	no	M3-M12	Ultra
12273	131/3	yes	no	M3-M12	Ultra-Vap
12282	105/3	yes	no	M3-M12	Ultra -GG

5 Cutting tools

Taps

Full boxes with set of taps and drills

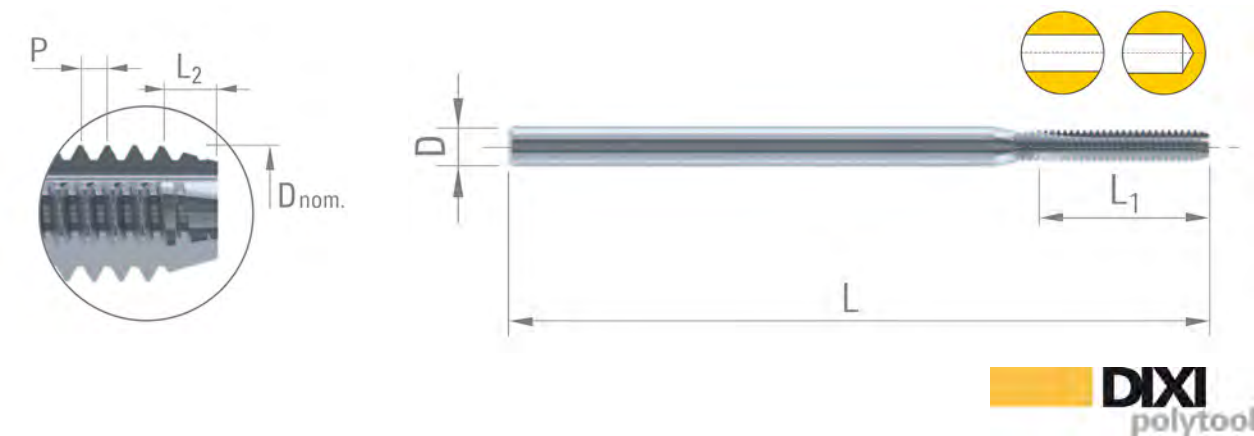


Item No	type	Blind hole	Through hole	DIN 371/376	Content
Simple					
12229	105/4	no	yes	M3-M12	Ultra
12231	105/4	no	yes	M3-M12	Ultra-VAP
12272	131/3	yes	no	M3-M12	Ultra
12274	131/3	yes	no	M3-M12	Ultra-VAP
12283	105/3	no	yes	M3-M12	Ultra -GG
Double					
12232	105/4- 105/4	no	yes	M3-M12	Ultra
12233	105/4- 131/3	no-yes	yes-no	M3-M12	Ultra
12234	131/3- 131/3	yes	no	M3-M12	Ultra
12241	105/4-105/4	no	yes	M3-M12	Ultra-VAP
12242	105/4- 131/3	no-yes	yes-no	M3-M12	Ultra-VAP
12243	131/3- 131/3	yes	no	M3-M12	Ultra-VAP

5 Cutting tools

Carbide cutting taps and Whirling tools

Carbide Micro cutting taps type 1712 R Z3



- Steel + Pb
- Cu alloy / Silver / Gold

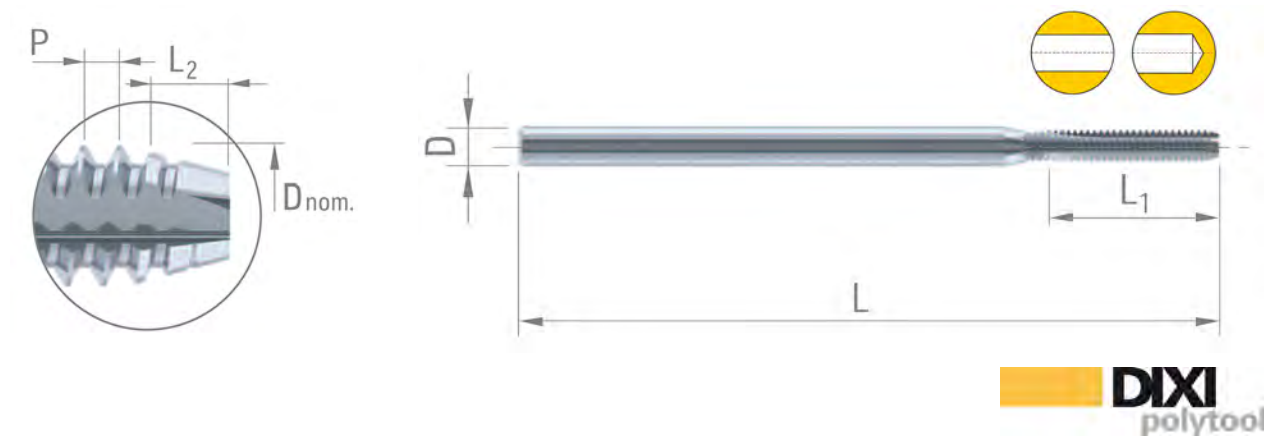
rpm 500-2500

5 Cutting tools

Item No	Tolerance	D nom.	P	Drill. Ø brass	Drill. Ø steel	L1	L2	Dh5	L
Type S									
62326	NIHS 3G	S0.30	0.08	0.23	0.24	1.0	0.25	1.5	30.0
965642	NIHS 3G	S0.35	0.09	0.27	0.28	1.5	0.27	1.5	30.0
62327	NIHS 3G	S0.40	0.10	0.32	0.33	2.0	0.30	1.5	30.0
62328	NIHS 3G+	S0.40	0.10	0.32	0.33	2.0	0.30	1.5	30.0
62329	NIHS 3G	S0.50	0.125	0.40	0.42	2.5	0.38	1.5	30.0
62330	NIHS 3G+	S0.50	0.125	0.40	0.42	2.5	0.38	1.5	30.0
62331	NIHS 3G	S0.60	0.15	0.48	0.50	3.0	0.45	1.5	30.0
62332	NIHS 3G+	S0.60	0.15	0.48	0.50	3.0	0.45	1.5	30.0
62334	NIHS 3G	S0.70	0.175	0.56	0.58	3.0	0.52	1.5	30.0
62335	NIHS 3G+	S0.70	0.175	0.56	0.58	3.0	0.52	1.5	30.0
62337	NIHS 3G	S0.80	0.20	0.64	0.66	3.5	0.60	1.5	30.0
62338	NIHS 3G+	S0.80	0.20	0.64	0.66	3.5	0.60	1.5	30.0
62342	NIHS 3G	S0.90	0.225	0.72	0.74	4.0	0.67	1.5	30.0
62343	NIHS 3G+	S0.90	0.225	0.72	0.74	4.0	0.67	1.5	30.0
62345	NIHS 3G	S1.00	0.25	0.80	0.82	4.0	0.76	1.5	30.0
62346	NIHS 3G+	S1.00	0.25	0.80	0.82	4.0	0.76	1.5	30.0
62348	NIHS 3G	S1.20	0.25	1.00	1.02	5.0	0.76	1.5	30.0
62351	NIHS 3G	S1.40	0.30	1.15	1.17	5.0	0.85	1.5	30.0
Type M									
62353	ISO2 6H	M1.50	0.30	1.26	1.28	6.0	0.85	2.0	38.0
62354	ISO2 6H	M2.00	0.40	1.65	1.68	11.0	1.00	2.5	43.0

Carbide cutting taps and Whirling tools

Carbide Micro cutting taps type 1712 L Z3



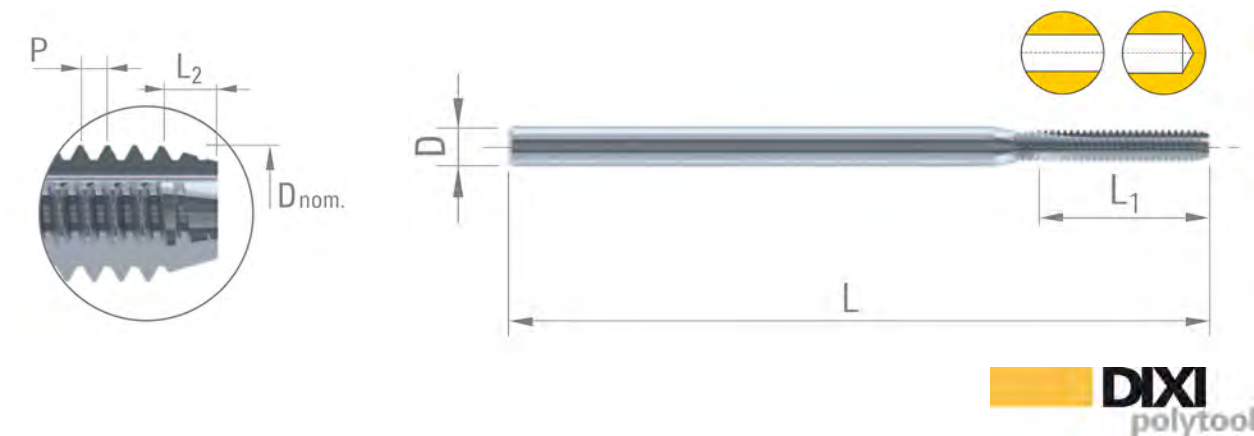
- Steel + Pb
- Cu alloy / Silver / Gold

Left hand cutting
rpm 500-2500

Item No	Tolerance	D nom.	P	Drill. Ø brass	Drill. Ø steel	L1	L2	Dh5	L
Type S									
969369	NIHS 3G	S0.60	0.15	0.49	0.51	4.0	0.45	1.5	30.0
969370	NIHS 3G	S0.70	0.175	0.57	0.59	4.0	0.52	1.5	30.0
969371	NIHS 3G	S0.80	0.20	0.65	0.67	4.0	0.60	1.5	30.0
969372	NIHS 3G	S0.90	0.225	0.73	0.75	4.0	0.67	1.5	30.0
969373	NIHS 3G	S1.00	0.25	0.81	0.83	4.0	0.75	1.5	30.0

