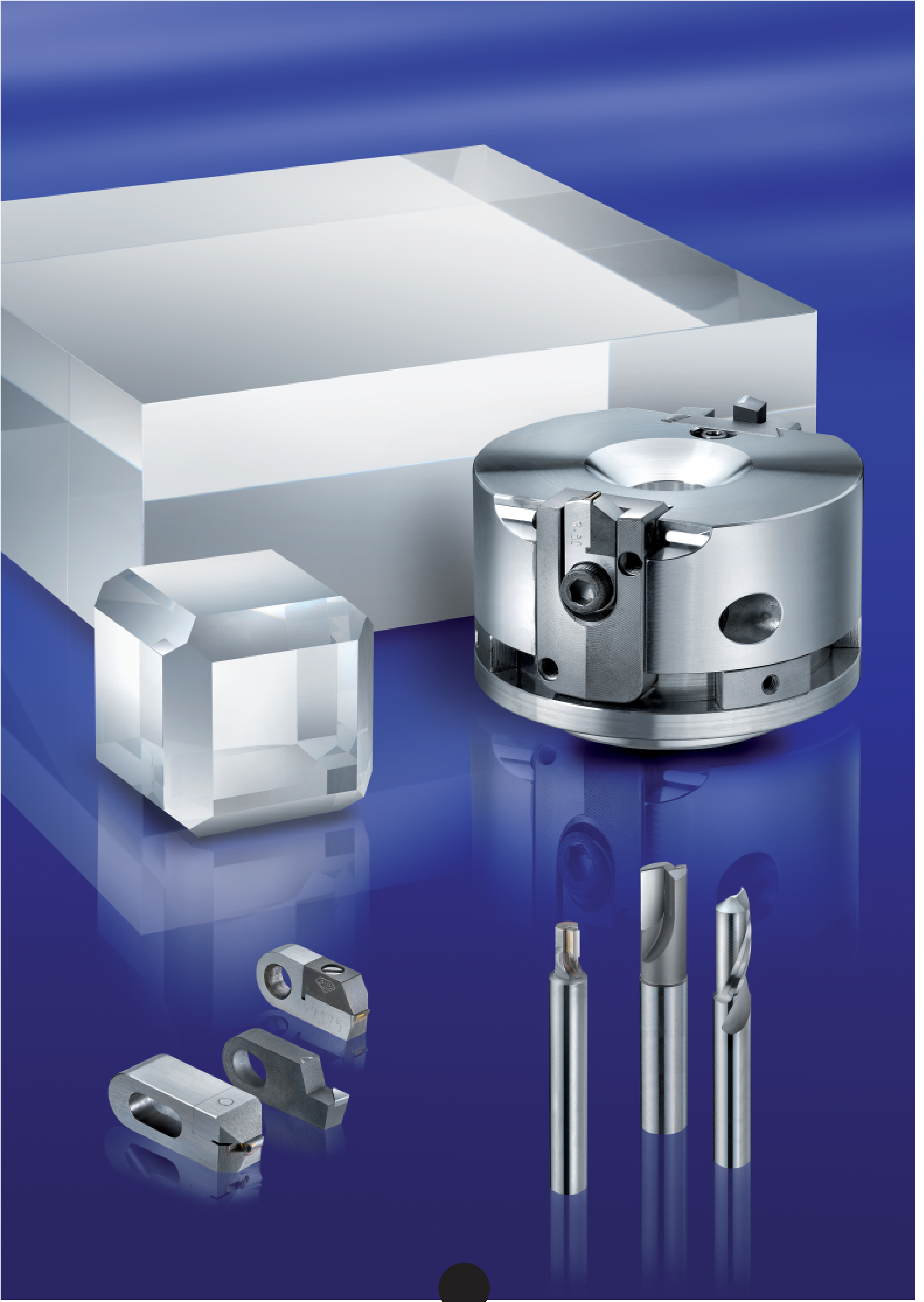
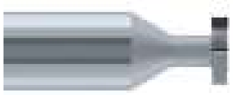
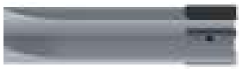
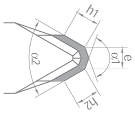


DIAMOND TOOLS



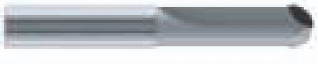
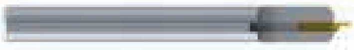




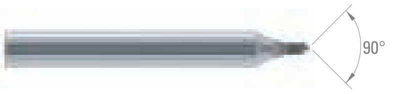
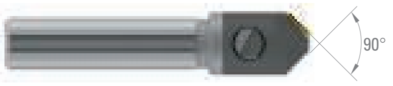
SELECTION OF DIAMOND TOOLS

✓ = item from stock ☺ On request

MILLING CUTTERS

		Z			PCD ●	CVD ▮	ND/MDC ◆	CBN ▲	
DIXI 72420		1 - 2	292		✓	☺		☺	
DIXI 70520		1 - 2	293		✓	☺		☺	
DIXI 70320		1 - 2	294		✓	☺	☺	☺	
DIXI 72310 ND		1	295				☺		
DIXI 72421		1	296				☺		

CHAMFERING TOOLS

		Z			PCD	CVD	ND/MDC	CBN	
DIXI 76230		1	297				✓		
DIXI 76230 DIA		1	297				☺		

FACE MILLING CUTTERS

		Z			PCD	CVD	ND/MDC	CBN	
DIXI 81000		2 - 4	300		✓		✓		
DIXI 80000		6 - 16	301		☺	☺		☺	

DRILLS

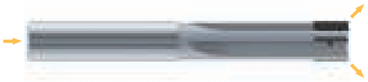
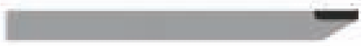
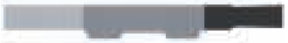
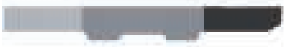
		Z			PCD	CVD	ND/MDC	CBN	
DIXI 11140		1	301		☺				
DIXI 11180		2	301		☺				

○ good ◎ excellent

CBN		PCD CVD ND/MDC									
Steel & cast iron > 45 HRC	Cast iron > 35 HRC	Cu alloy Silver Gold	Cu alloy difficult to machine	Al 4 - 8% Si	Al 8 - 13% Si	Graphite	Unsitered carbide Ceramics	Plastic	Carbon fibres		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
		◎	◎	◎	○	○	○	◎	○		
		◎	◎	◎	○			◎			
		◎	◎	◎	○			◎			
		◎	◎	◎	○			◎			
		◎	◎	◎	○			◎			
		◎	◎	◎	○			◎			
◎	○	◎	◎	◎	○						
		◎	◎	◎	○	○	○	◎	○		
		◎	◎	◎	○	○	○	◎	○		

SELECTION OF DIAMOND TOOLS

✓ = item from stock ☺ On request

		Z	Page		PCD ●	CVD ▮	ND/MDC ◆	CBN ▲	
REAMERS									
POLY 40010-2		4	302		☺			☺	
POLY 40010-3		4	302		☺			☺	
DIXI 25800		-	302		☺	☺	☺	☺	
DIXI 25810		-	302		☺	☺	☺	☺	
TURNING TOOLS									
DIXI 20610		-	303		☺	☺	☺	☺	
DIXI 20770		-	303		☺	☺	☺	☺	
ARTDECO 26500 TR		-	304		✓	☺	☺	☺	
ARTDECO 26500 FT		-	304		✓	☺	☺	☺	
ARTDECO 26500 AV		-	304		✓	☺	☺	☺	
ARTDECO 26500 AR		-	304		✓	☺	☺	☺	
DIXI 264X0		-	303		☺	☺	☺	☺	
DIADIX® WHEEL DRESSERS									
DIXI 1973		-	307						
DIXI 1978		-	307		✓	☺			

○ good ◎ excellent

CBN		PCD CVD ND/MDC									
Steel Hardened cast iron > 45 HRC	Cast iron > 35 HRC	Cu alloy Silver Gold	Cu alloy difficult to machine	Al 4 - 8% Si	Al 8 - 13% Si	Graphite	Unsitered carbide Ceramics	Plastic	Carbon fibres		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		
◎	○	◎	◎	◎	○	○	○	◎	○		

DIXI 72420 PCD

END MILLS, CENTRE CUTTING AND THROUGH COOLANT

Z = 1-2

P. 308

$D_1 \geq$ Ø 6

Cu alloy Silver Gold

Cu alloy difficult to machine

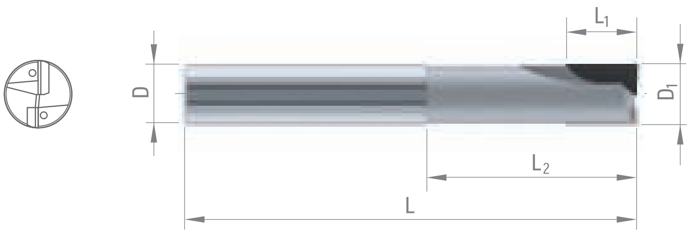
Al

Graphite

Unsitered carbide Ceramics

Plastic

Carbon fibres



$D_{1\ h10}$	L_1	L_2	D	L	Z	PCD
2.00	3.0	6	6	42	1	●
2.00 >	3.0	20	6	75	1	●
3.00	4.0	6	6	42	1	●
3.00 >	4.0	15	6	75	2	●
3.00 >	4.0	20	6	75	2	●
4.00	4.0	8	6	50	1	●
4.00 >	6.5	10	6	50	1	●
4.00 >	6.5	15	6	75	2	●
4.00 >	6.5	25	6	75	2	●
5.00	5.0	10	6	50	2	●
5.00 >	6.5	10	6	50	2	●
5.00 >	6.5	35	6	75	2	●
6.00	6.0	12	6	57	2	●
6.00 >	8.0	34	6	75	2	●
6.00 >	8.0	50	6	100	2	●
7.00	8.0	34	8	75	2	●
8.00	7.0	14	8	63	2	●
8.00 >	10.0	34	8	75	2	●
8.00 >	10.0	50	8	100	2	●
8.00 >	10.0	75	8	125	2	●
9.00	10.0	35	10	75	2	●
10.00	8.0	16	10	75	2	●
10.00 >	12.0	35	10	75	2	●
10.00 >	12.0	75	10	125	2	●
11.00	12.0	38	12	83	2	●
12.00	10.0	20	12	83	2	●
12.00 >	12.0	38	12	83	2	●
12.00 >	12.0	75	12	125	2	●
14.00	12.0	24	14	83	2	●
14.00 >	12.0	38	14	83	2	●
14.00 >	12.0	75	14	125	2	●
16.00	14.0	28	16	92	2	●
16.00 >	14.0	42	16	92	2	●
16.00 >	14.0	75	16	125	2	●
20.00	18.0	36	20	104	2	●
20.00 >	18.0	50	20	125	2	●

CBN ▲ **CVD ▮**

On request

On request

DIXI 70520 PCD

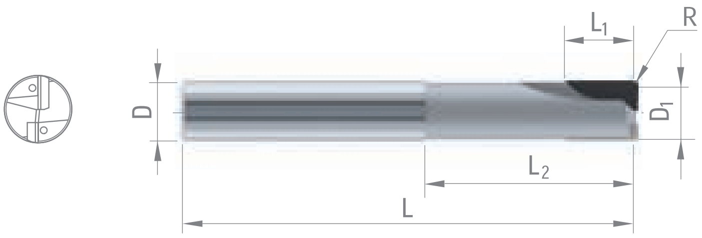
END MILLS, CENTRE CUTTING WITH CORNER RADIUS AND THROUGH COOLANT

Z = 1-2

P. 308

$D_1 \geq$ Ø 6

Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Unsitered carbide Ceramics
Plastic	Carbon fibres			



$D_{1\ h10}$	L_1	L_2	D	L	R	Z	PCD
2.00	3.0	6	6	42	0.1	1	●
2.00 >	3.0	20	6	75	0.1	1	●
3.00	4.0	6	6	42	0.1	1	●
3.00 >	4.0	15	6	75	0.1	2	●
3.00 >	4.0	20	6	75	0.1	2	●
4.00	4.0	8	6	50	0.1	1	●
4.00 >	6.5	10	6	50	0.1	1	●
4.00 >	6.5	15	6	75	0.1	2	●
4.00 >	6.5	25	6	75	0.1	2	●
5.00	5.0	10	6	50	0.1	2	●
5.00 >	6.5	10	6	50	0.1	2	●
5.00 >	6.5	35	6	75	0.1	2	●
6.00	6.0	12	6	57	0.1	2	●
6.00 >	8.0	34	6	75	0.1	2	●
6.00 >	8.0	50	6	100	0.1	2	●
7.00	8.0	34	8	75	0.1	2	●
8.00	7.0	14	8	63	0.1	2	●
8.00 >	10.0	34	8	75	0.1	2	●
8.00 >	10.0	50	8	100	0.1	2	●
8.00 >	10.0	75	8	125	0.1	2	●
9.00	10.0	35	10	75	0.1	2	●
10.00	8.0	16	10	75	0.1	2	●
10.00 >	12.0	35	10	75	0.1	2	●
10.00 >	12.0	75	10	125	0.1	2	●
11.00	12.0	38	12	83	0.1	2	●
12.00	10.0	20	12	83	0.1	2	●
12.00 >	12.0	38	12	83	0.1	2	●
12.00 >	12.0	75	12	125	0.1	2	●
14.00	12.0	24	14	83	0.1	2	●
14.00 >	12.0	38	14	83	0.1	2	●
14.00 >	12.0	75	14	125	0.1	2	●
16.00	14.0	28	16	92	0.1	2	●
16.00 >	14.0	42	16	92	0.1	2	●
16.00 >	14.0	75	16	125	0.1	2	●
20.00	18.0	36	20	104	0.1	2	●
20.00 >	18.0	50	20	125	0.1	2	●

CBN ▲ **CVD ▮**

On request

DIXI 70320 PCD

BALL-NOSE END MILLS
WITH THROUGH COOLANT

Z = 1-2

P. 308

$D_1 \geq Ø 6$

R = $D_1/2$

Cu alloy Silver Gold

Cu alloy difficult to machine

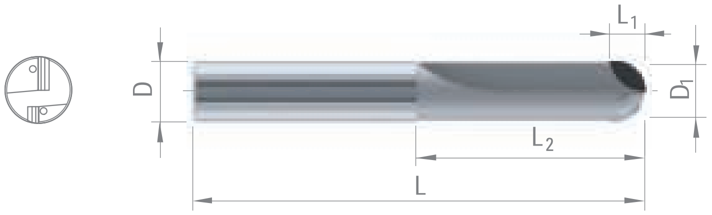
Al

Graphite

Unsitered carbide Ceramics

Plastic

Carbon fibres



$D_{1\ h10}$	L_1	L_2	D	L	Z	PCD
2.00	2.0	6.0	6	42	1	●
2.00	2.0	25.0	6	75	1	●
3.00	2.5	6.0	6	42	1	●
3.00	2.5	25.0	6	75	1	●
3.00	2.5	25.0	6	75	2	●
4.00	3.0	8.0	6	50	1	●
4.00	3.0	10.0	6	50	1	●
4.00	3.0	10.0	6	50	2	●
4.00	3.0	25.0	6	75	2	●
5.00	4.0	10.0	6	50	2	●
5.00	4.0	25.0	6	75	2	●
6.00	4.0	12.0	6	57	2	●
6.00	4.0	34.0	6	75	2	●
6.00	4.0	50.0	6	100	2	●
8.00	5.0	14.0	8	63	2	●
8.00	5.0	34.0	8	75	2	●
8.00	5.0	75.0	8	125	2	●
10.00	6.0	16.0	10	72	2	●
10.00	6.0	35.0	10	75	2	●
10.00	6.0	75.0	10	125	2	●
12.00	7.0	20.0	12	83	2	●
12.00	7.0	38.0	12	83	2	●
12.00	7.0	75.0	12	125	2	●

CBN ▲ **CVD ▮**

On request

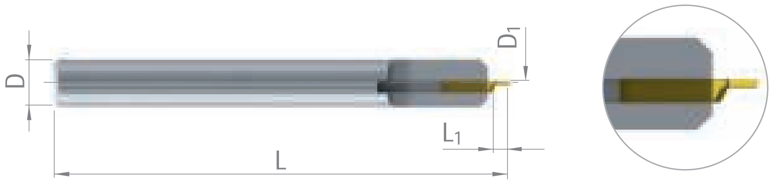
DIXI 72310 ND TOOLS ON REQUEST

NATURAL DIAMOND MICRO END MILLS

Z = 1

P. 308

Cu alloy
Silver
Gold | Cu alloy
difficult
to machine | Al | Plastic



D_1	L_1	D_{h6}	L	Z	ND
0.20	0.4	3	30	1	◆
0.30	0.6	3	30	1	◆
0.40	0.8	3	30	1	◆
0.50	1.0	3	30	1	◆
0.60	1.2	3	30	1	◆
0.70	1.4	3	30	1	◆
0.80	1.6	3	30	1	◆
0.90	1.8	3	30	1	◆
1.00	2.5	3	30	1	◆
1.10	2.5	3	30	1	◆
1.20	2.5	3	30	1	◆
1.30	2.5	3	30	1	◆
1.40	2.5	3	30	1	◆
1.50	2.5	3	30	1	◆
1.60	2.5	3	30	1	◆
1.70	2.5	3	30	1	◆
1.80	2.5	3	30	1	◆
1.90	2.5	3	30	1	◆
2.00	2.5	6	30	1	◆
3.00	2.5	6	30	1	◆
4.00	2.5	6	30	1	◆
5.00	2.5	6	30	1	◆
6.00	2.5	6	30	1	◆