Carbide cutting taps and Whirling tools

Carbide high performance micro cutting taps type 1713 Z3



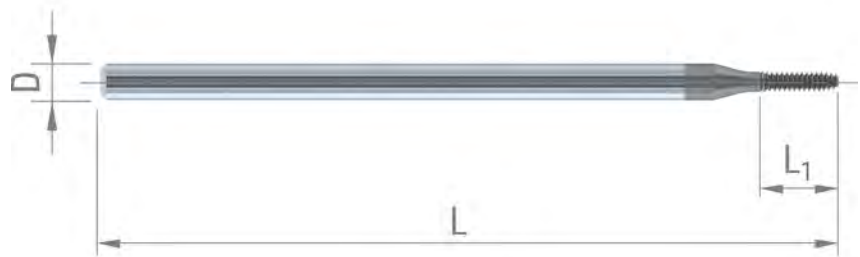
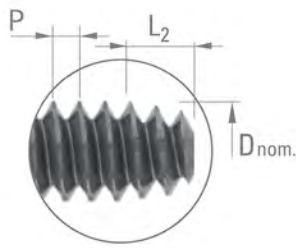
rpm 500-2500

- Steel + Pb
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al

Item No	Tolerance	D nom.	P	Drill. Ø brass	Drill. Ø steel	L1	L2	Dh5	L
Type S									
969795	NIHS 3G	S0.40	0.10	0.33	0.34	2.5	0.30	2.0	30.0
969474	NIHS 3G	S0.50	0.125	0.41	0.43	3.5	0.38	2.0	30.0
969497	NIHS 3G	S0.60	0.15	0.49	0.51	4.0	0.45	2.0	30.0
969498	NIHS 3G	S0.70	0.175	0.57	0.59	4.0	0.52	2.0	30.0
969499	NIHS 3G	S0.80	0.20	0.65	0.67	4.0	0.60	2.0	30.0
969500	NIHS 3G	S0.90	0.225	0.73	0.75	4.0	0.67	2.0	30.0
969501	NIHS 3G	S1.00	0.25	0.81	0.83	4.0	0.76	2.0	30.0
969502	NIHS 3G	S1.20	0.25	1.01	1.03	5.0	0.76	2.0	30.0
969503	NIHS 3G	S1.40	0.30	1.16	1.18	5.0	0.85	2.0	30.0

Carbide cutting taps and Whirling tools

Carbide Micro thread formers type 1715



- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Al

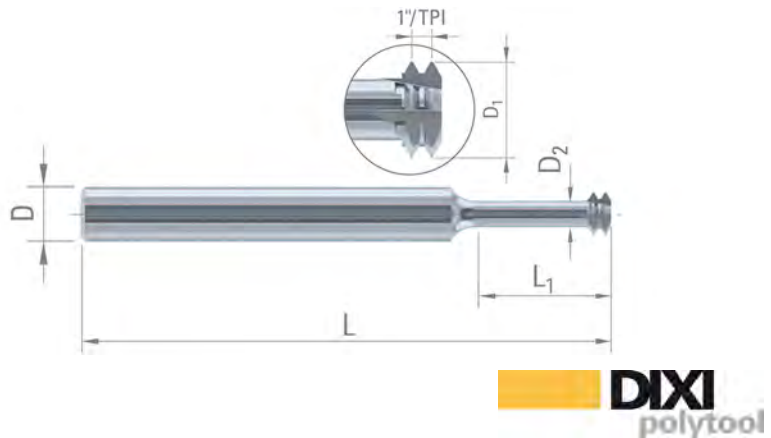
Coating available : DI-TOP

5 Cutting tools

Item No	Tolerance	D nom.	P	Drill. Ø brass	Drill. Ø steel	L1	L2	Dh5	L
Type S									
974654	NIHS 3GX	S0.4	0.10	0.36-0.37	0.37-0.38	1.60	0.30	1.50	30.00
972407	NIHS 3GX	S0.5	0.125	0.45-0.46	0.46-0.47	2.00	0.37	1.50	30.00
970899	NIHS 3GX	S0.6	0.15	0.54-0.55	0.55-0.56	2.40	0.45	1.50	30.00
970900	NIHS 3GX	S0.7	0.175	0.62-0.63	0.63-0.64	2.80	0.52	1.50	30.00
970901	NIHS 3GX	S0.8	0.20	0.71-0.72	0.72-0.73	3.20	0.60	1.50	30.00
970902	NIHS 3GX	S0.9	0.225	0.80-0.81	0.81-0.82	3.60	0.67	1.50	30.00
305793	NIHS 3GX	S1.0	0.25	0.89-0.90	0.90-0.91	4.00	0.75	1.50	30.00
305794	NIHS 3GX	S1.2	0.20	1.11-1.12	1.12-1.13	4.80	0.60	1.50	30.00
305795	NIHS 3GX	S1.2	0.25	1.08-1.09	1.09-1.10	4.80	0.75	1.50	30.00
305796	NIHS 3GX	S1.4	0.20	1.30-1.32	1.32-1.33	5.60	0.60	1.50	30.00
305797	NIHS 3GX	S1.4	0.30	1.27-1.28	1.28-1.29	5.60	0.90	1.50	30.00
Type M									
970903	5HX	M1.0	0.25	0.89-0.90	0.90-0.91	4.00	0.75	1.50	30.00
978772	4HX	M1.2	0.20	1.09-1.10	1.10-1.11	4.80	0.60	1.50	30.00
970904	5HX	M1.2	0.25	1.09-1.10	1.10-1.11	4.80	0.75	1.50	30.00
973645	4HX	M1.4	0.20	1.31-1.32	1.32-1.33	5.60	0.60	1.50	30.00
970905	5HX	M1.4	0.30	1.27-1.28	1.28-1.29	5.60	0.90	1.50	38.00
971650	6HX	M1.5	0.30	1.37-1.38	1.38-1.39	6.00	0.90	2.00	38.00
970906	6HX	M1.6	0.35	1.45-1.46	1.46-1.47	6.00	1.05	2.00	38.00
975090	4HX	M1.8	0.20	1.71-1.72	1.72-1.73	7.00	0.60	2.00	38.00
976259	4HX	M2.0	0.20	1.91-1.92	1.92-1.93	8.00	0.60	2.50	43.00
970907	5HX	M2.0	0.40	1.83-1.84	1.83-1.84	8.00	1.20	2.50	43.00
974959	6HX	M2.2	0.25	2.09-2.10	2.10-2.11	8.00	0.75	2.50	43.00

Carbide cutting taps and Whirling tools

Carbide whirling tools full profile type 1735



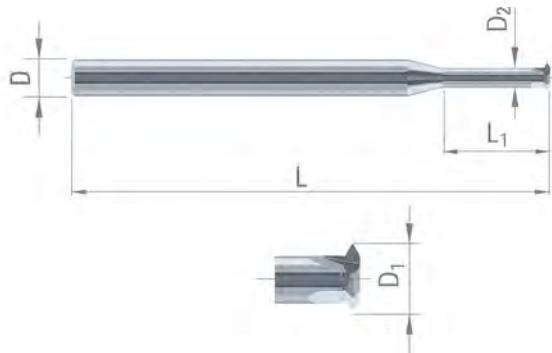
Coating available : TIALN

- L1 = 2x Ø nom.
- Steel + Pb
- Low alloyed steel
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy / Silver / Gold
- Cu alloy difficult to machine
- Alu
- Graphite
- Plastic