Steel shank

When ordering, please specify the material to be machined (non-ferrous)

DIXI 72421 TOOLS ON REQUEST

END MILLS FOR ACRYL

Z = 1

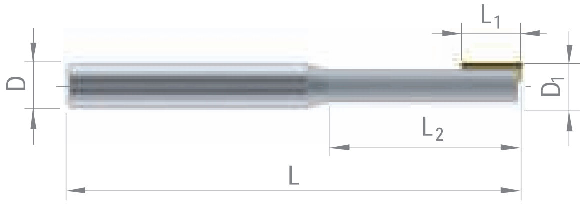
P. 308

Cu alloy Silver Gold

Cu alloy difficult to machine

Al

Plastic



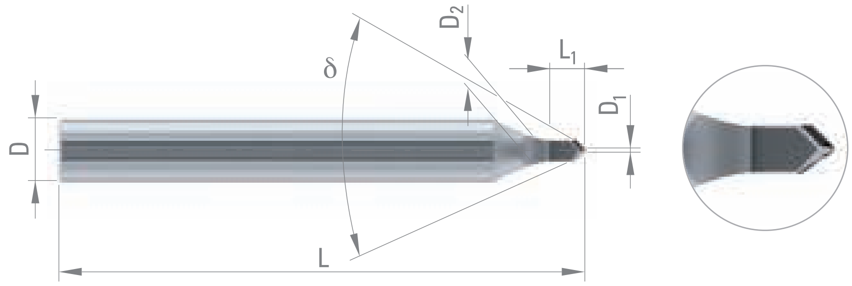
D_1	L_1	L_2	D_{h6}	L	ND/MDC
6	4	25	6	60	◆
6	6	25	6	60	◆
6	8	25	6	60	◆
8	4	25	8	60	◆
8	6	25	8	60	◆
8	8	25	8	60	◆
10	4	25	10	60	◆
10	6	25	10	60	◆
10	8	25	10	60	◆
10	10	25	10	60	◆
12	4	25	12	60	◆
12	6	25	12	60	◆
12	8	25	12	60	◆
12	10	25	12	60	◆

DIXI 76230 ND

NATURAL DIAMOND CHAMFERING TOOLS

Z = 1

Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



D_1	L_1	D_2	δ	D_{h6}	L	ND
* 0.10	2.60	3	30°	6	50	◆
* 0.10	1.20	3	60°	6	50	◆
* 0.10	0.70	3	90°	6	50	◆

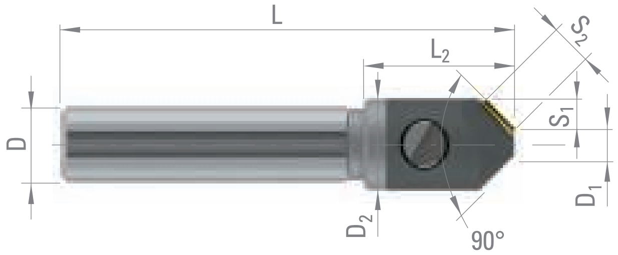
* not cutting

DIXI 76230 TOOLS ON REQUEST

MONOCRISTALLINE DIAMOND CHAMFERING TOOLS

Z = 1

Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



D_1	D_2	L_2	S_1	S_2	D_{h6}	L	ND/MDC
4	10	-	3	4.10	10	60	◆
4	12	20	4	5.50	10	60	◆
4	14	20	5	7.00	10	60	◆
4	16	20	6	8.50	10	60	◆

Cutting material ☐ **PCD** ☐ **CVD** ☐ **MDC / ND** ☐ **CBN**

Material to be machined:

HRC hardness: ⇩

DIXI 70XX0 TOOLS ON REQUEST

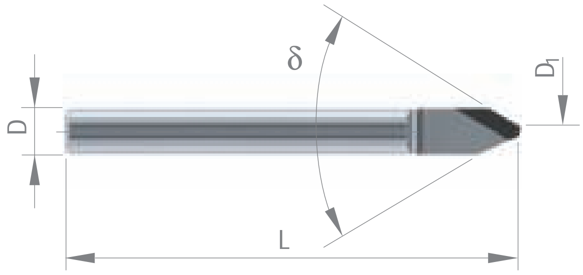
ENGRAVING TOOLS

D_1 =

D =

L =

δ =



DIXI 15150 TOOLS ON REQUEST

T-SLOT CUTTERS

Z =

D =

D_1 =

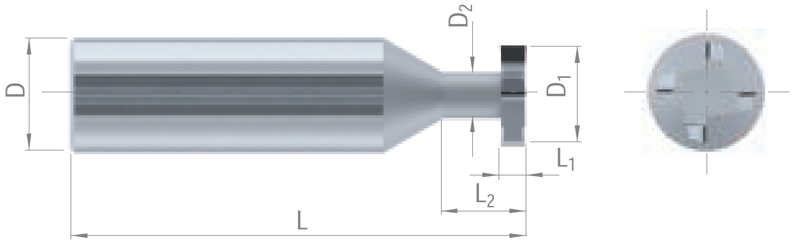
D_2 =

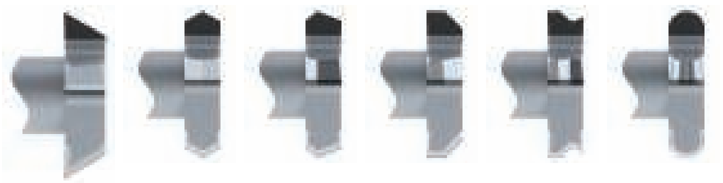
L =

L_1 =

L_2 =

R =





DIXI 16560 TOOLS ON REQUEST

CONCAVE SLITTING SAWS

D_1 =

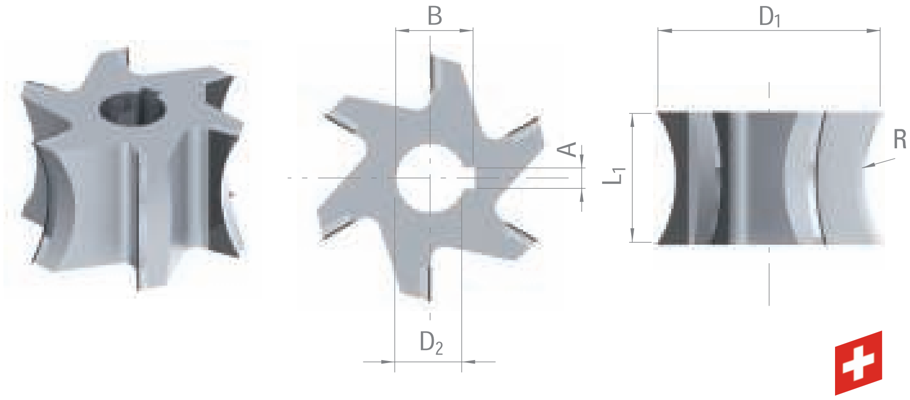
D_2 =

L_1 =

R =

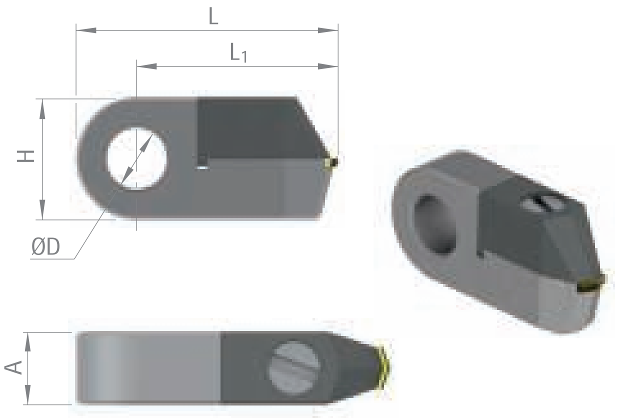
A =

B =

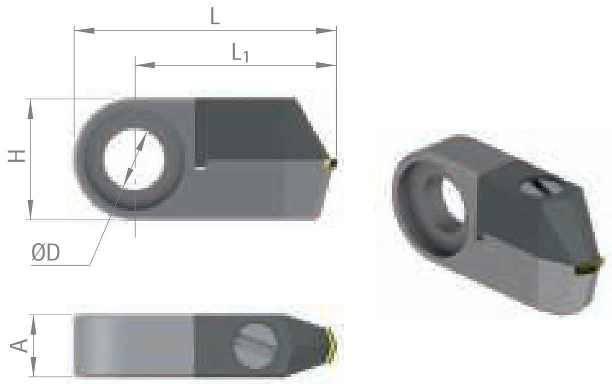


TURNING AND MILLING DIAMOND TOOLS

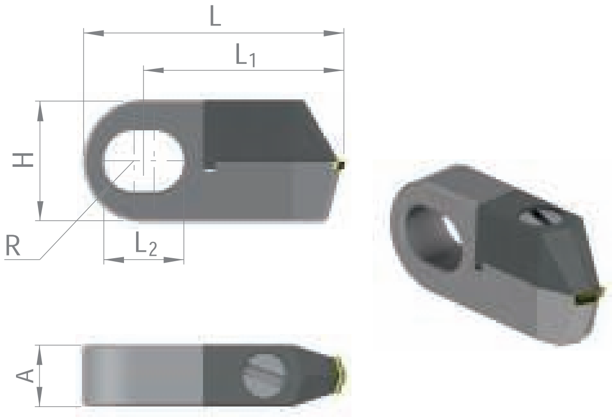
A



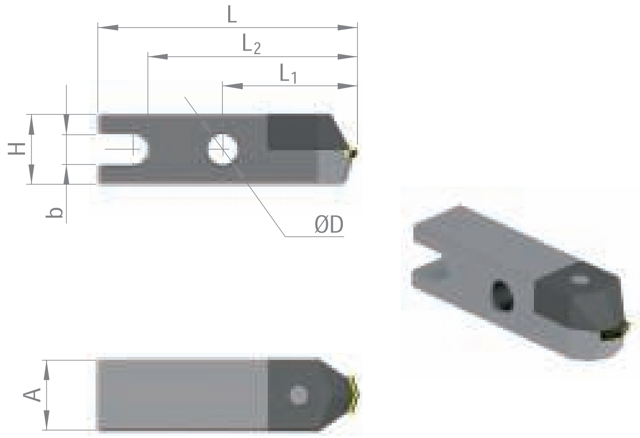
B



C



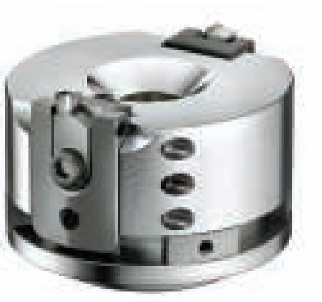
D



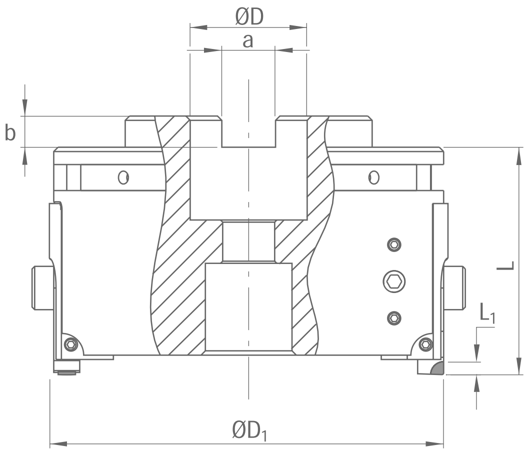
A large variety of diamond tools for turning and milling on request.
When ordering, please specify the cutting material (PCD - CBN - MDC / ND - CVD) and the material to be machined + its hardness in HRC (CBN tool).
For a range of special shapes, see pages **305-306**.

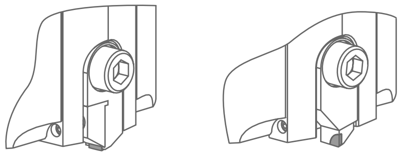
DIXI 81000

FACE MILLING HEAD FOR MIRROR FINISH



P. 310





Milling heads with interchangeable tool holders

D_1	D	L	Z	Description
135	-	70	4	Milling head with conical attachment for Wolf machines
125	-	24	4	Milling head with attachment for Bermaq machines Ø 25
100	27	55	4	Milling head with attachment for face milling arbor Ø 27
85	27	55	2	Milling head with attachment for face milling arbor Ø 27

Milling heads without interchangeable tool holders

D_1	D	L	Z	Description
60	22	40	2	Milling head with attachment for face milling arbor Ø 22
50	22	45	2	Milling head with attachment for face milling arbor Ø 22
40	16	55	2	Milling head with attachment for face milling arbor Ø 16
40	12	55	2	Milling head with shank Ø 12

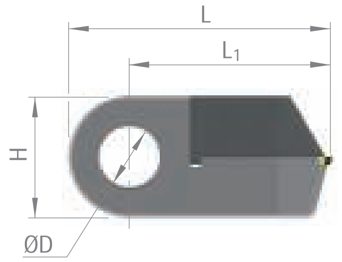
Interchangeable tool holders

Ref.	Description
974052	Holder for roughing/finishing tool
974053	Dummy

DIXI 20370

MILLING TOOLS

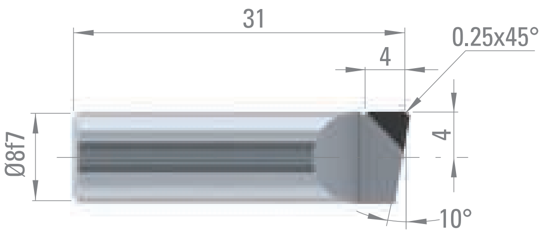
for DIXI 81000 face milling heads



Ref.	Description	Material to be machined
968117	PCD milling tools	Non ferrous materials
971664	PCD milling tools	Brass
968111	Monocristaline diamond milling tools	Plastic
969556	Monocristaline diamond milling tools	Aluminium / Copper
968526	Monocristaline diamond milling tools	Titanium
969557	Monocristaline diamond milling tools	Brass

DIXI 20370

CUTTING PINS Ø 8 x 31



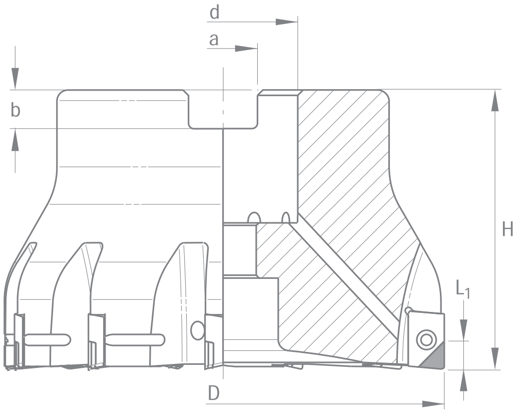
Ref.	Description
968179	PCD pin for roughing (black)
968181	PCD pin for finishing (red)
974193	PCD pin for satined surface (green)
968178	Diamond pin for transparent surface finish (blue)

DIXI 80000

ADJUSTABLE HOLDER FOR ISO INSERTS
FOR FACE MILLING APPLICATION

Z = 6-16

P. 310



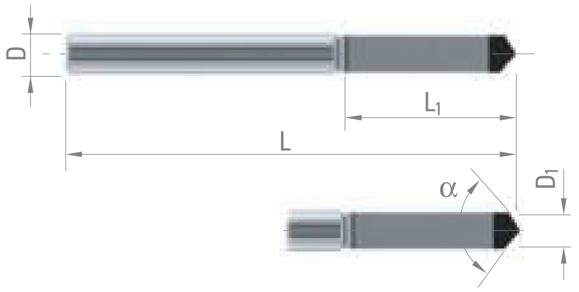
D	L_1	H	a	b	d	Z	Weight [kg]
40.00	3.0	40	8.4	6.6	16	6	0.20
50.00	3.0	40	10.4	7.2	22	7	0.35
63.00	3.0	40	10.4	7.2	22	8	0.60
80.00	3.0	50	12.4	7.2	27	11	1.20
100.00	3.0	50	14.4	8.2	32	13	2.00
125.00	3.0	50	16.4	9.0	32	16	2.20

Lubrication on each tooth.
Inserts independently adjustable at ± 2µm.
DIXI 26420 AKPT 10.03.05 ISO inserts have to be ordered separately specifying:
- Cutting material: PCD - CBN - CVD
- Material to be machined + its HRC hardness (CBN tool)