Carb. It. No	TiAlN It. No	UNC	UNF	UNEF	UN	TPI	D1	L1	D2	Dh5	L	Z
966664	966833		N°1			72	1.40	4.3	0.85	3.0	38.0	3
966663	966834	N°1	N°2			64	1.40	4.3	0.80	3.0	38.0	3
966662	966835	N°2	N°3			56	1.65	5.0	0.95	3.0	38.0	3
966661	966836	N°3	N°4			48	1.90	5.8	1.10	3.0	38.0	3
966660	966837		N°5			44	2.00	7.3	1.15	3.0	38.0	3
966659	966838	N°4				40	2.10	6.6	1.17	4.0	42.0	3
966658	966839	N°5	N°6			40	2.45	7.3	1.52	4.0	42.0	3
966657	966841		N°8			36	3.30	9.6	2.15	4.0	42.0	3
960656	966840	N°6				32	2.55	8.1	1.30	4.0	42.0	3
960205	960628	N°8	N°10	N°12		32	3.10	9.6	1.90	4.0	55.0	3
966655	966842				5/16"	28	4.20	12.6	2.85	6.0	63.0	3
			N°12									
966654	966843		1/4"	7/16"	5/16"	28	5.00	14.6	3.55	6.0	63.0	4
960395	960629	N°10				24	3.40	11.1	1.90	4.0	55.0	3
960396	960360	N°12	5/16"			24	4.10	12.6	2.70	6.0	57.0	4
960397	960631	1/4"			5/16"	20	4.70	14.6	2.90	6.0	57.0	4
960398	960635	5/16"	9/16"			18	6.10	18.2	4.00	8.0	63.0	6
960399	960636	3/8"			7/16"	16	7.50	21.9	5.30	8.0	63.0	6
960400	960637	7/16"	7/8"			14	8.70	25.6	6.20	10.0	75.0	6
960402	960638	1/2"				13	10.0	29.2	7.30	12.0	75.0	6

Carbide cutting taps and Whirling tools

Carbide whirling tools partial profile type 1738 Z3



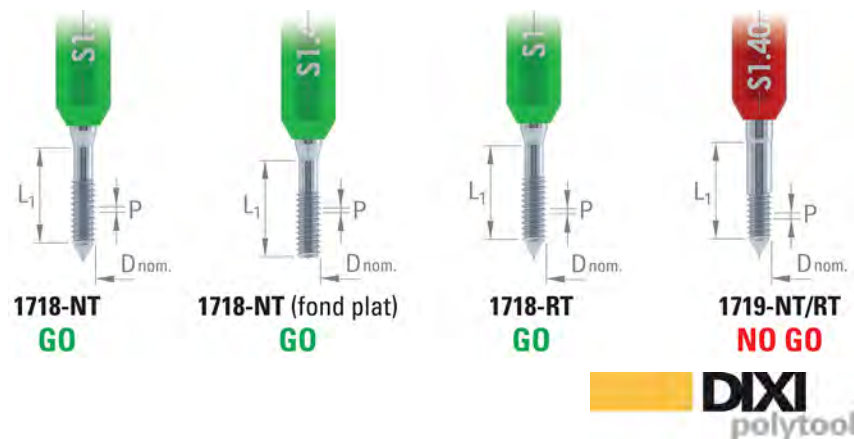
- High alloyed steel
- DUPLEX stainless steel
- Refractory alloy
- Titanium, titanium alloy

Coating available : CUTINOX

Carb. It. No	CUTINOX It. No	D nom.	Pitch	Drill Ø ISO	Drill Ø NIHS	D1	L1	D2	Dh5	L
984319	985156	S 0.70	0.175		0.56	0.54	1.80	0.33	3.0	38.0
965997	966008	S 0.80	0.20		0.64	0.62	2.30	0.38	3.0	38.0
965996	966007	S 0.90	0.225		0.72	0.70	2.50	0.43	3.0	38.0
964485	966006	M/S 1.00	0.25	0.75	0.80	0.78	2.80	0.44	3.0	38.0
965664	965943	M/S 1.20	0.25	0.95	1.00	0.98	3.40	0.64	3.0	38.0
965988	965999	M/S 1.40	0.30	1.10	1.15	1.12	4.00	0.71	3.0	38.0
965989	965998	M 1.40	0.20	1.22		1.18	4.00	0.74	3.0	38.0
965990	966000	M 1.60	0.35	1.30		1.26	4.50	0.72	3.0	38.0
965991	966001	M 1.80	0.35 (0.20)	1.50 1.60		1.45	5.10	0.77	3.0	38.0
965992	966002	M 2.00	0.40 (0.20)	1.65 1.80		1.60	5.60	0.85	3.0	38.0
965993	966003	M 2.20	0.45 (0.25)	1.80 1.95		1.70	6.20	0.91	3.0	38.0
965994	966004	M 2.50	0.45 (0.35) (0.25) (0.20)	2.10 2.15 2.25 2.30		2.00	7.00	1.20	3.0	38.0
965995	966005	M 3.00	0.50 (0.35) (0.25) (0.20)	2.50 2.65 2.75 2.80		2.40	8.40	1.60	3.0	38.0

Carbide cutting taps and Whirling tools

Thread gauges NIHS type 1718/1719



Right hand threads

NIHS06

Type 1718-NT	Type 1718-NT blind hole	Type 1718-RT	Type 1719-NT/RT	D nom.	Pitch	L1
Type S						
965295	978958	983114	965312	S 0.30	0.08	1.0
965296	978959	983468	965313	S 0.35	0.09	1.3
965297	978960	983115	965314	S 0.40	0.10	2.0
965298	978961	983116	965315	S 0.50	0.125	2.5
965299	978962	983117	965316	S 0.60	0.15	3.0
965300	978963	983236	965317	S 0.70	0.175	3.0
965301	978964	983118	965318	S 0.80	0.20	3.5
965302	978965	983119	965319	S 0.90	0.225	4.0
965303	978966	983120	965320	S 1.00	0.25	4.0
965304	978967	983121	965321	S 1.20	0.25	5.0
965305	978968	983122	965322	S 1.40	0.30	5.0

Carbide cutting taps and Whirling tools

Thread gauges NIHS type 1718/1719 Left hand threads



1718-NT L
GO



1719-NT/RT L
NO GO



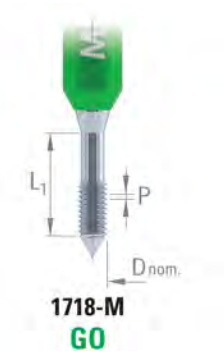
Left hand threads

NIHS06

Type 1718-NT	Type 1719-NT/RT	D nom.	Pitch	L1
Type S				
968369	968370	S 0.50	0.125	2.5
968345	968346	S 0.60	0.15	3.0
968344	968347	S 0.70	0.175	3.0
968343	968348	S 0.80	0.20	3.5
968925	968926	S 0.90	0.225	4.0
969395	969396	S 1.00	0.25	4.0
982638	982639	S 1.20	0.25	5.0

Carbide cutting taps and Whirling tools

Thread gauges ISO type 1718/1719



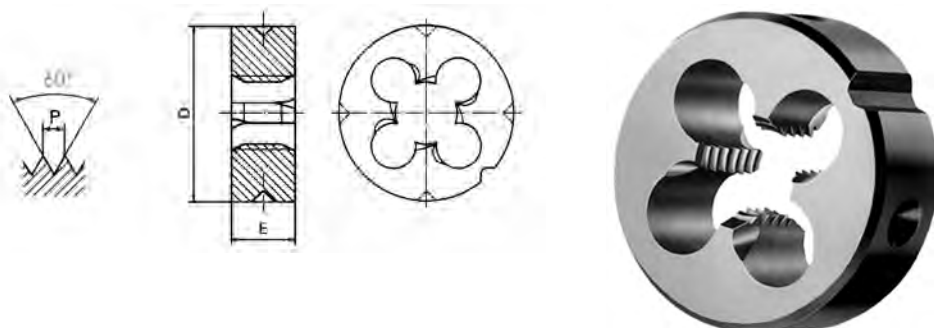
5 Cutting tools

ISO 1502

Type 1718-M	Type 1719-M	D nom.	Pitch	L1	Tol.
Type M					
976633	976635	M 1.00	0.25	5.0	5H
305894	305900	M 1.20	0.20	5.0	4H
980934	980935	M 1.20	0.20	5.0	5H
976634	976636	M 1.20	0.25	5.0	5H
305895	305901	M 1.40	0.20	5.0	4H
976693	976710	M 1.40	0.30	6.0	5H
976694	976711	M 1.50	0.30	6.0	6H
305896	305902	M 1.60	0.20	5.0	4H
976695	976713	M 1.60	0.20	5.0	5H
975716	975717	M 1.60	0.35	6.0	6H
305897	305903	M 1.80	0.20	5.0	4H
976024	976026	M 1.80	0.35	6.0	6H
305898	305904	M 2.00	0.20	5.0	4H
976699	976716	M 2.00	0.40	6.0	6H
305899	305905	M 2.20	0.20	5.0	4H
976701	976718	M 2.20	0.25	5.0	5H
976702	976719	M 2.20	0.45	8.0	6H
976703	976720	M 2.50	0.20	5.0	5H
976706	976707	M 2.50	0.25	5.0	5H
303652	303653	M 2.50	0.35	6.0	6H
976704	976721	M 2.50	0.45	8.0	6H
976705	976722	M 3.00	0.50	8.0	6H