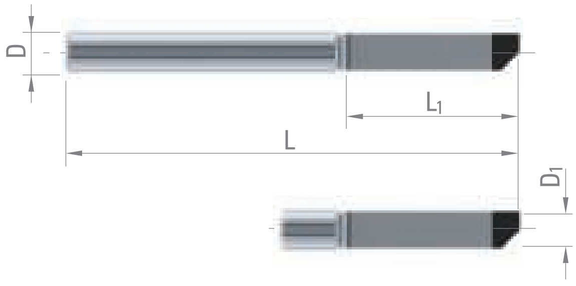
DIXI 11140 - 11180 TOOLS ON REQUEST

STRAIGHT FLUTE DRILLS

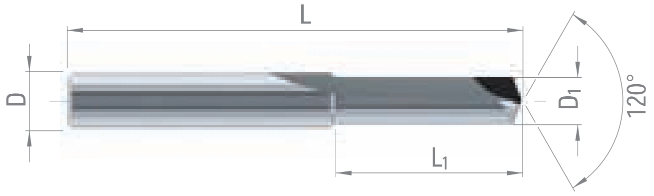
DIXI 11140 A - PCD



DIXI 11140 B - PCD



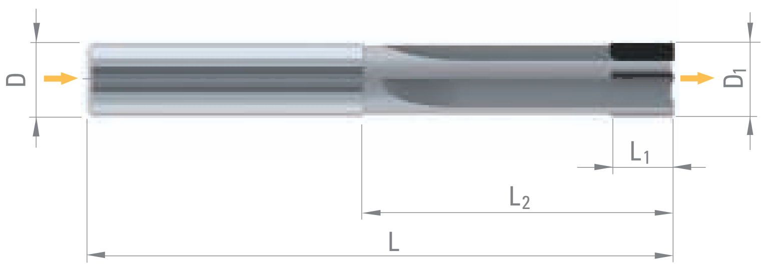
DIXI 11180 - PCD



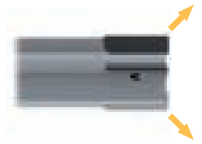
POLY 40010-2 - 40010-3 TOOLS ON REQUEST

PCD REAMERS

POLY 40010-2



POLY 40010-3

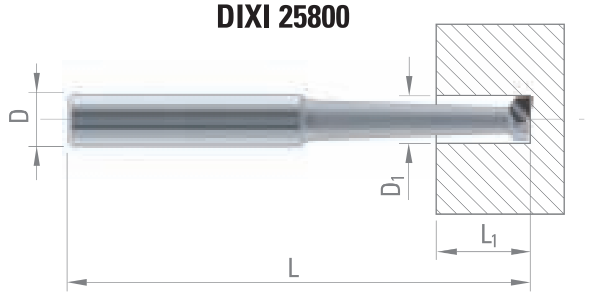


D1			L1	L2	D_{h6}	L	Z	PCD
8.000	-	9.100	7	34	8	64	4	●
9.102	-	10.100	7	44	10	80	4	●
10.101	-	11.100	7	44	10	80	4	●
11.101	-	12.300	7	63	12	108	4	●
12.300	-	13.100	7	63	12	108	4	●
13.101	-	14.500	7	58	16	108	4	●
14.501	-	16.100	7	58	16	108	4	●
16.101	-	18.100	7	58	16	108	4	●
18.101	-	20.500	7	58	20	108	4	●
20.501	-	22.100	7	58	20	108	4	●

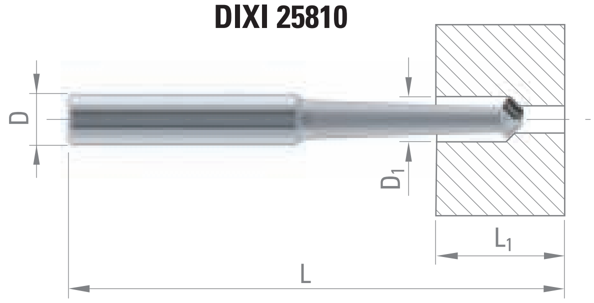
DIXI 25800 - 25810 TOOLS ON REQUEST

BORING TOOLS

DIXI 25800



DIXI 25810

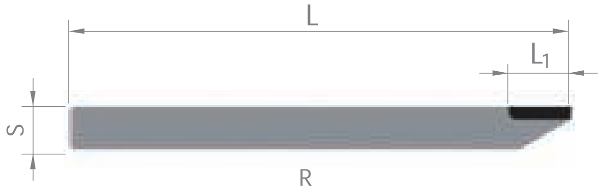


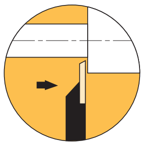
DIXI 20160-20770 TOOLS ON REQUEST

TURNING TOOLS

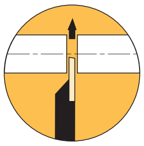
P. 312

DIXI 20610





DIXI 20770

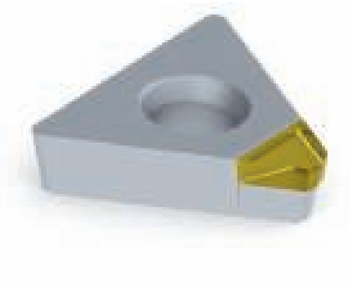


Available with cylindrical shank under references **DIXI 20611 / 20771**

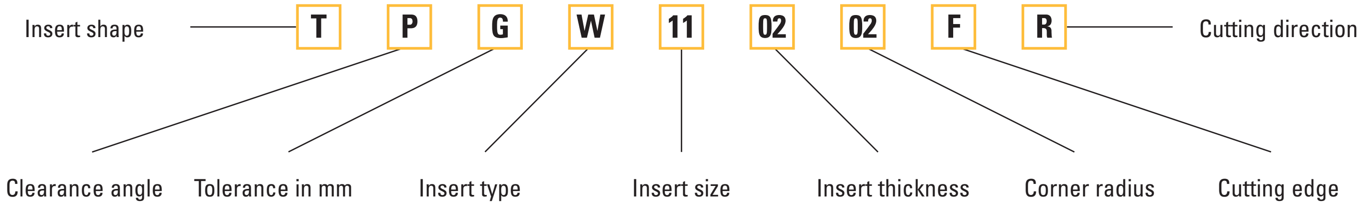
DIXI 264X0 TOOLS ON REQUEST

INSERTS AS PER DIN 4987/ISO 1832

When ordering, please attach a sketch of the insert showing the diamond part.
Please specify the ISO designation, the cutting material (PCD - CBN - MDC / ND - CVD), the material to be machined + its hardness in HRC (CBN tool).
Special ISO inserts available on request.
For a range of special shapes, see pages **305-306.**



Designation example (according to DIN 4987 / ISO 1832) **DIXI 26400 TPGW 11.02.02 FR**



ARTDECO 26500

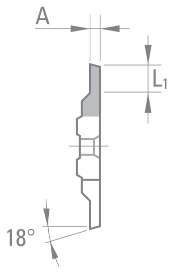
TURNING INSERTS

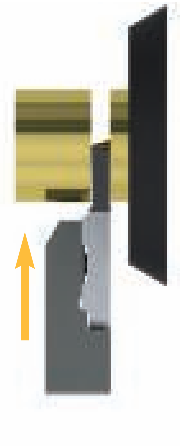
P. 312

PARTING OFF

ARTDECO 26500 TR

R	L_1	A	L	PCD
TR06R-0.8	3.0	0.8	TR06L-0.8	●
TR06R-1.0	4.0	1.0	TR06L-1.0	●
TR06R-1.2	5.0	1.2	TR06L-1.2	●
TR06R-1.5	5.0	1.5	TR06L-1.5	●
TR06R-1.8	6.0	1.8	TR06L-1.8	●
TR06R-2.0	6.0	2.0	TR06L-2.0	●

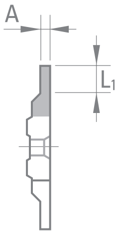


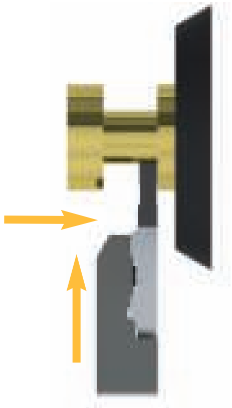


PLUNGING / TURNING

ARTDECO 26500 FT

R	L_1	A	L	PCD
FT06R-2.0	4.0	2.0	FT06L-2.0	●

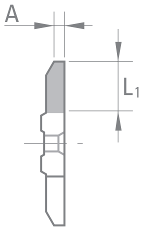


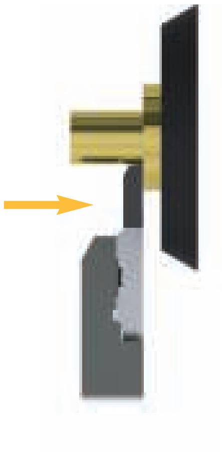


FRONT TURNING

ARTDECO 26500 AV

R	L_1	A	L	PCD
AV06R-1.5	5.0	1.5	AV06L-1.5	●

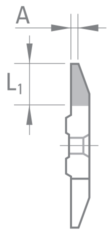


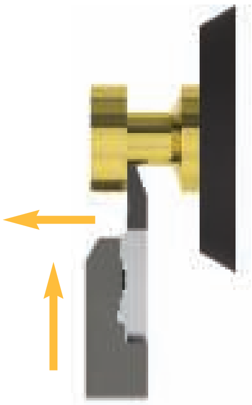


BACK TURNING

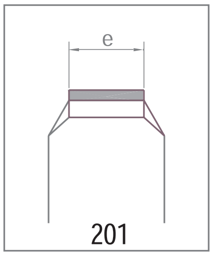
ARTDECO 26500 AR

R	L_1	A	L	PCD
AR06R-1.0	5.0	1.0	AR06L-1.0	●





RANGE OF SPECIAL SHAPES



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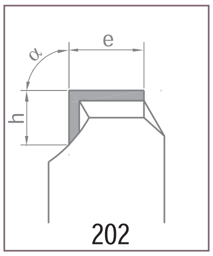

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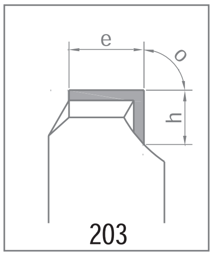

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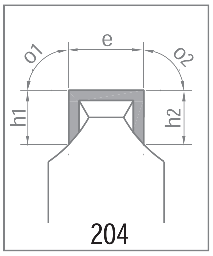

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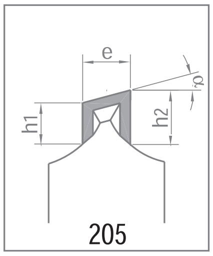

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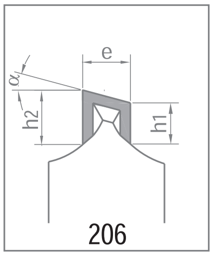

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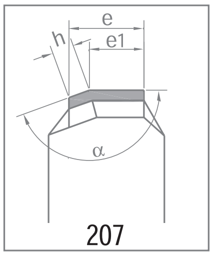

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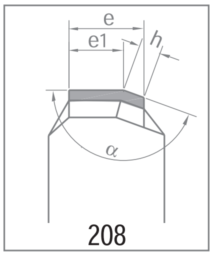

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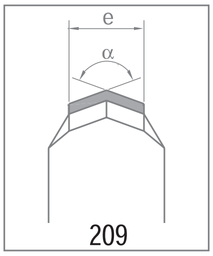

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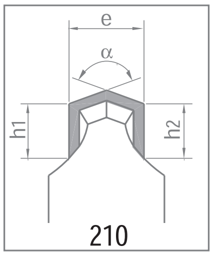

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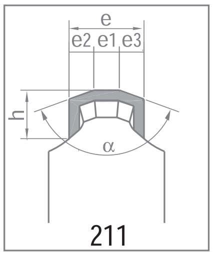

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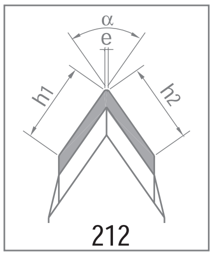

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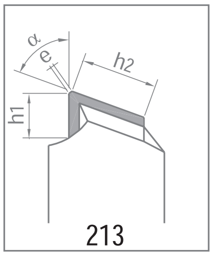

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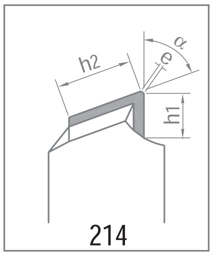

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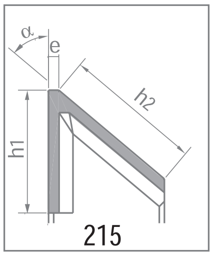

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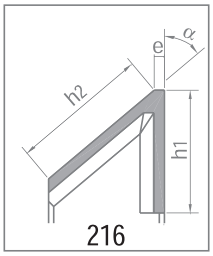

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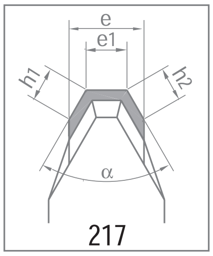

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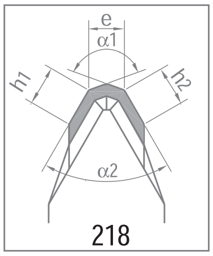

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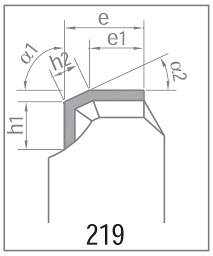

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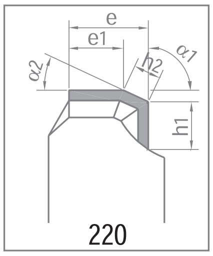

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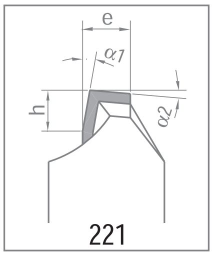

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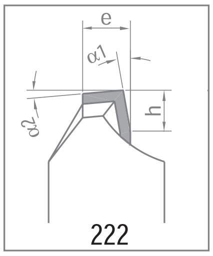

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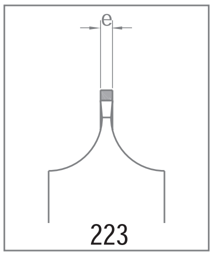

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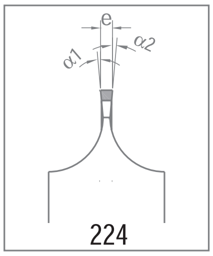

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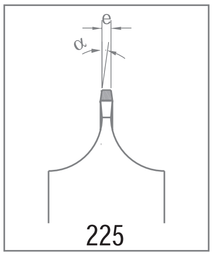

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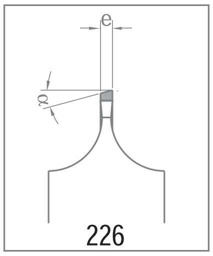

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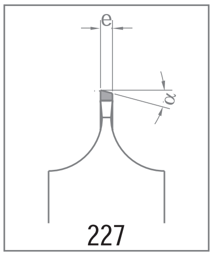

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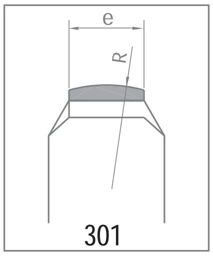

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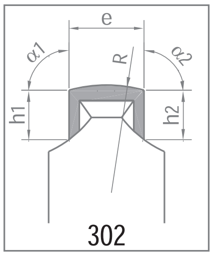

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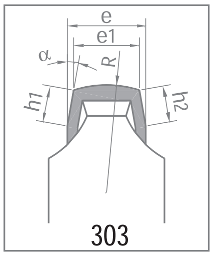

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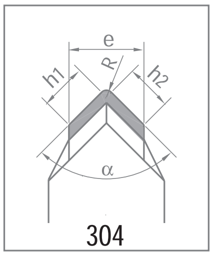

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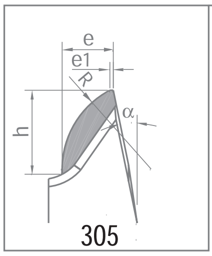

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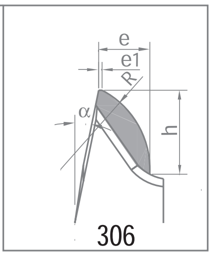

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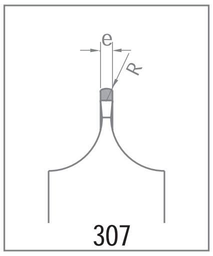

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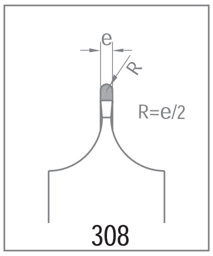

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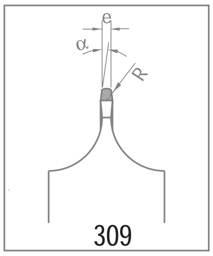

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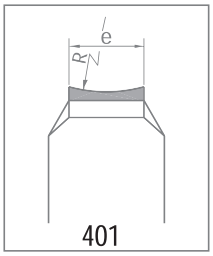

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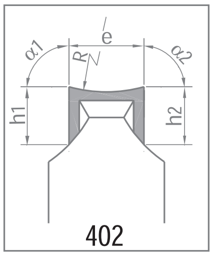

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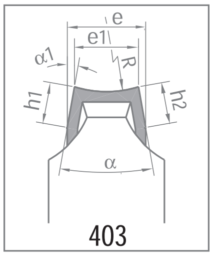

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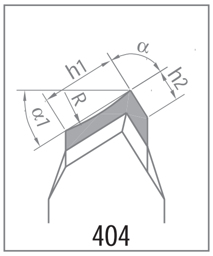

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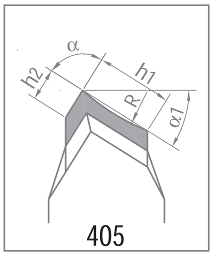

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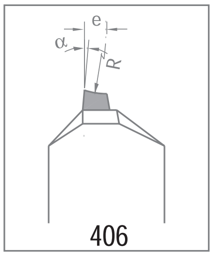

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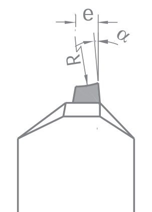
RANGE OF SPECIAL SHAPES



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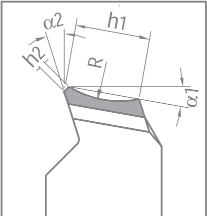

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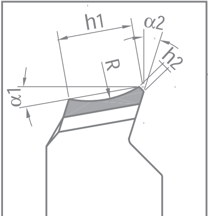

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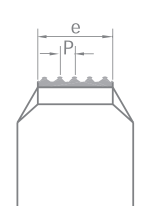

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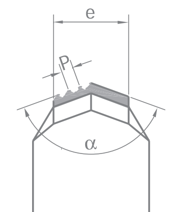

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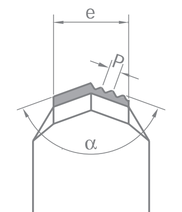

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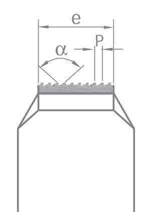

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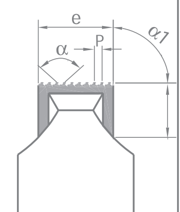

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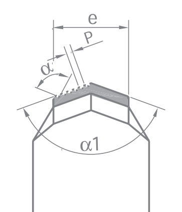

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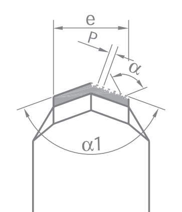

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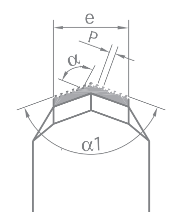

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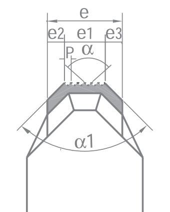

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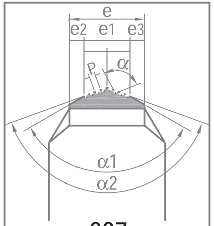

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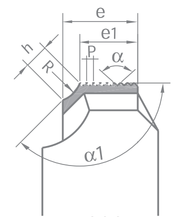

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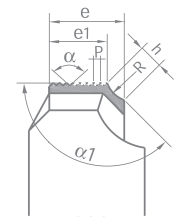

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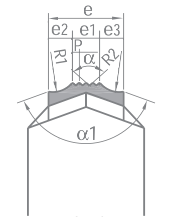

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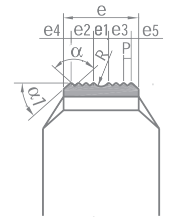

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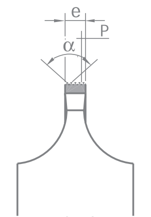

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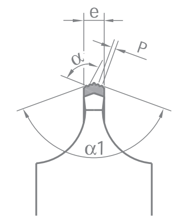

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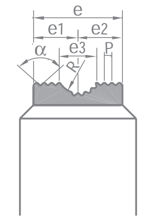

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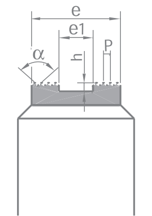

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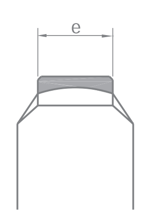

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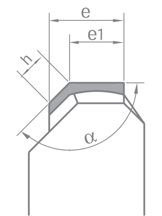

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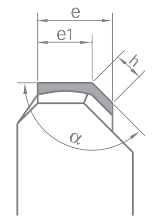

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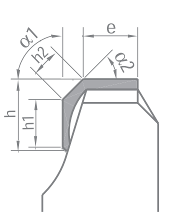

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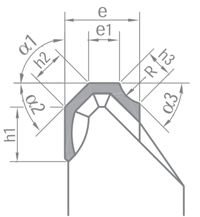

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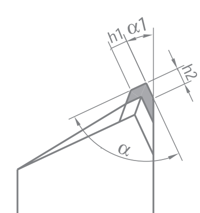

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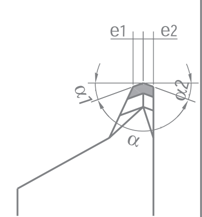

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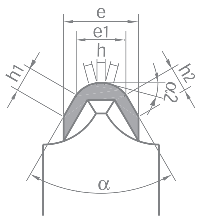

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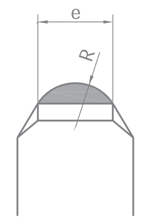

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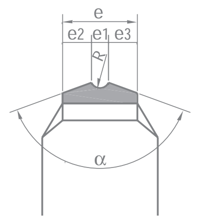

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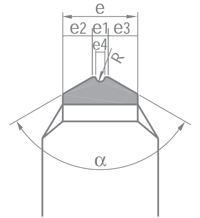

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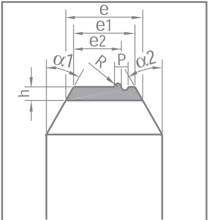

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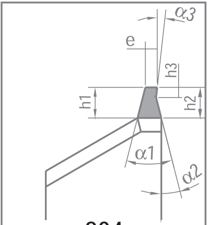

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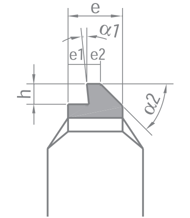

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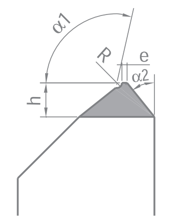

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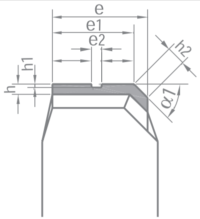

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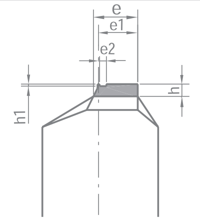

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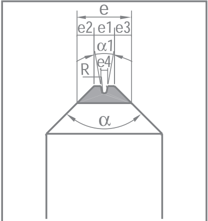
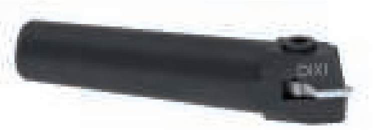
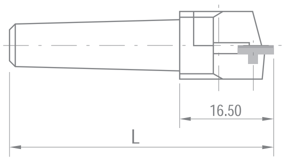


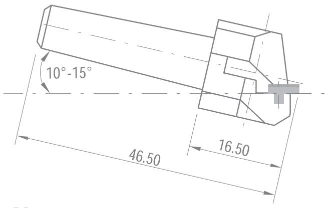
809

DIADIX® WHEEL-DRESSERS

DIADIX® HOLDERS

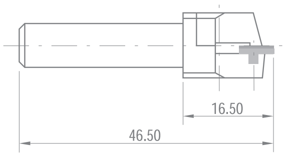


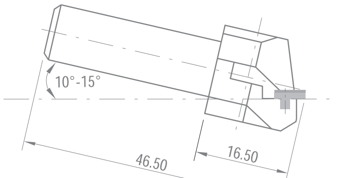




DIXI 1973.0023 morse taper 0 L = 46.5
DIXI 1973.0123 morse taper 1 L = 59.5

DIXI 1973.0013 morse taper 0
DIXI 1973.0113 morse taper 1

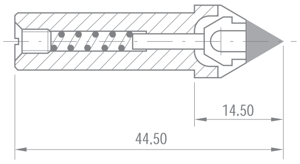


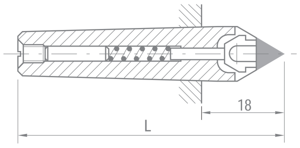


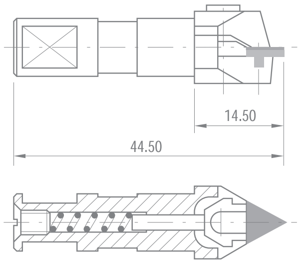
DIXI 1973.0823 Ø 8 mm
DIXI 1973.1023 Ø 10 mm
DIXI 1973.1223 Ø 12 mm

DIXI 1973.1013 Ø 10 mm

DIADIX® HOLDERS FOR PROFILER







Tool holder for profile dressing with automatic centering of the insert

Cylindrical holder

DIXI 1973.1025 Ø 10 mm.

Holders with morse taper

DIXI 1973.0125 morse taper 1 **L 58.5**
Ref. 24551
DIXI 1973.0125 morse taper 1 **L 36.5**
Ref. 26549

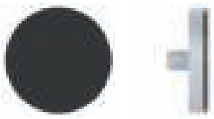
DIXI 1973.0925-1

On request, DIXI can develop special holders for various machines such as: Agathon, Kellenberger, Studer, Tripet, Tschudin (HTT), Voumard, etc...

DIADIX® INSERTS

Inserts for rough wheel dressing

DIXI 1978.360°

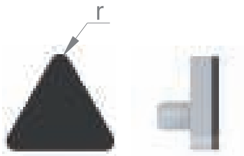


DIXI 1978.23

Inserts for profiling devices

DIXI 1978.2500

DIXI 1978.25XX



DIXI 1978.2512 r = 0.125 mm
DIXI 1978.2520 r = 0.200 mm
DIXI 1978.2525 r = 0.250 mm
DIXI 1978.2550 r = 0.500 mm

DIXI 72310 ND

CUTTING CONDITIONS

Material to be machined			ND	
			Vc [m/min]	
N	Copper alloys - easy to machine (brass - bronze)		**400**	800
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**300**	700
N	Aluminium alloys / Magnesium alloy		**500**	2000
N	Aluminium alloys	Si < 3 - 8%	**400**	1800
N	Cast aluminium	Si > 8 - 13%	**400**	1500
N	Plastic		**500**	1500
N	Gold, silver		**200**	750

DIXI 72420 - 70520 - 70320 - 72421

CUTTING CONDITIONS

Material to be machined			PCD		CVD		ND / MDC		CBN	
			Vc [m/min]		Vc [m/min]		Vc [m/min]		Vc [m/min]	
H	Tool steel and cast iron								**160**	280
K	Cast iron	> 350 HB							**160**	280
N	Copper alloys - easy to machine (brass - bronze)		**200**	1000	**400**	1200	**400**	800		
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**100**	1500	**200**	1700	**300**	700		
N	Aluminium alloys / Magnesium alloy		**700**	3000	**400**	1200	**500**	2000		
N	Aluminium alloys	Si < 3 - 8%	**300**	3500	**400**	1200	**400**	1800		
N	Cast aluminium	Si > 8 - 13%	**100**	3000	**200**	900	**400**	1200		
N	Graphite		**200**	1000	**400**	1200				
N	Unsitered carbide and ceramics		**200**	1000	**400**	1200				
N	Plastic		**500**	2000	**400**	1200	**500**	1500		
N	Carbon fibres		**1000**	3000	**400**	1200				
N	Gold, silver		**300**	1000	**400**	1200	**200**	750		

$$n\,[\text{tr/min}] = \frac{Vc\,[\text{m/min}] \times 1000}{\pi \times D_1\,[\text{mm}]}$$

$$Vf\,[\text{mm/min}] = n\,[\text{tr/min}] \times fz\,[\text{mm}] \times z$$

Feed per revolution **fz [mm]**

Ø D_1 0.10 - 1.00	Ø D_1 1.00 - 2.00
0.0005 - 0.005	**0.005** - 0.03
0.0005 - 0.005	**0.005** - 0.03
0.0005 - 0.005	**0.005** - 0.03
0.0005 - 0.005	**0.005** - 0.03
0.0005 - 0.005	**0.005** - 0.03
0.0005 - 0.005	**0.005** - 0.03
0.0005 - 0.005	**0.005** - 0.03

	PCD -CVD-CBN		PCD -CVD-CBN		DIA ND / MDC
fz [mm]	ap [mm]	ae [mm]	ap [mm]	ae [mm]	ap + ae [mm]
0.10 - 0.15	≤ **0.5 x D**	≤ **0.5 x D**	**0.10** - 0.30	**0.10** - 0.30	**max. = 0.05**
0.10 - 0.20	≤ **0.6 x D**	≤ **0.6 x D**	**0.10** - 0.30	**0.10** - 0.30	
0.05 - 0.25	≤ **1 x D**	≤ **1 x D**	**0.10** - 0.30	**0.10** - 0.30	
0.05 - 0.20	≤ **0.6 x D**	≤ **0.6 x D**	**0.10** - 0.30	**0.10** - 0.30	
0.05 - 0.25	≤ **1 x D**	≤ **1 x D**	**0.10** - 0.30	**0.10** - 0.30	
0.05 - 0.20	≤ **1 x D**	≤ **1 x D**	**0.10** - 0.30	**0.10** - 0.40	
0.05 - 0.20	≤ **1 x D**	≤ **1 x D**	**0.10** - 0.30	**0.10** - 0.30	
0.05 - 0.20	≤ **1 x D**	≤ **1 x D**	**0.10** - 0.30	**0.10** - 0.30	
0.025 - 0.125	≤ **1 x D**	≤ **1 x D**	**0.10** - 0.30	**0.10** - 0.30	
0.05 - 0.30	≤ **1 x D**	≤ **1 x D**	**0.10** - 0.30	**0.10** - 0.30	
0.05 - 0.30	≤ **1 x D**	≤ **1 x D**	**0.10** - 0.30	**0.10** - 0.30	
0.05 - 0.25	≤ **0.6 x D**	≤ **0.6 x D**	**0.10** - 0.30	**0.10** - 0.30	

DIXI 80000

CUTTING CONDITIONS

Material to be machined			PCD	CVD	CBN
			Vc [m/min]	Vc [m/min]	Vc [m/min]
H	Tool steel and cast iron				**350** 700
K	Cast iron	> 350 HB			**500** 1600
N	Copper alloys - easy to machine (brass - bronze)		**< 3000**	**< 3000**	
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**< 3000**	**< 3000**	
N	Aluminium alloys / Magnesium alloy		**< 7000**	**< 7000**	
N	Aluminium alloys	Si < 3 - 8%	**< 6000**	**< 6000**	
N	Cast aluminium	Si > 8 - 13%	**< 5000**	**< 5000**	

DIXI 81000

CUTTING CONDITIONS

Material to be machined			PCD + ND	
			Vc [m/min]	
N	Copper alloys - easy to machine (brass - bronze)		**400**	800
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**300**	700
N	Aluminium alloys / Magnesium alloy		**500**	2000
N	Aluminium alloys	Si < 3 - 8%	**400**	1800
N	Cast aluminium	Si > 8 - 13%	**400**	1200
N	Plastic		**500**	1500
N	Gold, silver		**200**	750

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times z$$

ap [mm]	fz [mm]
0.20 - 1.00	**0.04** - 0.12
0.20 - 1.50	**0.08** - 0.15
0.10 - 3.50	**0.05** - 0.25
0.10 - 3.50	**0.05** - 0.25
0.10 - 3.50	**0.05** - 0.25
0.10 - 3.50	**0.05** - 0.25
0.10 - 3.50	**0.05** - 0.25

ap [mm]	fz [mm]
< 2	**0.02** - 0.2
< 2	**0.02** - 0.2
< 2	**0.02** - 0.2
< 2	**0.02** - 0.2
< 2	**0.02** - 0.2
< 2	**0.02** - 0.2
< 2	**0.02** - 0.2

CUTTING CONDITIONS

Material to be machined			PCD		CVD		ND / MDC		CBN	
			Vc [m/min]		Vc [m/min]		Vc [m/min]		Vc [m/min]	
H	Tool steel and cast iron								**100**	200
K	Cast iron	> 350 HB							**200**	600
N	Copper alloys - easy to machine (brass - bronze)		**300**	1000	**300**	1000	**300**	1000		
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**250**	800	**250**	800	**250**	800		
N	Aluminium alloys / Magnesium alloy		**300**	1000	**300**	1000	**300**	1000		
N	Aluminium alloys	Si < 3 - 8%	**300**	1000	**300**	1000	**300**	1000		
N	Cast aluminium	Si > 8 - 13%	**250**	800	**250**	800	**250**	800		
N	Graphite		**80**	1500	**80**	1500				
N	Unsitered carbide and ceramics		**100**	800	**100**	800				
N	Plastic		**100**	600	**100**	600	**100**	600		
N	Carbon fibres		**100**	600	**100**	600				
N	Gold, silver		**300**	1000	**300**	1000	**300**	1000		