Cutting dies

Dies 501/4 HSS DIN 13 / ISO-6g

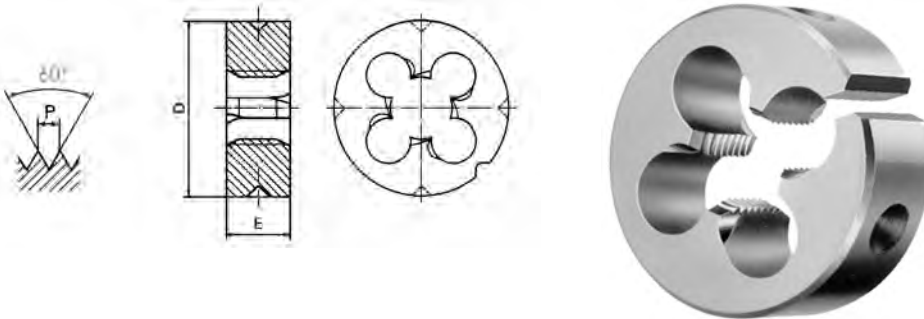


TDC manigley

Item No	d	P	Turning Ø	D	E	Spiral point
51411	M1.0	0.25	0.97	16.00	5.00	without
24368	M1.1	0.25	1.07	16.00	5.00	without
24376	M1.2	0.25	1.17	16.00	5.00	without
24384	M1.4	0.30	1.36	16.00	5.00	without
24392	M1.6	0.35	1.54	16.00	5.00	without
24503	M1.7	0.35	1.64	16.00	5.00	without
24511	M1.8	0.35	1.74	16.00	5.00	without
51446	M2.0	0.40	1.94	16.00	5.00	without
24538	M2.2	0.45	2.13	16.00	5.00	without
24546	M2.3	0.40	2.24	16.00	5.00	without
24554	M2.5	0.45	2.43	16.00	5.00	without
24562	M2.6	0.45	2.53	20.00	5.00	without
24570	M3.0	0.50	2.92	20.00	5.00	with
45012	M3.0	0.60	2.92	20.00	5.00	with
24589	M3.5	0.60	3.41	20.00	5.00	with
24597	M4.0	0.70	3.90	20.00	5.00	with
28126	M4.0	0.75	3.91	20.00	7.00	with
24600	M4.5	0.75	4.40	20.00	7.00	with
24619	M5.0	0.80	4.90	20.00	7.00	with
45047	M5.0	0.90	4.91	20.00	7.00	with
24627	M6.0	1.00	5.88	20.00	7.00	with
24635	M7.0	1.00	6.88	25.00	9.00	with
24643	M8.0	1.25	7.86	25.00	9.00	with
50067	M9.0	1.25	8.86	25.00	9.00	with
24651	M10.0	1.50	9.85	30.00	11.00	with
50113	M11.0	1.50	10.85	30.00	11.00	with
51454	M12.0	1.75	11.83	38.00	14.00	with
24678	M14.0	2.00	13.82	38.00	18.00	with
24686	M16.0	2.00	15.82	45.00	18.00	with
24694	M18.0	2.50	17.79	45.00	18.00	with

Cutting dies

Dies 502/4 DIN 13 / ISO-6g

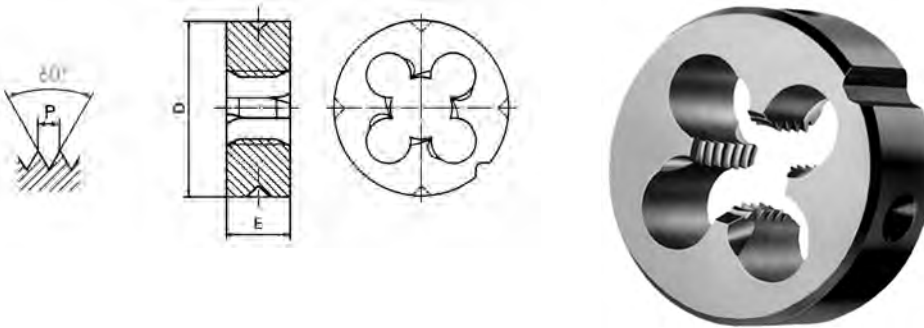


TDC manigley

Item No	d	P	Turning Ø	D	E	Spiral point
89893	M1.00	0.25	0.97	16.00	5.00	without
89907	M1.10	0.25	1.07	16.00	5.00	without
89915	M1.20	0.25	1.17	16.00	5.00	without
89923	M1.40	0.30	1.36	16.00	5.00	without
89931	M1.60	0.35	1.54	16.00	5.00	without
89958	M1.70	0.35	1.64	16.00	5.00	without
89966	M1.80	0.35	1.74	16.00	5.00	without
89974	M2.00	0.40	1.94	16.00	5.00	without
89982	M2.20	0.45	2.13	16.00	5.00	without
90174	M2.30	0.40	2.24	16.00	5.00	without
90182	M2.50	0.45	2.43	16.00	5.00	without
90190	M2.60	0.45	2.53	16.00	5.00	without
90204	M3.00	0.50	2.92	20.00	5.00	with
90220	M3.50	0.60	3.41	20.00	5.00	with
90239	M4.00	0.70	3.90	20.00	5.00	with
90255	M4.50	0.75	4.40	20.00	7.00	with
90263	M5.00	0.80	4.90	20.00	7.00	with
90298	M6.00	1.00	5.88	20.00	7.00	with
90301	M7.00	1.00	6.88	25.00	9.00	with
90417	M8.00	1.25	7.86	25.00	9.00	with
90425	M9.00	1.25	8.86	25.00	9.00	with
90433	M10.00	1.50	9.85	30.00	11.00	with
90441	M11.00	1.50	10.85	30.00	11.00	with
90468	M12.00	1.75	11.83	38.00	14.00	with
90476	M14.00	2.00	13.82	38.00	18.00	with
90484	M16.00	2.00	15.82	45.00	18.00	with
90492	M18.00	2.50	17.79	45.00	18.00	with

Cutting dies

Dies 501/4 STAINLESS STEEL DIN 13 / ISO-6g

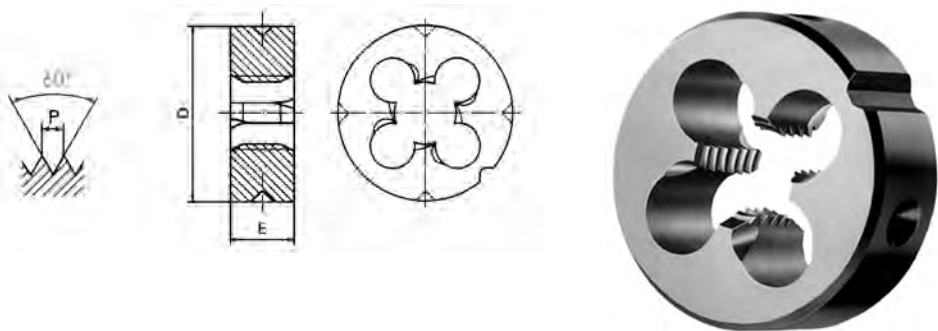


TDC manigley

Item No	d	P	Turning Ø	D	E	Spiral point
89834	M2.00	0.40	1.94	16.00	5.00	with
89842	M2.50	0.45	2.43	16.00	5.00	with
89850	M3.00	0.50	2.92	20.00	5.00	with
89869	M4.00	0.70	3.90	20.00	5.00	with
89877	M5.00	0.80	4.90	20.00	7.00	with
89885	M6.00	1.00	5.88	20.00	7.00	with
90328	M8.00	1.25	7.86	25.00	9.00	with
90336	M10.00	1.50	9.85	30.00	11.00	with
90344	M12.00	1.75	11.83	38.00	14.00	with
90352	M14.00	2.00	13.82	38.00	18.00	with
90360	M16.00	2.00	15.82	45.00	18.00	with
90379	M18.00	2.50	17.79	45.00	18.00	with

Cutting dies

Dies 501/4 HSS LH (LEFT) DIN 13 / ISO-6g



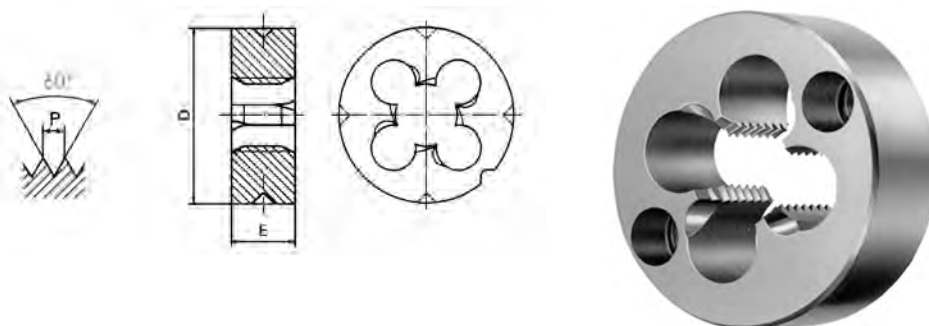
5 Cutting tools



Item No	d	P	Turning Ø	D	E	Spiral point
39675	M2.00	0.40	1.94	16.00	5.00	without
39701	M2.50	0.45	2.43	16.00	5.00	without
39721	M3.00	0.50	2.92	20.00	5.00	with
56960	M3.50	0.60	3.41	20.00	5.00	with
39748	M4.00	0.70	3.90	20.00	5.00	with
39764	M5.00	0.80	4.90	20.00	7.00	with
39772	M6.00	1.00	5.88	20.00	7.00	with
39780	M7.00	1.00	6.88	25.00	9.00	with
39799	M8.00	1.25	7.86	25.00	9.00	with
39802	M10.00	1.50	9.85	30.00	11.00	with
39810	M12.00	1.75	11.83	38.00	14.00	with
39829	M14.00	2.00	13.32	38.00	18.00	with
39837	M16.00	2.00	15.82	45.00	18.00	with

Cutting dies

Automatic lathes dies 503/4 HSS DIN 13 / 6g

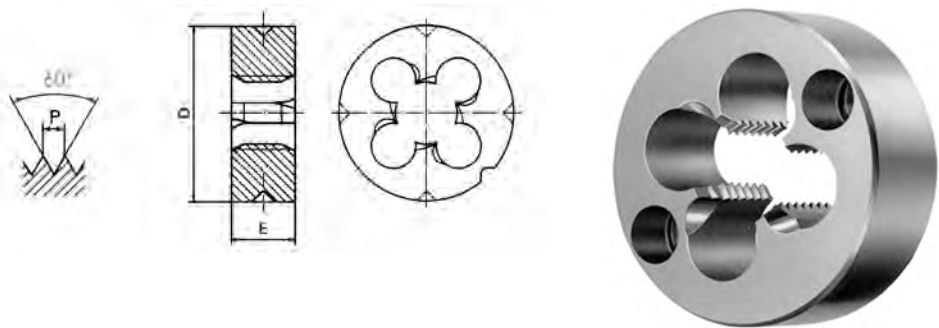


TDC manigley

Item No	d	P	Turning Ø	D	E	Spiral point
31542	M1.40	0.30	1.36	16.00	2.00	with
31569	M1.60	0.35	1.54	16.00	2.00	with
31585	M1.70	0.35	1.64	16.00	2.00	with
31607	M1.80	0.35	1.74	16.00	2.00	with
31623	M2.00	0.40	1.94	16.00	2.50	with
31615	M2.00	0.40	1.94	12.00	2.50	with
31658	M2.20	0.45	2.13	12.00	3.00	with
31666	M2.20	0.45	2.13	16.00	3.00	with
55883	M2.30	0.40	2.24	16.00	2.50	with
31682	M2.50	0.45	2.43	16.00	3.00	with
31674	M2.50	0.45	2.43	12.00	3.00	with
31704	M2.60	0.45	2.53	16.00	3.00	with
31712	M3.00	0.50	2.92	16.00	3.50	with
31720	M3.50	0.60	3.41	16.00	4.00	with
31739	M4.00	0.70	3.90	16.00	5.00	with
31747	M4.50	0.75	4.40	20.00	5.00	with
31755	M5.00	0.80	4.90	20.00	6.00	with
31763	M6.00	1.00	5.88	20.00	7.00	with
31771	M7.00	1.00	6.88	25.00	7.00	with
55875	M8.00	1.25	7.86	25.00	9.00	with
31798	M10.00	1.50	9.85	30.00	11.00	with
31801	M12.00	1.75	11.83	35.00	12.00	with
55981	M14.00	2.00	13.82	35.00	14.00	with
31828	M16.00	2.00	15.82	45.00	18.00	with

Cutting dies

Automatic lathes dies 503/4 STAINLESS 6g



5 Cutting tools



Item No	d	P	Turning Ø	D	E	Spiral point
10910	M3.00	0.50	2.92	16.00	3.50	with
10911	M4.00	0.70	3.90	16.00	5.00	with
10912	M5.00	0.80	4.90	20.00	6.00	with
10913	M6.00	1.00	5.88	20.00	7.00	with
10914	M8.00	1.25	7.86	25.00	9.00	with

Cutting dies

Set of dies

TDC manigley



610

Content

One set of 7 pieces :
Type 501 M3, M4, M5, M6, M8, M10, M12

Art. 54695

5 Cutting tools



610

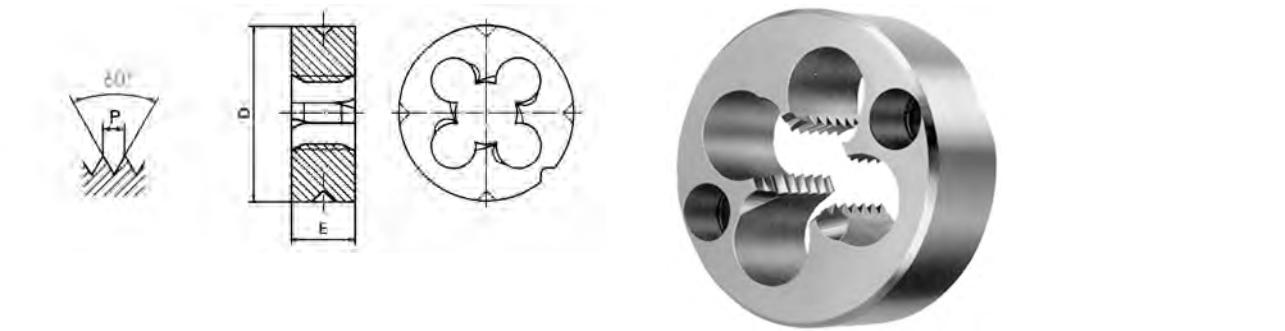
Content

One set of 7 pieces hexagonal dies :
Type 504 M3, M4, M5, M6, M8, M10, M12

Art. 54710

Cutting dies

Dies MAN-HALTER 510/3 HSS DIN 13 / ISO-6g



5 Cutting tools



Item No	d	P	Turning Ø	D	E	Spiral point
58459	M2.00	0.40	1.94	12.00	2.50	avec
58467	M2.20	0.45	2.13	12.00	3.00	avec
58475	M2.50	0.45	2.43	16.00	3.00	avec
54542	M3.00	0.50	2.92	16.00	3.50	avec
54550	M4.00	0.70	3.90	16.00	5.00	avec
54569	M5.00	0.80	4.90	20.00	6.00	avec
54577	M6.00	1.00	5.88	20.00	7.00	avec
54585	M8.00	1.25	7.86	25.00	9.00	avec
54593	M10.00	1.50	9.85	30.00	11.00	avec
54607	M12.00	1.75	11.83	35.00	12.00	avec

Die-holder MAN



Item No	D	E
64920	1M 4 HSS	M2, M2.2, M2.5, M3, M4,
54690	2M 8 HSS	M3, M4, M5, M6, M8
54712	3M 12 HSS	M5, M6, M8, M10, M12

Taps holder

Tap wrenches adjustable type 822



Item No	Size	Square	Metrical	UNC-UNF	GAZ
36811	0	2.00 - 3.55	M1 - M4.5	No.0 - No.8	
56677	1	2.50 - 5.60	M3 - M7	No.4 - 1/4"	
36838	2	4.50 - 8.00	M6 - M12	No.12 - 1/2"	G 1/8" - 1/4"
36846	3	5.00 - 12.50	M6 - M22	1/4" - 7/8"	G 1/8" - 3/8"
36854	4	8.00 - 16.00	M10 - M30	1/2" - 1 1/8"	G 1/4" - 3/4"
36862	5	12.50 - 22.40	M22 - M42	7/8" - 1 1/2"	G 1/2" - 1 1/8"

Die-holder DIN 223



Item No	Size	Die type	M	W	MF	G	BSF	UNC	UNF
36641	1	16 x 5	1 2.6	1/16" - 3/32"	1 - 2.6			No. 1 - 3	No. 0 - 3
56650	2	20 x 5	3 - 4	1/8" - 5/32"	3 - 4			No. 4 - 8	No. 4 - 8
36668	3	20 x 7	4.5 -6	3/16" - 1/4"	4.5 -6		1/4"	No. 10 - 1/4"	NO. 10 - 1/4"
36676	4	25 x 9	7 - 9	5/16"	7 - 9		5/16"	5/16"	5/16"
36684	5	30 x11	10 - 11	3/8" - 7/16"	10 - 11	1/8	3/8" - 7/16"	3/8" - 7/16"	3/8" - 7/16"
36692	6	38 x 10			12 - 15	1/4			1/2" - 9/16"
36706	7	38 x 14	12 - 14	1/2" - 9/16"			1/2" - 9/16"	1/2" - 9/16"	
36714	8	45 x 14			16 - 20	3/8 - 1/2			5/8" - 3/4"
36722	9	45 x 18	16 - 20	5/8" - 3/4"			5/8" - 3/4"	5/8" - 3/4"	
36730	10	55 x 16			22 - 26	5/8 - 3/4			7/8" - 1"
36749	11	55 x 22	22 - 24	7/8" - 1"			7/8" -1"	7/8" - 1"	
36757	12	65 x 18			27 - 36	7/8 - 1			
36765	13	65 x 25	27 - 36	27 - 36					
36773	14	75 x 20			38 - 42	1 1/8 - 1 1/4			
36781	15	75 x 30	39 - 42	39 - 42					
56669	16	90 x 22			45 - 50	13/8 - 2			
36803	17	90 x 36	45 - 52	45 - 52					