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

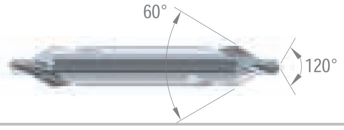
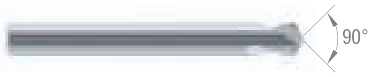
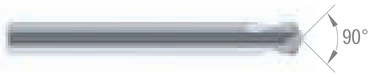
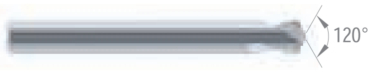
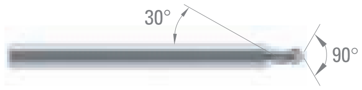
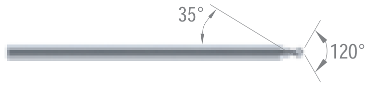
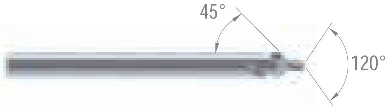
$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times z$$

PCD -CVD-CBN		DIA ND / MDC	
Depth of cut (mm)	Feed (mm/rev)	Depth of cut (mm)	Feed (mm/rev)
< 3	**0.05** - 0.20		
< 3	**0.05** - 0.70		
< 10	**0.05** - 0.50	< 0.05	**0.05** - 0.50
< 6	**0.05** - 0.50	< 0.05	**0.05** - 0.50
< 10	**0.05** - 0.50	< 0.05	**0.05** - 0.50
< 10	**0.05** - 0.50	< 0.05	**0.05** - 0.50
< 6	**0.05** - 0.50	< 0.05	**0.05** - 0.50
< 10	**0.05** - 0.50		
< 5	**0.05** - 0.20		
< 10	**0.10** - 0.60	< 0.05	**0.10** - 0.60
< 3	**0.05** - 0.60		
< 6	**0.05** - 0.50	< 0.05	**0.05** - 0.50

DRILLING 3

SELECTION OF DRILLS

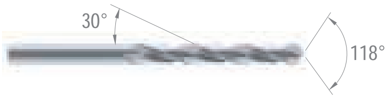
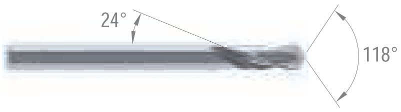
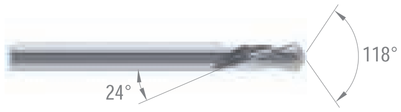
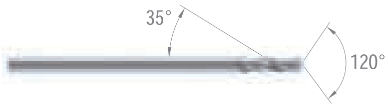
✓ = item from stock

CENTRE AND SPOTTING DRILLS		Z	Page	Lc	☐ CARBIDE	TiN 🟨	DICUT 🟪	TiAlN 🟦	
DIXI 1101 R Ø 0.80 - 4.00		2	10	DIN 333 A	✓				
DIXI 1106 R Ø 1.00 - 20.00		2	11		✓			✓	
DIXI 1106 L Ø 4.00 - 6.00		2	12		✓				
DIXI 1107 R Ø 1.00 - 20.00		2	12		✓				
DIXI 1108 R Ø 0.60 - 2.50		2	13	1 - 2 x Ø	✓	✓		✓	
DIXI 1109 R Ø 0.50 - 2.50		2	15	1 - 2 x Ø	✓		✓		
DIXI 1110 R Ø 0.80 - 1.45		2	16	1 - 2 x Ø	✓			✓	

HELICAL GUN DRILLS Z = 1

DIXI 1111 R Ø 0.10 - 2.00		1	17	4 - 9 x Ø	✓				

TWIST DRILLS Z = 2

DIXI 1126 R Ø 1.00 - 14.00		2	18	DIN 338 7 - 12 x Ø	✓	✓	✓		
DIXI 1130 R Ø 0.30 - 16.00		2	20	DIN 6539 2 - 16 x Ø	✓	✓	✓		
DIXI 1130 L Ø 0.30 - 8.00		2	23	4 - 16 x Ø	✓	✓	✓		
DIXI 1132 R Ø 0.40 - 2.00		2	26	4 - 15 x Ø	✓	✓	✓		

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
◎	○	○	○		◎	○	○	◎	○	◎		◎
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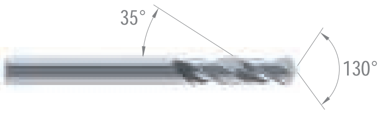
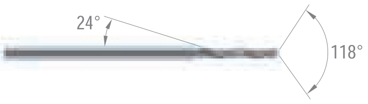
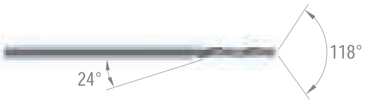
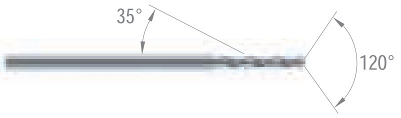
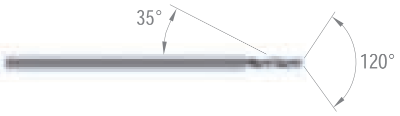
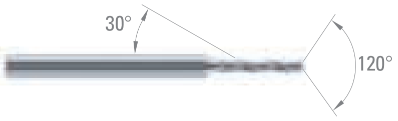
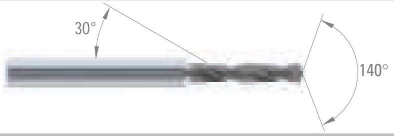
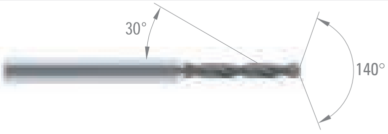
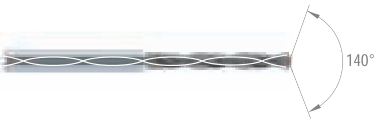
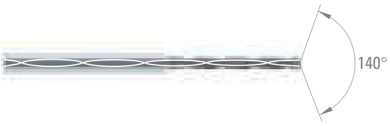
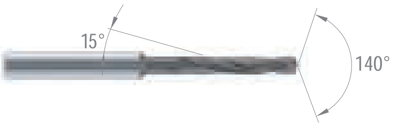
SELECTION OF DRILLS

✓ = item from stock

TWIST DRILLS Z = 2		Z	Page	Lc	☐ CARBIDE	TiN 🟨	DICUT 🟥	TiAlN 🟦	DLC 🟩	XIDUR 🟪
DIXI 1133 R Ø 0.50 - 6.00		2	27	4 - 18 x Ø	✓	✓	✓			
TWIST DRILLS - REINFORCED SHANK Z = 2										
DIXI 1131 R Ø 0.05 - 2.45		2	29	DIN 1899 4 - 9 x Ø	✓	✓	✓		* ✓	
DIXI 1131 L Ø 0.10 - 2.45		2	34	DIN 1899 4 - 9 x Ø	✓	✓	✓			
DIXI 1134 R Ø 0.50 - 1.95		2	38	DIN 1899 6 - 9 x Ø	✓	✓	✓			
DIXI 1135 R Ø 0.20 - 2.49		2	40	3 - 8 x Ø	✓	✓	✓			
DIXI 1138 R Ø 0.05 - 2.80		2	45	4 - 9 x Ø	✓			✓		
SELF-CENTERING DRILLS Z = 2										
DIXI 1149 R Ø 2.00 - 14.00		2	47	DIN 6537K 3 - 4 x Ø				✓		
DIXI 1147 R Ø 0.50 - 10.00		2	49	6.5 x Ø				✓		
SELF-CENTERING DRILLS WITH THROUGH COOLANT Z = 2										
DIXI 1145 R Ø 0.70 - 14.00		2	51	DIN 6537L 5 - 7 x Ø				✓		
DIXI 1146 R Ø 0.80 - 10.00		2	53	10 x Ø				✓		
TWIST DRILLS FOR HARDENED STEEL > 45 HRC										
DIXI 1280 R Ø 0.25 - 12.00		2	55	3 - 7 x Ø						✓

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
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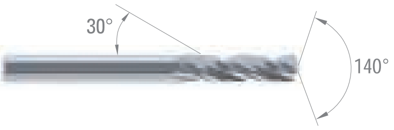
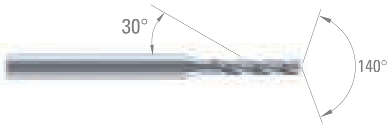
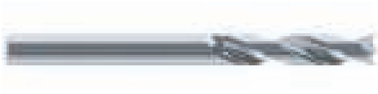
○	◎	◎	○		○	◎	○					

				◎		○						

SELECTION OF DRILLS

✓ = item from stock

TWIST DRILLS Z = 3	Z	Page	Lc	☐ CARBIDE	🟨 TiN			
DIXI 1151 R Ø 1.00 - 14.00 	3	57	3 - 8 x Ø	✓	✓			
DIXI 1152 R Ø 0.15 - 2.90 	3	59	6 - 10 x Ø	✓				
DRILLS FOR COMPOSITE MATERIALS / KEVLAR®								
DIXI 1290 R Ø 2.50 - 12.70 	2	61		✓				
TOOLS ON REQUEST								
SPADE DRILLS								
DIXI 1112 R+L Ø 0.08 - 5.99 	2	62						
HALF-MOON BITS								
DIXI 1114 R+L Ø 0.08 - 5.99 	1	62						
STRAIGHT FLUTE SLOT DRILLS								
DIXI 1118 R+L Ø 0.08 - 5.99 	2	62						
STEPPED TWIST DRILLS								
DIXI 1501 R+L 	2	63						
DIXI 1502 R+L 	2	63						
DIXI 1503 R+L 	2	64						
DIXI 1504 R+L 	2	64						

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
○	○				◎		◎	◎		○		
○	○				◎		◎	◎		○		

												Kevlar®
												◎

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DIXI 1101 R 60°

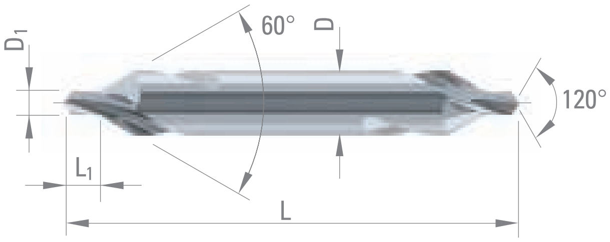
CENTRE DRILLS

Z = 2

P. 66

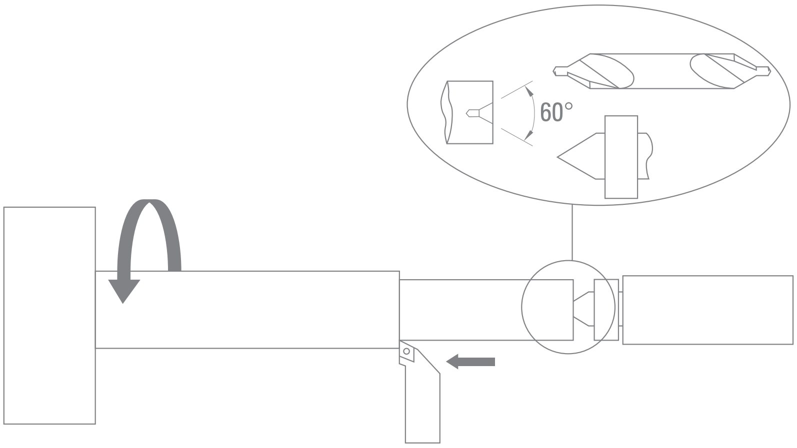
DIN 333 A

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Plastic



D_1	L_1	D_{h6}	L	CARBIDE
$0.80^{+0.14}_{0}$	1.30 ±0.1	3.15	31.50 ±2	☐
$1.00^{+0.14}_{0}$	1.60 ±0.2	3.15	31.50 ±2	☐
$1.25^{+0.14}_{0}$	1.90 ±0.2	3.15	31.50 ±2	☐
$1.60^{+0.14}_{0}$	2.40 ±0.2	4.00	35.50 ±2	☐
$2.00^{+0.14}_{0}$	2.90 ±0.2	5.00	40.00 ±2	☐
$2.50^{+0.14}_{0}$	3.60 ±0.2	6.30	45.00 ±2	☐
* $3.15^{+0.18}_{0}$	4.40 ±0.3	8.00	50.00 ±2	☐
* $4.00^{+0.18}_{0}$	5.60 ±0.4	10.00	56.00 ±3	☐

* = With web thinning



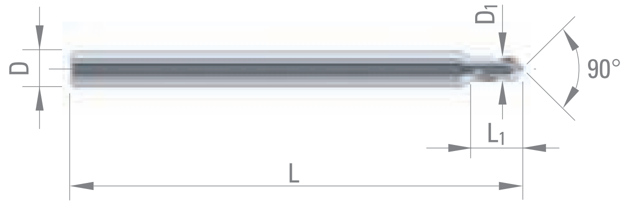
DIXI 1106 R 90°

SPOTTING DRILLS

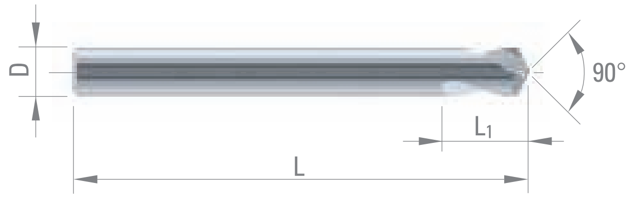
Z = 2

P. 66

Ø 1.00 ≤ Ø 2.00



Ø 1.00 ≤ Ø 20.00



Steel < 600MPa

Steel > 600MPa

High alloyed steel

DUPLEX stainless steel

Cast iron

Refractory alloy

Titanium, titanium alloy

Cu alloy Silver Gold

Cu alloy difficult to machine

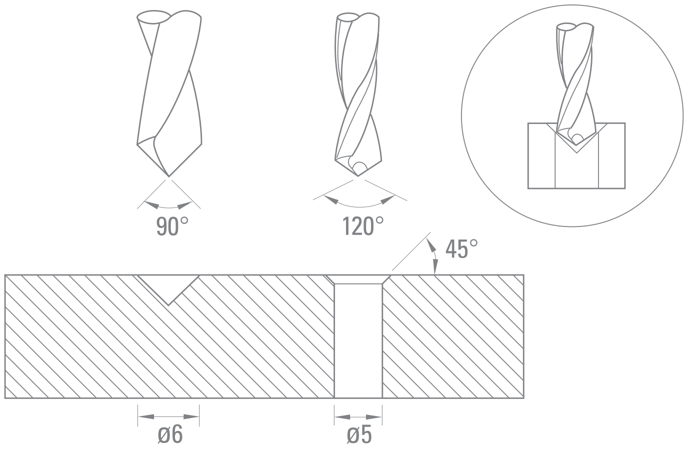
Al

Plastic

D_1	L_1	D_{h6}	L	CARBIDE	TiAIN
1.00	3	3	38	☐	■
1.50	5	3	38	☐	■
2.00	5	3	38	☐	■

D_{h6}	L_1	L	CARBIDE	TiAIN
1.00	3	32	☐	■
1.50	5	32	☐	■
2.00	5	32	☐	■
3.00	9	38	☐	■
4.00	10	50	☐	■
5.00	13	50	☐	■
* 6.00	13	57	☐	■
* 8.00	27	63	☐	■
* 10.00	30	72	☐	■
* 12.00	35	83	☐	■
* 16.00	46	92	☐	■
* 20.00	52	104	☐	■

* = With web thinning



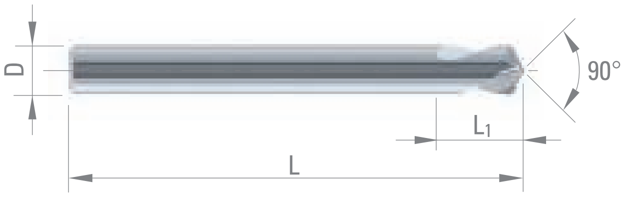
DIXI 1106 L 90°

LEFT HAND SPOTTING DRILLS

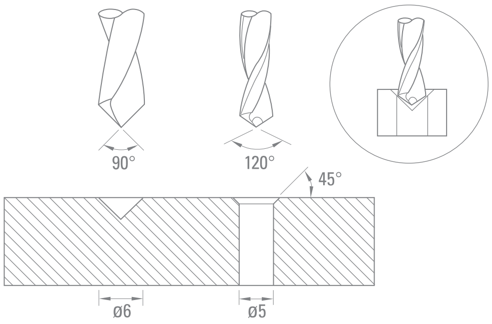
Z = 2

P. 66

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				



D_{h6}	L_1	L	CARBIDE
4.00	10	50	☐
5.00	13	50	☐
6.00	13	57	☐



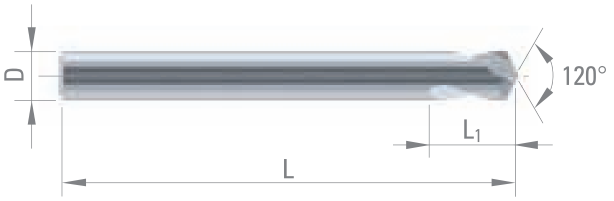
DIXI 1107 R 120°

SPOTTING DRILLS

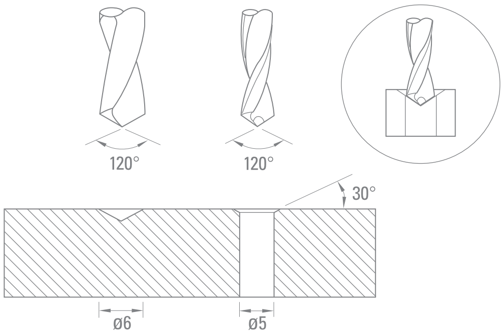
Z = 2

P. 66

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				



D_{h6}	L_1	L	CARBIDE
1.00	3	38	☐
2.00	5	38	☐
3.00	9	38	☐
4.00	10	50	☐
6.00	13	57	☐
* 8.00	27	63	☐
* 10.00	30	72	☐
* 12.00	35	83	☐
* 16.00	46	92	☐
* 20.00	52	104	☐