Gauges

Plug gauges M ISO 1502 (6H) go/no go type 703



5 Cutting tools

Item No	d	P
27359	M1.00	0.25
44938	M1.20	0.25
45640	M1.40	0.30
45624	M1.60	0.35
45969	M1.80	0.35
44776	M2.00	0.40
46868	M2.50	0.45
28525	M3.00	0.50
48763	M3.50	0.60
49670	M4.00	0.70
57843	M4.50	0.75
63649	M5.00	0.80
63703	M6.00	1.00
63762	M7.00	1.00
63819	M8.00	1.25
63878	M10.00	1.50
63924	M11.00	1.50
63959	M12.00	1.75
64009	M14.00	2.00
64068	M16.00	2.00

Gauges

Plug gauges M ISO 1502 (6H) go/no go type 703



Item No	d	P
31879	M2.00	0.40
33332	M2.50	0.45
33340	M3.00	0.50
33359	M3.50	0.60
33367	M4.00	0.70
33383	M5.00	0.80
33391	M6.00	1.00
33413	M8.00	1.25
33421	M10.00	1.50
35998	M12.00	1.75

5 Cutting tools

Gauges

Plug gauges MF ISO 1502 (6G) go/no go type 703

MF = fine thread



5 Cutting tools

Item No	d	P
28886	MF2.0	0.25
29033	MF2.2	0.25
29084	MF2.5	0.35
29173	MF3.0	0.35
29246	MF3.5	0.35
28312	MF4.0	0.50
28428	MF4.5	0.50
27847	MF5.0	0.50
27901	MF6.0	0.75
27960	MF7.0	0.75
28010	MF8.0	0.75
25615	MF8.0	1.00
40835	MF9.0	0.75
40916	MF9.0	1.00
25305	MF10.0	0.75
46493	MF10.0	1.00
46582	MF10.0	1.25
25445	MF11.0	0.75
25542	MF11.0	1.00
27634	MF12.0	1.00
27111	MF12.0	1.25
47686	MF12.0	1.50
47759	MF14.0	1.00
47902	MF14.0	1.25
47961	MF14.0	1.50
48607	MF15.0	1.00
48666	MF15.0	1.50
48712	MF16.0	1.00

Gauges

Thread ring gauges ISO (6g) go type 704



Item No	d	P
34878	M1.00	0.25
34894	M1.20	0.25
34908	M1.40	0.30
34916	M1.60	0.35
34940	M1.80	0.35
34959	M2.00	0.40
34983	M2.50	0.45
35009	M3.00	0.50
35017	M3.50	0.60
35025	M4.00	0.70
35033	M4.50	0.75
35041	M5.00	0.80
56480	M6.00	1.00
35068	M7.00	1.00
35076	M8.00	1.25
35084	M10.00	1.50
35092	M11.00	1.50
35106	M12.00	1.75
35114	M14.00	2.00
35122	M16.00	2.00

Gauges

Thread ring gauges M ISO (6g) go/no go type 704



5 Cutting tools

Item No	d	P
17345	M1.00	0.25
17353	M1.20	0.25
17361	M1.40	0.30
17388	M1.60	0.35
17396	M1.80	0.35
17418	M2.00	0.40
20117	M2.50	0.45
20192	M3.00	0.50
20206	M3.50	0.60
22209	M4.00	0.70
22217	M4.50	0.75
22225	M5.00	0.80
22241	M6.00	1.00
22268	M7.00	1.00
22284	M8.00	1.25
22306	M10.00	1.50
22314	M11.00	1.50
22322	M12.00	1.75
22330	M14.00	2.00
22349	M16.00	2.00

Gauges

Thread ring gauges MF ISO (6g) go type 704

MF = fine thread



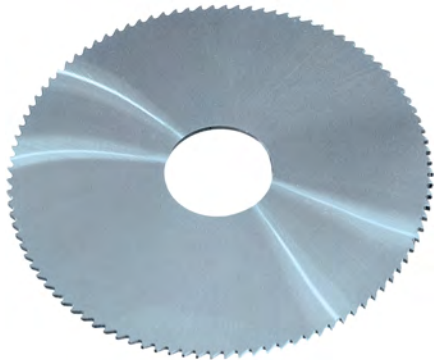
TDC manigley

5 Cutting tools

Item No	d	P
35262	MF2.00	0.25
35270	MF2.20	0.25
35297	MF2.50	0.35
35319	MF3.00	0.35
35327	MF3.50	0.35
35335	MF4.00	0.50
35343	MF4.50	0.50
35351	MF5.00	0.50
56510	MF6.00	0.75
35378	MF7.00	0.75
35386	MF8.00	0.75
35408	MF8.00	1.00
39535	MF9.00	0.75
39543	MF9.00	1.00
35394	MF10.00	0.75
35416	MF10.00	1.00
35521	MF10.00	1.25
39551	MF11.00	0.75
39578	MF11.00	1.00
35424	MF12.00	1.00
56529	MF12.00	1.25
35556	MF12.00	1.50
35432	MF14.00	1.00
45548	MF14.00	1.25
35564	MF14.00	1.50

Solid carbide slitting saws

TYPE 1011 Ø 15 to 50 - Fine teeth



Coating available :

TIALN

TICN

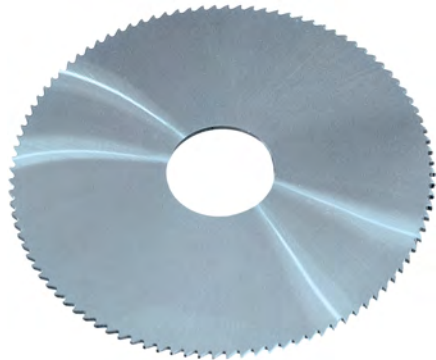
Example for item n° for a slitting saw Ø 15,
bore 5, thickness 0.50 with Z48 :
1011-15-5-0.50-Z48

5 Cutting tools

Thickness	Ø 15 x 5	Ø 20 x 5	Ø 25 x 8	Ø 30 x 8	Ø 40 x 10	Ø 50 x 13
0.10	Z64	Z80	Z80	Z100	Z128	
0.15	Z64	Z80	Z80	Z100	Z128	
0.20	Z64	Z80	Z80	Z100	Z128	Z128
0.25	Z64	Z64	Z80	Z100	Z100	Z128
0.30	Z64	Z64	Z80	Z80	Z100	Z128
0.35	Z64	Z64	Z64	Z80	Z100	Z100
0.40	Z64	Z64	Z64	Z80	Z100	Z100
0.45	Z48	Z48	Z64	Z80	Z80	Z100
0.50	Z48	Z48	Z64	Z80	Z80	Z100
0.60	Z48	Z48	Z64	Z64	Z80	Z100
0.70	Z48	Z48	Z48	Z64	Z80	Z80
0.80	Z40	Z40	Z48	Z64	Z80	Z80
0.90	Z40	Z40	Z48	Z64	Z64	Z80
1.00	Z40	Z40	Z48	Z64	Z64	Z80
1.10	Z40	Z40	Z48	Z48	Z64	Z80
1.20	Z40	Z40	Z48	Z48	Z64	Z80
1.30	Z40	Z40	Z40	Z48	Z64	Z64
1.40	Z40	Z40	Z40	Z48	Z64	Z64
1.50	Z40	Z40	Z40	Z48	Z64	Z64
1.60	Z40	Z40	Z40	Z48	Z64	Z64
1.70	Z40	Z32	Z40	Z48	Z48	Z64
1.80	Z40	Z32	Z40	Z48	Z48	Z64
1.90	Z40	Z32	Z40	Z48	Z48	Z64
2.00	Z40	Z32	Z40	Z48	Z48	Z64
2.50	Z40	Z32	Z40	Z40	Z48	Z64
3.00	Z40	Z32	Z32	Z40	Z48	Z48
3.50	Z24	Z24	Z32	Z40	Z40	Z48
4.00	Z24	Z24	Z32	Z40	Z40	Z48
5.00	Z24	Z24	Z32	Z32	Z40	Z48
6.00	Z24	Z24	Z24	Z32	Z40	Z40

Solid carbide slitting saws

TYPE 1011 Ø 63 to 200 - Fine teeth



Coating available :

TIALN

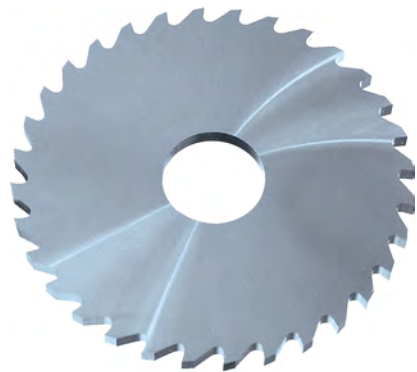
TICN

Example for item n° for a slitting saw Ø 63,
bore 16, thickness 0.50 with Z128 :
1011-63-16-0.50-Z128

Thickness	Ø 63 x 16	Ø 80 x 22	Ø 100 x 22	Ø 125 x 22	Ø 150 x 32	Ø 160 x 32	Ø 200 x 32
0.20	Z160						
0.25	Z128	Z160					
0.30	Z128	Z160					
0.35	Z128	Z160					
0.40	Z128	Z160					
0.45	Z128	Z128					
0.50	Z128	Z128	Z160				
0.60	Z100	Z128	Z160	Z160			
0.70	Z100	Z128	Z128	Z160			
0.80	Z100	Z128	Z128	Z160			
0.90	Z100	Z100	Z128	Z160			
1.00	Z100	Z100	Z128	Z160	Z150	160	
1.10	Z80	Z100	Z128	Z128			
1.20	Z80	Z100	Z128	Z128	Z150	Z160	Z200
1.30	Z80	Z100	Z100				
1.40	Z80	Z100	Z100	Z128			
1.50	Z80	Z100	Z100	Z128	Z150	Z160	Z160
1.60	Z80	Z100	Z100	Z128	Z150	Z160	Z160
1.70	Z80	Z80	Z100				
1.80	Z80	Z80	Z100	Z128	Z128	Z128	Z160
1.90	Z80	Z80	Z100				
2.00	Z80	Z80	Z100	Z128	Z128	Z128	Z160
2.50	Z64	Z80	Z100	Z100	Z128	Z128	Z160
3.00	Z64	Z80	Z80	Z100	Z128	Z128	Z128
3.50	Z64	Z64	Z80	Z100			
4.00	Z64	Z64	Z80	Z100	Z100	Z100	Z128
5.00	Z48	Z64	Z80	Z100			
6.00	Z48	Z64	Z64	Z100			

Solid carbide slitting saws

TYPE 1021 Ø 15 to 125 - Large teeth



Coating available :

TIALN

TICN

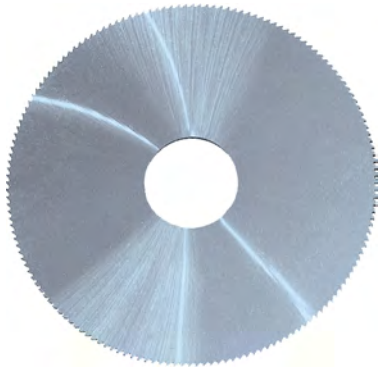
Example for item n° for a slitting saw Ø 15,
bore 5, thickness 0.50 with Z20 :
1021-15-5-0.50-Z20

Cutting tools

Thickness	Ø 15 x 5	Ø 20 x 5	Ø 25 x 8	Ø 30 x 8	Ø 40 x 10	Ø 50 x 13	Ø 63 x 16	Ø 80 x 22	Ø 100 x 22	Ø 125 x 25
0.20	Z20	Z20	Z20	Z30	Z40					
0.25	Z20	Z20	Z20	Z30	Z40					
0.30	Z20	Z20	Z20	Z30	Z40					
0.40	Z20	Z20	Z20	Z30	Z40	Z48	Z64			
0.50	Z20	Z20	Z20	Z30	Z40	Z48	Z64			
0.60	Z20	Z20	Z20	Z30	Z40	Z48	Z48	Z64	Z80	
0.70	Z20	Z20	Z20	Z30	Z40	Z40	Z48	Z64	Z64	
0.80	Z20	Z20	Z20	Z24	Z32	Z40	Z48	Z64	Z64	Z80
0.90	Z20	Z20	Z20	Z24	Z32	Z40	Z48	Z48	Z64	Z80
1.00	Z20	Z20	Z20	Z24	Z32	Z40	Z48	Z48	Z64	Z80
1.20	Z20	Z20	Z20	Z24	Z32	Z40	Z40	Z48	Z64	Z64
1.50	Z20	Z20	Z20	Z24	Z32	Z32	Z40	Z48	Z48	Z64
1.60	Z20	Z20	Z20	Z24	Z32	Z32	Z40	Z48	Z48	Z64
1.80	Z20	Z20	Z20	Z24	Z24	Z32	Z40	Z40	Z48	Z64
2.00	Z20	Z20	Z20	Z24	Z24	Z32	Z40	Z40	Z48	Z64
2.50	Z20	Z20	Z20	Z24	Z24	Z32	Z32	Z40	Z48	Z48
3.00	Z20	Z20	Z20	Z24	Z24	Z24	Z32	Z40	Z40	Z48
4.00	Z20	Z20	Z20	Z24	Z20	Z24	Z32	Z32	Z40	Z48
5.00	Z20	Z20	Z20	Z24	Z20	Z24	Z24	Z32	Z40	Z40
6.00	Z20	Z20	Z20	Z24	Z20	Z20	Z24	Z32	Z32	Z40

Solid carbide slitting saws

TYPE 1031 Ø 15 to 32 - Extra fine teeth



Coating available :

TIALN

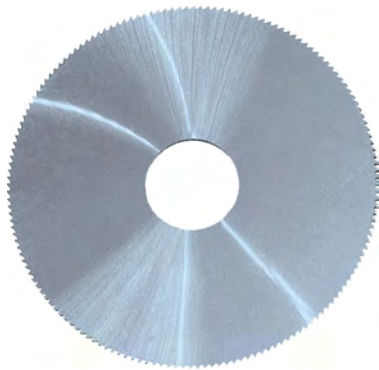
TICN

- Example for item n° for a slitting saw Ø 15, bore 5, thickness 0.50 with Z80 : 1031-15-5-0.50-Z80

Thickness	Ø 15 x 5	Ø 20 x 5	Ø 20 x 6	Ø 25 x 5	Ø 25 x 6	Ø 25 x 8	Ø 30 x 8	Ø 32 x 8
0.15	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.20	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.25	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.30	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.35	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.40	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.50	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.60	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.70	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.80	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
0.90	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
1.00	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
1.20	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
1.50	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
2.00	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
2.50	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80
3.00	Z80	Z80	Z80	Z80	Z100	Z100	Z100	Z80

Solid carbide slitting saws

TYPE 1031 Ø 35 to 80 - Extra fine teeth



Coating available :

TIALN

TICN

Example for item n° for a slitting saw Ø 35,
bore 8, thickness 0.50 with Z96 :
1031-35-8-0.50-Z96

Cutting tools

Thickness	Ø 35 x 8	Ø 40 x 8	Ø 40 x 10	Ø 45 x 8	Ø 50 x 10	Ø 50 x 13	Ø 63 x 16	Ø 80 x 16
0.15	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160				
0.20	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100			
0.25	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	
0.30	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	
0.35	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	
0.40	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	
0.50	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
0.60	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
0.70	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
0.80	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
0.90	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
1.00	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
1.20	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
1.50	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
2.00	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
2.50	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128
3.00	Z96	Z100 / Z160	Z100 / Z160	Z100 / Z160	Z100	Z120	Z120	Z128

Solid carbide rods

Carbide ground rods

Quality K15

Cylindrical rods in K15 quality are generally available from stock in following dimensions :

Ø 1.00 to 13.00 mm per 0.50 mm

Ø 13.00 to 20.00 mm per 1.00 mm

within 4-5 days for other dim. per 0.01 mm

K15 rod length : 100.00 mm

Example of item No :

Cyl0100 (Ø 1.00 mm x 100.00 mm K15)



Quality B4

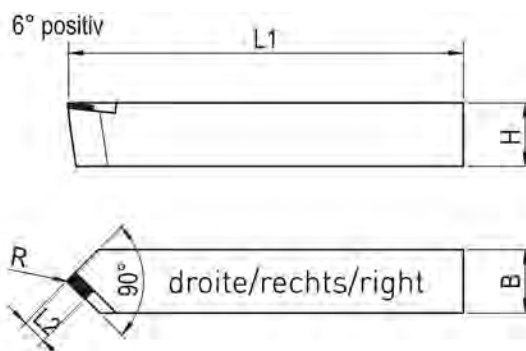
Cylindrical rods in B4 quality are available from Ø 1.00 to 20.00 mm per 0.50 (lg. 100.00 mm or 310.00 mm).