* = With web thinning

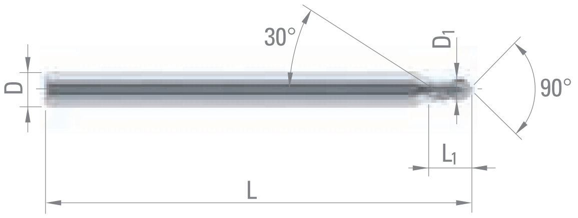
DIXI 1108 R 90°

SPOTTING DRILLS
REINFORCED SHANK

Z = 2

P. 66

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				



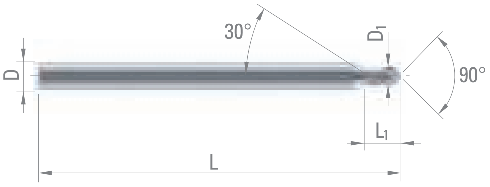
$D_{1\ h6}$	L_1	D_{h6}	L	CARBIDE	TiN	TiAlN
0.60	1.0	3	38	☐		
0.65	1.0	3	38	☐		
0.70	1.0	3	38	☐		
0.75	1.0	3	38	☐		
0.80	1.5	3	38	☐	🟨	🟦
0.82	1.5	3	38	☐		🟦
0.85	1.5	3	38	☐		🟦
0.87	1.5	3	38	☐		🟦
0.90	1.5	3	38	☐	🟨	🟦
0.92	1.5	3	38	☐		🟦
0.95	1.5	3	38	☐		🟦
0.97	1.5	3	38	☐		🟦
1.00	1.5	3	38	☐	🟨	🟦
1.02	2.0	3	38	☐		🟦
1.05	2.0	3	38	☐		🟦
1.07	2.0	3	38	☐		🟦
1.10	2.0	3	38	☐	🟨	🟦
1.12	2.0	3	38	☐		🟦
1.15	2.0	3	38	☐		🟦
1.17	2.0	3	38	☐		🟦
1.20	2.0	3	38	☐	🟨	🟦
1.22	2.0	3	38	☐		🟦
1.25	2.0	3	38	☐		🟦
1.27	2.0	3	38	☐		🟦
1.30	2.0	3	38	☐	🟨	🟦
1.32	2.0	3	38	☐		🟦
1.35	2.0	3	38	☐		🟦
1.37	2.0	3	38	☐		🟦
1.40	2.0	3	38	☐	🟨	🟦
1.42	2.0	3	38	☐		🟦
1.45	2.0	3	38	☐		🟦
1.47	2.0	3	38	☐		🟦
1.50	2.0	3	38	☐	🟨	🟦
1.52	3.0	3	38	☐		🟦
1.55	3.0	3	38	☐		🟦
1.57	3.0	3	38	☐		🟦
1.60	3.0	3	38	☐	🟨	🟦
1.62	3.0	3	38	☐		🟦
1.65	3.0	3	38	☐		🟦
1.67	3.0	3	38	☐		🟦
1.70	3.0	3	38	☐	🟨	🟦

DIXI 1108 R 90°

$D_{1\ h6}$	L_1	D_{h6}	L	CARBIDE	TiN	TiAlN
1.72	3.0	3	38	☐		🟦
1.75	3.0	3	38	☐		🟦
1.77	3.0	3	38	☐		🟦
1.80	3.0	3	38	☐	🟨	🟦
1.82	3.0	3	38	☐		🟦
1.85	3.0	3	38	☐		🟦
1.87	3.0	3	38	☐		🟦
1.90	3.0	3	38	☐	🟨	🟦
1.92	3.0	3	38	☐		🟦
1.95	3.0	3	38	☐		🟦
1.97	3.0	3	38	☐		🟦
2.00	3.0	3	38	☐	🟨	🟦
2.02	3.0	3	38	☐		🟦
2.05	3.0	3	38	☐		🟦
2.07	3.0	3	38	☐		🟦
2.10	3.0	3	38	☐	🟨	🟦
2.12	3.0	3	38	☐		🟦
2.15	3.0	3	38	☐		🟦
2.17	3.0	3	38	☐		🟦
2.20	3.0	3	38	☐	🟨	🟦
2.22	3.0	3	38	☐		🟦
2.25	3.0	3	38	☐		🟦
2.27	3.0	3	38	☐		🟦
2.30	3.0	3	38	☐	🟨	🟦
2.32	3.0	3	38	☐		🟦
2.35	3.0	3	38	☐		🟦
2.37	3.0	3	38	☐		🟦
2.40	3.0	3	38	☐	🟨	🟦
2.42	3.0	3	38	☐		🟦
2.45	3.0	3	38	☐		🟦
2.47	3.0	3	38	☐		🟦
2.50	3.0	3	38	☐	🟨	🟦

P. 66

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Plastic

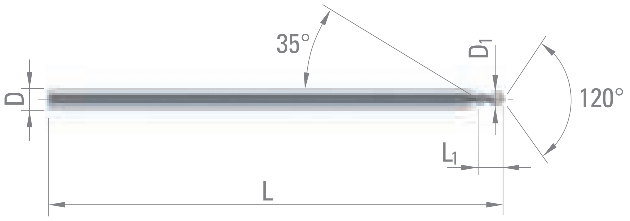


DIXI 1109 R 120°

SPOTTING DRILLS
REINFORCED SHANK

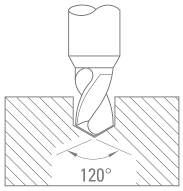
Z = 2

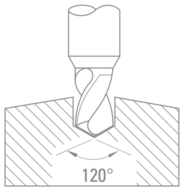
P. 66

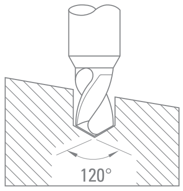


Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	DICUT
0.50	1.0	1.5	30	☐	■
0.55	1.0	1.5	30	☐	■
0.60	1.2	1.5	30	☐	■
0.65	1.2	1.5	30	☐	■
0.70	1.5	1.5	30	☐	■
0.75	1.5	1.5	30	☐	■
0.80	2.0	1.5	30	☐	■
0.85	2.0	1.5	30	☐	■
0.90	2.0	1.5	30	☐	■
0.95	2.0	1.5	30	☐	■
1.00	2.0	1.5	30	☐	■
1.05	2.0	1.5	30	☐	■
1.10	2.0	1.5	30	☐	■
1.15	2.4	1.5	30	☐	■
1.20	2.4	1.5	30	☐	■
1.25	2.4	1.5	30	☐	■
1.30	2.4	1.5	30	☐	■
1.35	2.4	1.5	30	☐	■
1.40	2.4	1.5	30	☐	■
1.45	2.4	1.5	30	☐	■
1.50	3.0	2.0	32	☐	■
1.55	3.0	2.0	32	☐	■
1.60	3.0	2.0	32	☐	■
1.65	3.0	2.0	32	☐	■
1.70	3.0	2.0	32	☐	■
1.75	3.5	2.0	32	☐	■
1.80	3.5	2.0	32	☐	■
1.85	3.5	2.0	32	☐	■
1.90	3.5	2.0	32	☐	■
1.95	3.5	2.0	32	☐	■
2.00	4.0	2.5	32	☐	■
2.10	4.0	2.5	32	☐	■
2.20	4.0	2.5	32	☐	■
2.30	4.0	2.5	32	☐	■
2.40	4.0	2.5	32	☐	■
2.50	4.0	2.5	32	☐	■





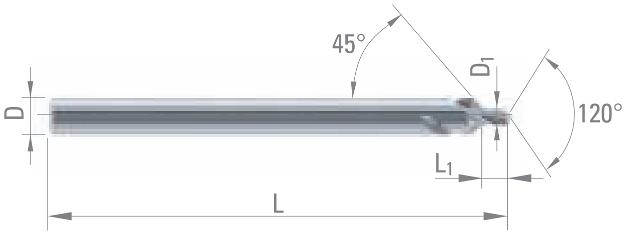


DIXI 1110 R 120°

SPOTTING AND CHAMFERING DRILLS

Z = 2

P. 66



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiAIN
0.80	2.0	3	38	☐	🟦
0.85	2.0	3	38	☐	🟦
0.90	2.0	3	38	☐	🟦
0.95	2.0	3	38	☐	🟦
1.00	2.0	3	38	☐	🟦
1.05	2.0	3	38	☐	🟦
1.10	2.0	3	38	☐	🟦
1.15	2.4	3	38	☐	🟦
1.20	2.4	3	38	☐	🟦
1.25	2.4	3	38	☐	🟦
1.30	2.4	3	38	☐	🟦
1.35	2.4	3	38	☐	🟦
1.40	2.4	3	38	☐	🟦
1.45	2.4	3	38	☐	🟦

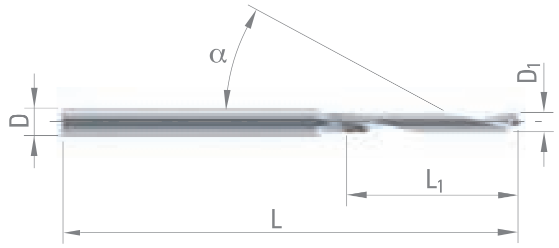
DIXI 1111 R

HELICAL GUN DRILLS

Z = 1

P. 68

Steel > 600MPa	Cu alloy Silver Gold	Al



$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE
0.10	0.7	1.0	30	☐
0.15	1.0	1.0	30	☐
0.20	1.0	1.0	30	☐
0.25	1.0	1.0	30	☐
0.30	1.5	1.0	30	☐
0.35	1.5	1.0	30	☐
0.40	2.0	1.0	30	☐
0.45	3.6	1.0	30	☐
0.50	4.0	1.0	30	☐
0.55	4.5	1.0	30	☐
0.60	4.5	1.0	30	☐
0.65	5.0	1.0	30	☐
0.70	5.6	1.0	30	☐
0.75	5.6	1.0	30	☐
0.80	6.3	1.5	30	☐
0.85	6.3	1.5	30	☐
0.90	7.1	1.5	30	☐
0.95	7.1	1.5	30	☐
1.00	9.0	1.5	30	☐
1.05	9.0	1.5	30	☐
1.10	9.0	1.5	30	☐
1.15	9.0	1.5	30	☐
1.20	10.0	1.5	30	☐
1.30	10.0	1.5	30	☐
1.40	10.0	1.5	30	☐
1.45	10.0	1.5	30	☐
1.50	12.0	2.0	38	☐
1.60	12.0	2.0	38	☐
1.65	12.0	2.0	38	☐
1.70	12.0	2.0	38	☐
1.75	12.0	2.0	38	☐
1.80	12.0	2.0	38	☐
2.00	12.0	2.5	43	☐

Other diameters until Ø 5.99 on request

DIXI 1126 R

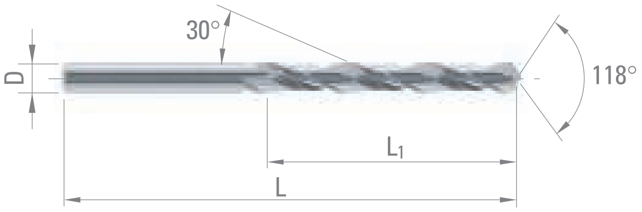
TWIST DRILLS

Z = 2

P. 65

P. 70

DIN 338



Steel < 600MPa	Steel > 600MPa	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			

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
1.00	12	34	☐	🟨	🟪
1.10	14	36	☐	🟨	🟪
1.20	16	38	☐	🟨	🟪
1.30	16	38	☐	🟨	🟪
1.40	18	40	☐	🟨	🟪
1.50	18	40	☐	🟨	🟪
1.60	20	43	☐	🟨	🟪
1.70	20	43	☐	🟨	🟪
1.80	22	46	☐	🟨	🟪
1.90	22	46	☐	🟨	🟪
2.00	24	49	☐	🟨	🟪
2.10	24	49	☐	🟨	🟪
2.20	27	53	☐	🟨	🟪
2.30	27	53	☐	🟨	🟪
2.40	30	57	☐	🟨	🟪
2.50	30	57	☐	🟨	🟪
2.60	30	57	☐	🟨	🟪
2.70	33	61	☐	🟨	🟪
2.80	33	61	☐	🟨	🟪
2.90	33	61	☐	🟨	🟪
3.00	33	61	☐	🟨	🟪
3.10	36	65	☐	🟨	🟪
3.20	36	65	☐	🟨	🟪
3.30	36	65	☐	🟨	🟪
3.40	39	70	☐	🟨	🟪
3.50	39	70	☐	🟨	🟪
3.60	39	70	☐	🟨	🟪
3.70	39	70	☐	🟨	🟪
3.80	43	75	☐	🟨	🟪
3.90	43	75	☐	🟨	🟪
4.00	43	75	☐	🟨	🟪
4.10	43	75	☐	🟨	🟪
4.20	43	75	☐	🟨	🟪
4.30	47	80	☐	🟨	🟪
4.40	47	80	☐	🟨	🟪
4.50	47	80	☐	🟨	🟪
4.60	47	80	☐	🟨	🟪
4.70	47	80	☐	🟨	🟪
4.80	52	86	☐	🟨	🟪
4.90	52	86	☐	🟨	🟪

DIXI 1126 R

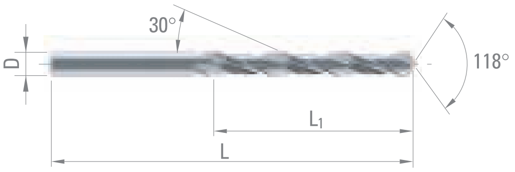
D_{h6}	L_1	L	CARBIDE	TiN	DICUT
5.00	52	86	☐	🟨	🟪
5.10	52	86	☐	🟨	🟪
5.20	52	86	☐	🟨	🟪
5.30	52	86	☐	🟨	🟪
5.40	57	93	☐	🟨	🟪
5.50	57	93	☐	🟨	🟪
5.60	57	93	☐	🟨	🟪
5.70	57	93	☐	🟨	🟪
5.80	57	93	☐	🟨	🟪
5.90	57	93	☐	🟨	🟪
6.00	57	93	☐	🟨	🟪
6.10	63	101	☐	🟨	🟪
6.20	63	101	☐	🟨	🟪
6.30	63	101	☐	🟨	🟪
6.40	63	101	☐	🟨	🟪
6.50	63	101	☐	🟨	🟪
6.60	63	101	☐	🟨	🟪
6.70	63	101	☐	🟨	🟪
6.80	69	109	☐	🟨	🟪
6.90	69	109	☐	🟨	🟪
7.00	69	109	☐	🟨	🟪
7.50	69	109	☐	🟨	🟪
7.70	75	117	☐	🟨	🟪
7.80	75	117	☐	🟨	🟪
8.00	75	117	☐	🟨	🟪
8.50	75	117	☐	🟨	🟪
9.00	81	125	☐	🟨	🟪
9.50	81	125	☐	🟨	🟪
10.00	87	133	☐	🟨	🟪
10.20	87	133	☐	🟨	🟪
10.50	87	133	☐	🟨	🟪
11.00	94	142	☐	🟨	🟪
11.50	94	142	☐	🟨	🟪
12.00	101	151	☐	🟨	🟪
12.50	101	151	☐	🟨	🟪
13.00	101	151	☐	🟨	🟪
13.50	108	160	☐	🟨	🟪
14.00	108	160	☐	🟨	🟪

P. 65

P. 70

DIN 338

Steel < 600MPa	Steel > 600MPa	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			