Example of Item No :

Cyl0100-14-310 (Ø 1.00 mm x 310.00 mm B4)

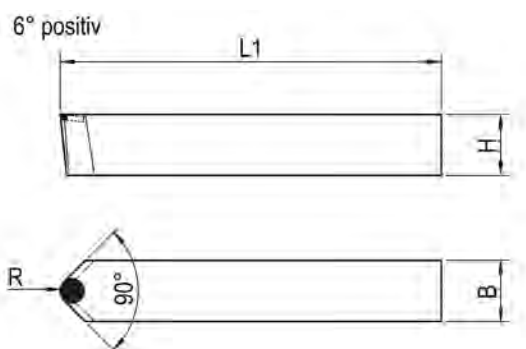
Diamond tools

Longitudinal turning smothing cutter, central



PCD	CVD	H	L1	B	L2	R
300.20.00050	200.20.00050	10.00	90.00	10.00	8.00	0.40
300.20.00051	200.20.00051	12.00	100.00	12.00	8.00	0.40
300.20.00052	200.20.00052	16.00	110.00	16.00	8.00	0.80
300.20.00053	200.20.00053	20.00	125.00	20.00	8.00	0.80
300.20.00054	200.20.00054	25.00	140.00	20.00	8.00	0.80
300.20.00055	200.20.00055	32.00	170.00	25.00	8.00	0.80

Radius cutter

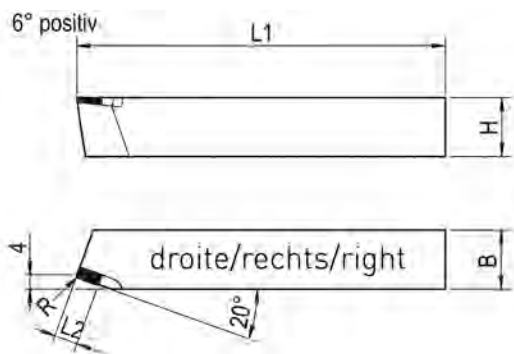


Tools can also be manufactured in CBN on request

PCD	CVD	H	L1	B	R
300.20.00060	200.20.00060	10.00	90.00	10.00	4.00
300.20.00061	200.20.00061	12.00	100.00	12.00	4.00
300.20.00062	200.20.00062	16.00	110.00	16.00	4.00
300.20.00063	200.20.00063	20.00	125.00	20.00	4.00
300.20.00064	200.20.00064	25.00	140.00	20.00	4.00
300.20.00065	200.20.00065	32.00	170.00	32.00	4.00

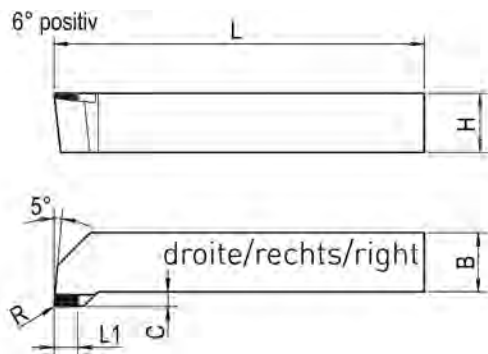
Diamond tools

Smoothing cutter



PCD	CVD	H	L1	B	L2	R
300.20.00066	200.20.00066	10.00	90.00	10.00	8.00	0.4
300.20.00067	200.20.00067	12.00	100.00	12.00	8.00	0.4
300.20.00068	200.20.00068	16.00	110.00	16.00	8.00	0.8
300.20.00069	200.20.00069	20.00	125.00	20.00	8.00	0.8
300.20.00070	200.20.00070	25.00	140.00	20.00	8.00	0.8
300.20.00071	200.20.00071	32.00	170.00	25.00	8.00	0.8

Offset cutting tool

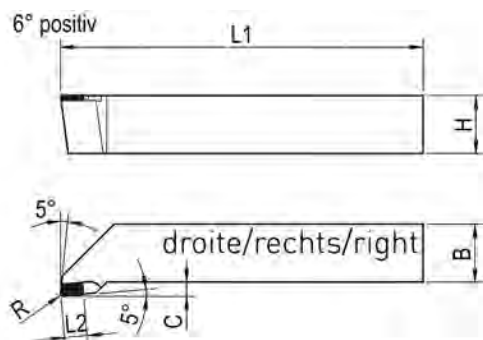


Tools can also be manufactured in CBN on request

PCD	CVD	H	L1	B	R	C	L
300.20.00080	200.20.00080	10.00	8.0	10.00	0.2	4.0	90.00
300.20.00081	200.20.00081	12.00	8.0	12.00	0.4	4.0	100.00
300.20.00082	200.20.00082	16.00	8.0	16.00	0.8	4.0	110.00
300.20.00083	200.20.00083	20.00	8.0	20.00	0.8	5.0	125.00
300.20.00084	200.20.00084	25.00	8.0	20.00	0.8	5.0	140.00
300.20.00085	200.20.00085	32.00	8.0	25.00	0.8	5.0	170.00

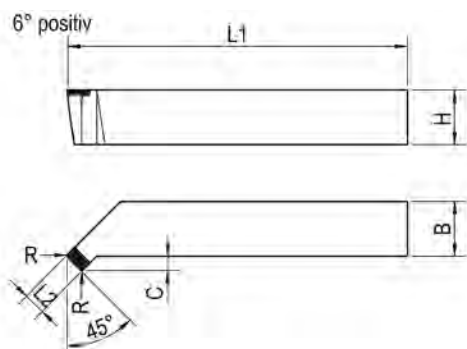
Diamond tools

Edge cutting tool



PCD	CVD	H	L1	B	L2	R	C
300.20.00090	200.20.00090	10.00	90.00	10.00	8.00	0.2	4.00
300.20.00091	200.20.00091	12.00	100.0	12.00	8.00	0.4	4.00
300.20.00092	200.20.00092	16.00	110.00	16.00	8.00	0.8	4.00
300.20.00093	200.20.00093	20.00	125.00	20.00	8.00	0.8	5.00
300.20.00094	200.20.00094	25.00	140.00	20.00	8.00	0.8	5.00
300.20.00095	200.20.00095	32.00	170.00	25.00	8.00	0.8	5.00

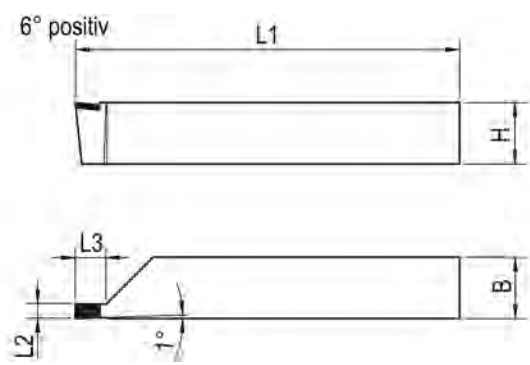
Smoothing cutter, curved



PCD	CVD	H	L1	B	L2	R	C
300.20.00100	200.20.00100	10.00	90.00	10.00	8.00	0.2	4.00
300.20.00101	200.20.00101	12.00	100.00	12.00	8.00	0.4	4.00
300.20.00102	200.20.00102	16.00	110.00	16.00	8.00	0.8	4.00
300.20.00103	200.20.00103	20.00	125.00	20.00	8.00	0.8	5.00
300.20.00104	200.20.00104	25.00	140.00	20.00	8.00	0.8	5.00
300.20.00105	200.20.00105	32.00	170.00	25.00	8.00	0.8	5.00

Diamond tools

Recessing and cutting off



Tools can also be manufactured in CBN on request

PCD	CVD	H	L1	B	L2	L3
300.20.00110	200.20.00110	10.00	90.00	10.00	jusqu'à 3.80	8.00
300.20.00111	200.20.00111	12.00	100.00	12.00	jusqu'à 3.80	9.00
300.20.00112	200.20.00112	16.00	110.00	16.00	jusqu'à 7.80	10.00
300.20.00113	200.20.00113	20.00	125.00	20.00	3.80 - 7.80	12.00
300.20.00114	200.20.00114	25.00	140.00	25.00	3.80 - 7.80	15.00

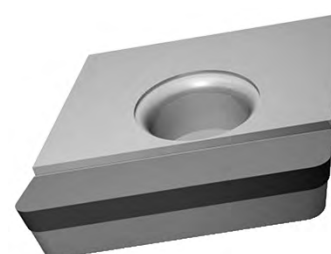
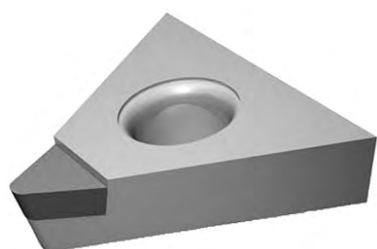
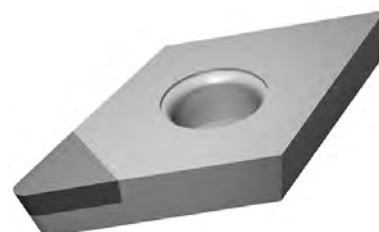
5 Cutting tools

Diamond tools

Diamond inserts CVD, PCD, CBN

A complete program of diamond inserts is available on request.

5 Cutting tools



Exécution disponible sur plaquettes Applitec / Bimu ou autres
Ausführung auf andere Applitec / Bimu, usw. Wendeplatten auch möglich.

Execution possible on any kind of inserts like Applitec / Bimu etc.