DIXI 1130 R

TWIST DRILLS

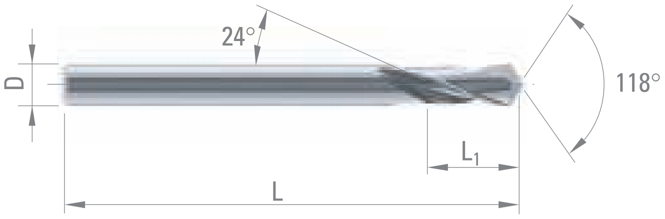
Z = 2

P. 65

P. 72

DIN 6539

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



D_{h6}	L_1	L	CARBIDE	TiN	DICUT
0.30	5	30	☐	🟨	🟪
0.35	5	30	☐	🟨	🟪
0.40	6	30	☐	🟨	🟪
0.45	6	30	☐	🟨	🟪
0.50	6	30	☐	🟨	🟪
0.55	6	30	☐	🟨	🟪
0.60	6	30	☐	🟨	🟪
0.65	6	30	☐	🟨	🟪
0.70	6	30	☐	🟨	🟪
0.75	6	30	☐	🟨	🟪
0.80	7	30	☐	🟨	🟪
0.85	7	30	☐	🟨	🟪
0.90	7	30	☐	🟨	🟪
0.95	7	30	☐	🟨	🟪
1.00	7	30	☐	🟨	🟪
1.05	8	30	☐	🟨	🟪
1.10	8	30	☐	🟨	🟪
1.15	8	30	☐	🟨	🟪
1.20	8	30	☐	🟨	🟪
1.25	8	30	☐	🟨	🟪
1.30	8	30	☐	🟨	🟪
1.35	8	30	☐	🟨	🟪
1.40	8	30	☐	🟨	🟪
1.45	8	30	☐	🟨	🟪
1.50	8	30	☐	🟨	🟪
1.55	9	38	☐	🟨	🟪
1.60	9	38	☐	🟨	🟪
1.65	9	38	☐	🟨	🟪
1.70	9	38	☐	🟨	🟪
1.75	9	38	☐	🟨	🟪
1.80	9	38	☐	🟨	🟪
1.85	9	38	☐	🟨	🟪
1.90	9	38	☐	🟨	🟪
1.95	9	38	☐	🟨	🟪
2.00	9	38	☐	🟨	🟪
2.05	9	38	☐	🟨	🟪
2.10	9	38	☐	🟨	🟪
2.15	10	40	☐	🟨	🟪
2.20	10	40	☐	🟨	🟪

DIXI 1130 R

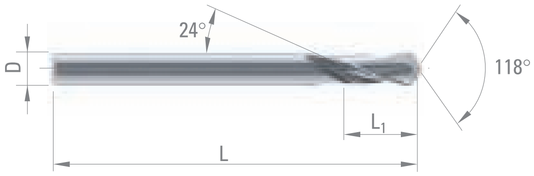
D_{h6}	L_1	L	CARBIDE	TiN	DICUT
2.25	10	40	☐	🟨	🟪
2.30	10	40	☐	🟨	🟪
2.35	10	40	☐	🟨	🟪
2.40	11	43	☐	🟨	🟪
2.45	11	43	☐	🟨	🟪
2.50	11	43	☐	🟨	🟪
2.55	11	43	☐	🟨	🟪
2.60	11	43	☐	🟨	🟪
2.65	11	43	☐	🟨	🟪
2.70	12	46	☐	🟨	🟪
2.75	12	46	☐	🟨	🟪
2.80	12	46	☐	🟨	🟪
2.85	12	46	☐	🟨	🟪
2.90	12	46	☐	🟨	🟪
2.95	12	46	☐	🟨	🟪
3.00	12	46	☐	🟨	🟪
3.05	14	49	☐	🟨	🟪
3.10	14	49	☐	🟨	🟪
3.15	14	49	☐	🟨	🟪
3.20	14	49	☐	🟨	🟪
3.25	14	49	☐	🟨	🟪
3.30	14	49	☐	🟨	🟪
3.35	14	49	☐	🟨	🟪
3.40	15	52	☐	🟨	🟪
3.45	15	52	☐	🟨	🟪
3.50	15	52	☐	🟨	🟪
3.55	15	52	☐	🟨	🟪
3.60	15	52	☐	🟨	🟪
3.65	15	52	☐	🟨	🟪
3.70	15	52	☐	🟨	🟪
3.75	15	52	☐	🟨	🟪
3.80	17	55	☐	🟨	🟪
3.85	17	55	☐	🟨	🟪
3.90	17	55	☐	🟨	🟪
3.95	17	55	☐	🟨	🟪
4.00	17	55	☐	🟨	🟪
4.05	17	55	☐	🟨	🟪
4.10	17	55	☐	🟨	🟪
4.15	17	55	☐	🟨	🟪
4.20	17	55	☐	🟨	🟪
4.25	17	55	☐	🟨	🟪
4.30	18	58	☐	🟨	🟪
4.35	18	58	☐	🟨	🟪
4.40	18	58	☐	🟨	🟪
4.45	18	58	☐	🟨	🟪
4.50	18	58	☐	🟨	🟪
4.55	18	58	☐	🟨	🟪
4.60	18	58	☐	🟨	🟪
4.65	18	58	☐	🟨	🟪
4.70	18	58	☐	🟨	🟪
4.75	18	58	☐	🟨	🟪
4.80	20	62	☐	🟨	🟪
4.85	20	62	☐	🟨	🟪
4.90	20	62	☐	🟨	🟪
4.95	20	62	☐	🟨	🟪

P. 65

P. 72

DIN 6539

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



DIXI 1130 R

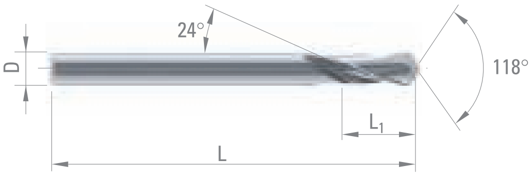
D_{h6}	L_1	L	CARBIDE	TiN	DICUT
5.00	20	62	☐	🟨	🟪
5.10	20	62	☐	🟨	🟪
5.20	20	62	☐	🟨	🟪
5.30	20	62	☐	🟨	🟪
5.40	21	66	☐	🟨	🟪
5.50	21	66	☐	🟨	🟪
5.60	21	66	☐	🟨	🟪
5.70	21	66	☐	🟨	🟪
5.80	21	66	☐	🟨	🟪
5.90	21	66	☐	🟨	🟪
6.00	21	66	☐	🟨	🟪
6.10	23	70	☐	🟨	🟪
6.20	23	70	☐	🟨	🟪
6.30	23	70	☐	🟨	🟪
6.40	23	70	☐	🟨	🟪
6.50	23	70	☐	🟨	🟪
6.60	23	70	☐	🟨	🟪
6.70	23	70	☐	🟨	🟪
6.80	25	74	☐	🟨	🟪
6.90	25	74	☐	🟨	🟪
7.00	25	74	☐	🟨	🟪
7.10	25	74	☐	🟨	🟪
7.20	25	74	☐	🟨	🟪
7.30	25	74	☐	🟨	🟪
7.40	25	74	☐	🟨	🟪
7.50	25	74	☐	🟨	🟪
7.60	27	79	☐	🟨	🟪
7.70	27	79	☐	🟨	🟪
7.80	27	79	☐	🟨	🟪
7.90	27	79	☐	🟨	🟪
8.00	27	79	☐	🟨	🟪
8.10	27	79	☐	🟨	🟪
8.20	27	79	☐	🟨	🟪
8.30	27	79	☐	🟨	🟪
8.40	27	79	☐	🟨	🟪
8.50	27	79	☐	🟨	🟪
8.80	29	84	☐	🟨	🟪
9.00	29	84	☐	🟨	🟪
9.20	29	84	☐	🟨	🟪
9.50	29	84	☐	🟨	🟪
9.80	31	89	☐	🟨	🟪
10.00	31	89	☐	🟨	🟪
10.20	31	89	☐	🟨	🟪
10.50	31	89	☐	🟨	🟪
11.00	33	95	☐	🟨	🟪
11.50	33	95	☐	🟨	🟪
12.00	35	102	☐	🟨	🟪
12.50	35	102	☐	🟨	🟪
13.00	35	102	☐	🟨	🟪
13.50	37	107	☐	🟨	🟪
14.00	37	107	☐	🟨	🟪
16.00	38	115	☐	🟨	🟪

P. 65

P. 72

DIN 6539

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



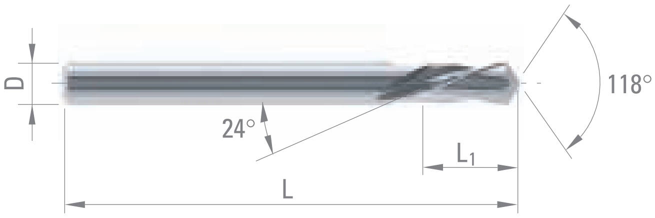
DIXI 1130 L

LEFT HAND TWIST DRILLS

Z = 2

P. 65 P. 72

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



D_{h6}	L_1	L	CARBIDE	TiN	DICUT
0.30	5	30	☐	🟨	🟪
0.35	5	30	☐	🟨	🟪
0.40	6	30	☐	🟨	🟪
0.45	6	30	☐	🟨	🟪
0.50	6	30	☐	🟨	🟪
0.55	6	30	☐	🟨	🟪
0.60	6	30	☐	🟨	🟪
0.65	6	30	☐	🟨	🟪
0.70	6	30	☐	🟨	🟪
0.75	6	30	☐	🟨	🟪
0.80	8	30	☐	🟨	🟪
0.85	8	30	☐	🟨	🟪
0.90	8	30	☐	🟨	🟪
0.95	8	30	☐	🟨	🟪
1.00	8	30	☐	🟨	🟪
1.05	10	30	☐	🟨	🟪
1.10	10	30	☐	🟨	🟪
1.15	10	30	☐	🟨	🟪
1.20	10	30	☐	🟨	🟪
1.25	10	30	☐	🟨	🟪
1.30	10	30	☐	🟨	🟪
1.35	10	30	☐	🟨	🟪
1.40	10	30	☐	🟨	🟪
1.45	10	30	☐	🟨	🟪
1.50	10	30	☐	🟨	🟪
1.55	16	38	☐	🟨	🟪
1.60	16	38	☐	🟨	🟪
1.65	16	38	☐	🟨	🟪
1.70	16	38	☐	🟨	🟪
1.75	16	38	☐	🟨	🟪
1.80	16	38	☐	🟨	🟪
1.85	16	38	☐	🟨	🟪
1.90	16	38	☐	🟨	🟪
1.95	16	38	☐	🟨	🟪

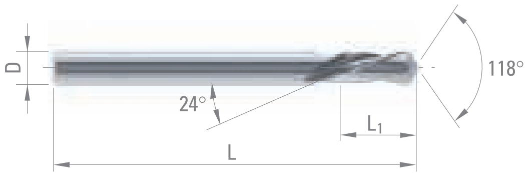
DIXI 1130 L

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
2.00	16	38	☐	🟨	🟪
2.05	16	38	☐	🟨	🟪
2.10	16	38	☐	🟨	🟪
2.15	16	40	☐	🟨	🟪
2.20	16	40	☐	🟨	🟪
2.25	16	40	☐	🟨	🟪
2.30	16	40	☐	🟨	🟪
2.35	16	40	☐	🟨	🟪
2.40	16	43	☐	🟨	🟪
2.45	16	43	☐	🟨	🟪
2.50	16	43	☐	🟨	🟪
2.55	16	43	☐	🟨	🟪
2.60	16	43	☐	🟨	🟪
2.65	16	43	☐	🟨	🟪
2.70	16	46	☐	🟨	🟪
2.75	16	46	☐	🟨	🟪
2.80	16	46	☐	🟨	🟪
2.85	16	46	☐	🟨	🟪
2.90	16	46	☐	🟨	🟪
2.95	16	46	☐	🟨	🟪
3.00	16	46	☐	🟨	🟪
3.05	18	49	☐	🟨	🟪
3.10	18	49	☐	🟨	🟪
3.15	18	49	☐	🟨	🟪
3.20	18	49	☐	🟨	🟪
3.25	18	49	☐	🟨	🟪
3.30	18	49	☐	🟨	🟪
3.35	18	49	☐	🟨	🟪
3.40	20	50	☐	🟨	🟪
3.45	20	50	☐	🟨	🟪
3.50	20	50	☐	🟨	🟪
3.55	20	50	☐	🟨	🟪
3.60	20	50	☐	🟨	🟪
3.65	20	50	☐	🟨	🟪
3.70	20	50	☐	🟨	🟪
3.75	20	50	☐	🟨	🟪
3.80	22	50	☐	🟨	🟪
3.85	22	50	☐	🟨	🟪
3.90	22	50	☐	🟨	🟪
3.95	22	50	☐	🟨	🟪
4.00	22	50	☐	🟨	🟪
4.05	22	50	☐	🟨	🟪
4.10	22	50	☐	🟨	🟪
4.15	22	50	☐	🟨	🟪
4.20	22	50	☐	🟨	🟪
4.25	22	50	☐	🟨	🟪
4.30	24	50	☐	🟨	🟪
4.35	24	50	☐	🟨	🟪
4.40	24	50	☐	🟨	🟪
4.45	24	50	☐	🟨	🟪

P. 65

P. 72

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



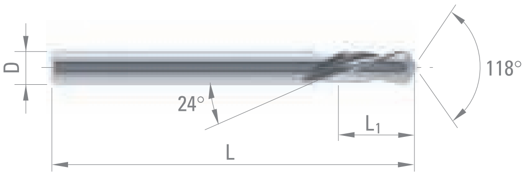
DIXI 1130 L

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
4.50	24	50	☐	🟨	🟪
4.55	24	50	☐	🟨	🟪
4.60	24	50	☐	🟨	🟪
4.65	24	50	☐	🟨	🟪
4.70	24	50	☐	🟨	🟪
4.75	24	50	☐	🟨	🟪
4.80	25	50	☐	🟨	🟪
4.85	25	50	☐	🟨	🟪
4.90	25	50	☐	🟨	🟪
4.95	25	50	☐	🟨	🟪
5.00	25	50	☐	🟨	🟪
5.10	25	50	☐	🟨	🟪
5.20	25	50	☐	🟨	🟪
5.30	25	50	☐	🟨	🟪
5.40	25	50	☐	🟨	🟪
5.50	25	50	☐	🟨	🟪
5.60	25	50	☐	🟨	🟪
5.70	25	50	☐	🟨	🟪
5.80	25	50	☐	🟨	🟪
5.90	25	50	☐	🟨	🟪
6.00	28	66	☐	🟨	🟪
6.10	31	70	☐	🟨	🟪
6.20	31	70	☐	🟨	🟪
6.30	31	70	☐	🟨	🟪
6.40	31	70	☐	🟨	🟪
6.50	31	70	☐	🟨	🟪
6.60	31	70	☐	🟨	🟪
6.70	31	70	☐	🟨	🟪
6.80	34	74	☐	🟨	🟪
6.90	34	74	☐	🟨	🟪
7.00	34	74	☐	🟨	🟪
7.50	34	74	☐	🟨	🟪
8.00	37	79	☐	🟨	🟪

P. 65

P. 72

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



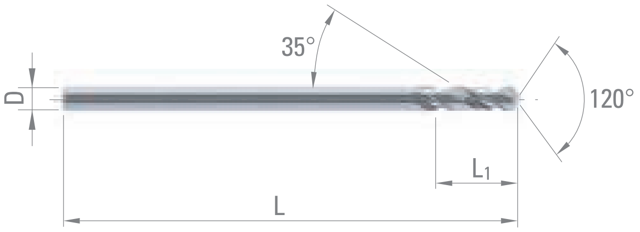
DIXI 1132 R

TWIST DRILLS

Z = 2

P. 65

P. 76



Steel < 600MPa	Steel > 600MPa	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			

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
0.40	6	30	☐	🟨	🟪
0.45	6	30	☐	🟨	🟪
0.50	6	30	☐	🟨	🟪
0.55	6	30	☐	🟨	🟪
0.60	6	30	☐	🟨	🟪
0.65	6	30	☐	🟨	🟪
0.70	6	30	☐	🟨	🟪
0.75	6	30	☐	🟨	🟪
0.80	7	30	☐	🟨	🟪
0.85	7	30	☐	🟨	🟪
0.90	7	30	☐	🟨	🟪
0.95	7	30	☐	🟨	🟪
1.00	7	30	☐	🟨	🟪
1.05	8	30	☐	🟨	🟪
1.10	8	30	☐	🟨	🟪
1.15	8	30	☐	🟨	🟪
1.20	8	30	☐	🟨	🟪
1.25	8	30	☐	🟨	🟪
1.30	8	30	☐	🟨	🟪
1.35	8	30	☐	🟨	🟪
1.40	8	30	☐	🟨	🟪
1.45	8	30	☐	🟨	🟪
1.50	8	30	☐	🟨	🟪
1.55	9	38	☐	🟨	🟪
1.60	9	38	☐	🟨	🟪
1.65	9	38	☐	🟨	🟪
1.70	9	38	☐	🟨	🟪
1.75	9	38	☐	🟨	🟪
1.80	9	38	☐	🟨	🟪
1.85	9	38	☐	🟨	🟪
1.90	9	38	☐	🟨	🟪
1.95	9	38	☐	🟨	🟪
2.00	9	38	☐	🟨	🟪

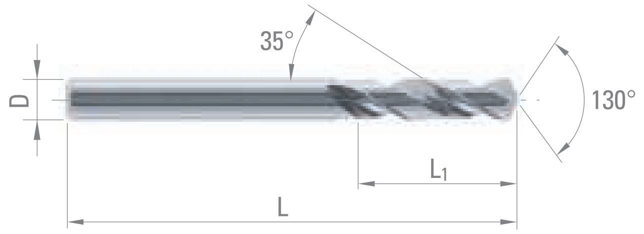
DIXI 1133 R

TWIST DRILLS

Z = 2

P. 65 P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



D_{h6}	L_1	L	CARBIDE	TiN	DICUT
0.50	9	38	☐	🟨	🟪
0.55	9	38	☐	🟨	🟪
0.60	13	38	☐	🟨	🟪
0.65	13	38	☐	🟨	🟪
0.70	13	38	☐	🟨	🟪
0.75	13	38	☐	🟨	🟪
0.80	13	38	☐	🟨	🟪
0.85	13	38	☐	🟨	🟪
0.90	16	38	☐	🟨	🟪
0.95	16	38	☐	🟨	🟪
1.00	16	38	☐	🟨	🟪
1.05	16	38	☐	🟨	🟪
1.10	16	38	☐	🟨	🟪
1.15	16	38	☐	🟨	🟪
1.20	16	38	☐	🟨	🟪
1.25	16	38	☐	🟨	🟪
1.30	16	38	☐	🟨	🟪
1.35	16	38	☐	🟨	🟪
1.40	16	38	☐	🟨	🟪
1.45	16	38	☐	🟨	🟪
1.50	16	38	☐	🟨	🟪
1.55	16	38	☐	🟨	🟪
1.60	16	38	☐	🟨	🟪
1.65	16	38	☐	🟨	🟪
1.70	16	38	☐	🟨	🟪
1.75	16	38	☐	🟨	🟪
1.80	16	38	☐	🟨	🟪
1.85	16	38	☐	🟨	🟪
1.90	16	38	☐	🟨	🟪
1.95	16	38	☐	🟨	🟪

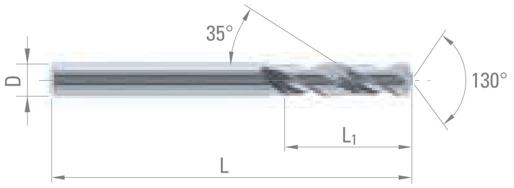
DIXI 1133 R

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
2.00	16	38	☐	🟨	🟪
2.10	16	38	☐	🟨	🟪
2.20	16	40	☐	🟨	🟪
2.30	16	40	☐	🟨	🟪
2.40	16	43	☐	🟨	🟪
2.50	16	43	☐	🟨	🟪
2.60	16	43	☐	🟨	🟪
3.00	16	46	☐	🟨	🟪
3.30	18	49	☐	🟨	🟪
3.50	20	50	☐	🟨	🟪
4.00	22	55	☐	🟨	🟪
4.20	22	55	☐	🟨	🟪
4.50	24	58	☐	🟨	🟪
5.00	26	62	☐	🟨	🟪
5.50	28	66	☐	🟨	🟪
6.00	28	66	☐	🟨	🟪

P. 65

P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



DIXI 1131 R

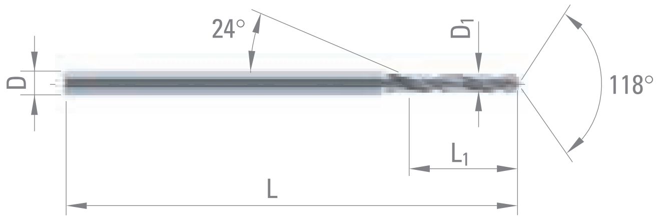
TWIST DRILLS
REINFORCED SHANK

Z = 2

P. 65

P. 74

DIN 1899



Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Grgaphite
Plastic

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
0.05	0.35	1.0	30	☐			
0.06	0.4	1.0	30	☐			
0.07	0.5	1.0	30	☐			
0.08	0.6	1.0	30	☐			
0.09	0.65	1.0	30	☐			
0.10	0.7	1.0	30	☐			
0.11	0.7	1.0	30	☐			
0.12	0.7	1.0	30	☐			
0.13	0.7	1.0	30	☐			
0.14	0.7	1.0	30	☐			
0.15	1.0	1.0	30	☐			
0.16	1.0	1.0	30	☐			
0.17	1.0	1.0	30	☐			
0.18	1.0	1.0	30	☐			
0.19	1.0	1.0	30	☐			
0.20	1.0	1.0	30	☐	🟨	🟪	🟩
0.21	1.0	1.0	30	☐	🟨	🟪	🟩
0.22	1.0	1.0	30	☐	🟨	🟪	🟩
0.23	1.0	1.0	30	☐	🟨	🟪	🟩
0.23 >	2.2	1.0	30	☐	🟨	🟪	🟩
0.24	1.0	1.0	30	☐	🟨	🟪	🟩
0.24 >	2.2	1.0	30	☐	🟨	🟪	🟩
0.25	1.0	1.0	30	☐	🟨	🟪	🟩
0.25 >	2.2	1.0	30	☐	🟨	🟪	🟩
0.26	1.0	1.0	30	☐	🟨	🟪	🟩
0.27	1.0	1.0	30	☐	🟨	🟪	🟩
0.28	1.0	1.0	30	☐	🟨	🟪	🟩
0.29	1.0	1.0	30	☐	🟨	🟪	🟩
0.30	1.5	1.0	30	☐	🟨	🟪	🟩
0.31	1.5	1.0	30	☐	🟨	🟪	🟩
0.32	1.5	1.0	30	☐	🟨	🟪	🟩
0.32 >	3.0	1.0	30	☐	🟨	🟪	🟩
0.33	1.5	1.0	30	☐	🟨	🟪	🟩
0.33 >	3.0	1.0	30	☐	🟨	🟪	🟩
0.34	1.5	1.0	30	☐	🟨	🟪	🟩
0.34 >	3.0	1.0	30	☐	🟨	🟪	🟩
0.35	1.5	1.0	30	☐	🟨	🟪	🟩
0.36	1.5	1.0	30	☐	🟨	🟪	🟩
0.37	1.5	1.0	30	☐	🟨	🟪	🟩
0.38	1.5	1.0	30	☐	🟨	🟪	🟩
0.39	1.5	1.0	30	☐	🟨	🟪	🟩

DIXI 1131 R

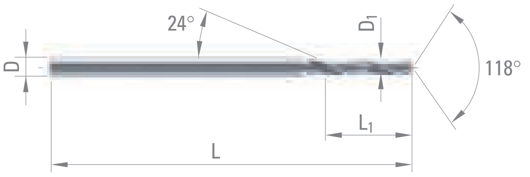
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
0.40	2.0	1.0	30	☐	🟨	🟪	🟩
0.41	2.0	1.0	30	☐	🟨	🟪	🟩
0.42	2.0	1.0	30	☐	🟨	🟪	🟩
0.43	2.0	1.0	30	☐	🟨	🟪	🟩
0.44	2.0	1.0	30	☐	🟨	🟪	🟩
0.45	3.6	1.0	30	☐	🟨	🟪	🟩
0.46	3.6	1.0	30	☐	🟨	🟪	🟩
0.47	3.6	1.0	30	☐	🟨	🟪	🟩
0.48	3.6	1.0	30	☐	🟨	🟪	🟩
0.49	4.0	1.0	30	☐	🟨	🟪	🟩
0.50	4.0	1.0	30	☐	🟨	🟪	🟩
0.51	4.0	1.0	30	☐	🟨	🟪	🟩
0.52	4.0	1.0	30	☐	🟨	🟪	🟩
0.53	4.0	1.0	30	☐	🟨	🟪	🟩
0.54	4.5	1.0	30	☐	🟨	🟪	🟩
0.55	4.5	1.0	30	☐	🟨	🟪	🟩
0.56	4.5	1.0	30	☐	🟨	🟪	🟩
0.57	4.5	1.0	30	☐	🟨	🟪	🟩
0.58	4.5	1.0	30	☐	🟨	🟪	🟩
0.59	4.5	1.0	30	☐	🟨	🟪	🟩
0.60	4.5	1.0	30	☐	🟨	🟪	🟩
0.61	5.0	1.0	30	☐	🟨	🟪	🟩
0.62	5.0	1.0	30	☐	🟨	🟪	🟩
0.63	5.0	1.0	30	☐	🟨	🟪	🟩
0.64	5.0	1.0	30	☐	🟨	🟪	🟩
0.65	5.0	1.0	30	☐	🟨	🟪	🟩
0.66	5.0	1.0	30	☐	🟨	🟪	🟩
0.67	5.0	1.0	30	☐	🟨	🟪	🟩
0.68	5.6	1.0	30	☐	🟨	🟪	🟩
0.69	5.6	1.0	30	☐	🟨	🟪	🟩
0.70	5.6	1.0	30	☐	🟨	🟪	🟩
0.71	5.6	1.0	30	☐	🟨	🟪	🟩
0.72	5.6	1.0	30	☐	🟨	🟪	🟩
0.73	5.6	1.0	30	☐	🟨	🟪	🟩
0.74	5.6	1.0	30	☐	🟨	🟪	🟩
0.75	5.6	1.0	30	☐	🟨	🟪	🟩
0.76	6.3	1.0	30	☐	🟨	🟪	🟩
0.77	6.3	1.0	30	☐	🟨	🟪	🟩
0.78	6.3	1.0	30	☐	🟨	🟪	🟩
0.79	6.3	1.0	30	☐	🟨	🟪	🟩
0.80	6.3	1.5	30	☐	🟨	🟪	🟩
0.81	6.3	1.5	30	☐	🟨	🟪	🟩
0.82	6.3	1.5	30	☐	🟨	🟪	🟩
0.83	6.3	1.5	30	☐	🟨	🟪	🟩
0.84	6.3	1.5	30	☐	🟨	🟪	🟩
0.85	6.3	1.5	30	☐	🟨	🟪	🟩
0.86	7.1	1.5	30	☐	🟨	🟪	🟩
0.87	7.1	1.5	30	☐	🟨	🟪	🟩
0.88	7.1	1.5	30	☐	🟨	🟪	🟩
0.89	7.1	1.5	30	☐	🟨	🟪	🟩

P. 65

P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	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			



DIXI 1131 R

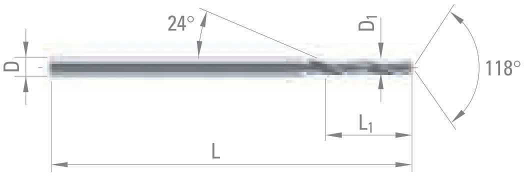
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
0.90	7.1	1.5	30	☐	🟨	🟪	🟩
0.91	7.1	1.5	30	☐	🟨	🟪	🟩
0.92	7.1	1.5	30	☐	🟨	🟪	🟩
0.93	7.1	1.5	30	☐	🟨	🟪	🟩
0.94	7.1	1.5	30	☐	🟨	🟪	🟩
0.95	7.1	1.5	30	☐	🟨	🟪	🟩
0.96	8.0	1.5	30	☐	🟨	🟪	🟩
0.97	8.0	1.5	30	☐	🟨	🟪	🟩
0.98	8.0	1.5	30	☐	🟨	🟪	🟩
0.99	8.0	1.5	30	☐	🟨	🟪	🟩
1.00	9.0	1.5	30	☐	🟨	🟪	🟩
1.01	9.0	1.5	30	☐	🟨	🟪	🟩
1.02	9.0	1.5	30	☐	🟨	🟪	🟩
1.03	9.0	1.5	30	☐	🟨	🟪	🟩
1.04	9.0	1.5	30	☐	🟨	🟪	🟩
1.05	9.0	1.5	30	☐	🟨	🟪	🟩
1.06	9.0	1.5	30	☐	🟨	🟪	🟩
1.07	9.0	1.5	30	☐	🟨	🟪	🟩
1.08	9.0	1.5	30	☐	🟨	🟪	🟩
1.09	9.0	1.5	30	☐	🟨	🟪	🟩
1.10	9.0	1.5	30	☐	🟨	🟪	🟩
1.11	9.0	1.5	30	☐	🟨	🟪	🟩
1.12	9.0	1.5	30	☐	🟨	🟪	🟩
1.13	9.0	1.5	30	☐	🟨	🟪	🟩
1.14	9.0	1.5	30	☐	🟨	🟪	🟩
1.15	9.0	1.5	30	☐	🟨	🟪	🟩
1.16	9.0	1.5	30	☐	🟨	🟪	🟩
1.17	9.0	1.5	30	☐	🟨	🟪	🟩
1.18	9.0	1.5	30	☐	🟨	🟪	🟩
1.19	10.0	1.5	30	☐	🟨	🟪	🟩
1.20	10.0	1.5	30	☐	🟨	🟪	🟩
1.21	10.0	1.5	30	☐	🟨	🟪	🟩
1.22	10.0	1.5	30	☐	🟨	🟪	🟩
1.23	10.0	1.5	30	☐	🟨	🟪	🟩
1.24	10.0	1.5	30	☐	🟨	🟪	🟩
1.25	10.0	1.5	30	☐	🟨	🟪	🟩
1.26	10.0	1.5	30	☐	🟨	🟪	🟩
1.27	10.0	1.5	30	☐	🟨	🟪	🟩
1.28	10.0	1.5	30	☐	🟨	🟪	🟩
1.29	10.0	1.5	30	☐	🟨	🟪	🟩
1.30	10.0	1.5	30	☐	🟨	🟪	🟩
1.31	10.0	1.5	30	☐	🟨	🟪	🟩
1.32	10.0	1.5	30	☐	🟨	🟪	🟩
1.33	11.2	1.5	30	☐	🟨	🟪	🟩
1.34	11.2	1.5	30	☐	🟨	🟪	🟩
1.35	11.2	1.5	30	☐	🟨	🟪	🟩
1.36	11.2	1.5	30	☐	🟨	🟪	🟩
1.37	11.2	1.5	30	☐	🟨	🟪	🟩
1.38	11.2	1.5	30	☐	🟨	🟪	🟩
1.39	11.2	1.5	30	☐	🟨	🟪	🟩

P. 65

P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	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			



DIXI 1131 R

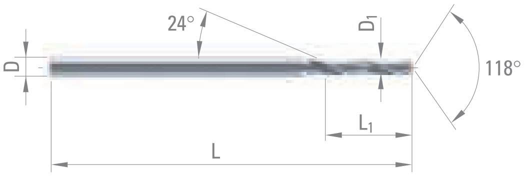
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
1.40	11.2	1.5	30	☐	🟨	🟥	🟩
1.41	11.2	1.5	30	☐	🟨	🟥	🟩
1.42	11.2	1.5	30	☐	🟨	🟥	🟩
1.43	11.2	1.5	30	☐	🟨	🟥	🟩
1.44	11.2	1.5	30	☐	🟨	🟥	🟩
1.45	11.2	1.5	30	☐	🟨	🟥	🟩
1.46	11.2	1.5	30	☐	🟨	🟥	🟩
1.47	11.2	1.5	30	☐	🟨	🟥	🟩
1.48	11.2	1.5	30	☐	🟨	🟥	🟩
1.49	11.2	1.5	30	☐	🟨	🟥	🟩
1.50	11.2	2.0	38	☐	🟨	🟥	🟩
1.51	12.0	2.0	38	☐	🟨	🟥	🟩
1.52	12.0	2.0	38	☐	🟨	🟥	🟩
1.53	12.0	2.0	38	☐	🟨	🟥	🟩
1.54	12.0	2.0	38	☐	🟨	🟥	🟩
1.55	12.0	2.0	38	☐	🟨	🟥	🟩
1.56	12.0	2.0	38	☐	🟨	🟥	🟩
1.57	12.0	2.0	38	☐	🟨	🟥	🟩
1.58	12.0	2.0	38	☐	🟨	🟥	🟩
1.59	12.0	2.0	38	☐	🟨	🟥	🟩
1.60	12.0	2.0	38	☐	🟨	🟥	🟩
1.61	12.0	2.0	38	☐	🟨	🟥	🟩
1.62	12.0	2.0	38	☐	🟨	🟥	🟩
1.63	12.0	2.0	38	☐	🟨	🟥	🟩
1.64	12.0	2.0	38	☐	🟨	🟥	🟩
1.65	12.0	2.0	38	☐	🟨	🟥	🟩
1.66	12.0	2.0	38	☐	🟨	🟥	🟩
1.67	12.0	2.0	38	☐	🟨	🟥	🟩
1.68	12.0	2.0	38	☐	🟨	🟥	🟩
1.69	12.0	2.0	38	☐	🟨	🟥	🟩
1.70	12.0	2.0	38	☐	🟨	🟥	🟩
1.71	12.0	2.0	38	☐	🟨	🟥	🟩
1.72	12.0	2.0	38	☐	🟨	🟥	🟩
1.73	12.0	2.0	38	☐	🟨	🟥	🟩
1.74	12.0	2.0	38	☐	🟨	🟥	🟩
1.75	12.0	2.0	38	☐	🟨	🟥	🟩
1.76	12.0	2.0	38	☐	🟨	🟥	🟩
1.77	12.0	2.0	38	☐	🟨	🟥	🟩
1.78	12.0	2.0	38	☐	🟨	🟥	🟩
1.79	12.0	2.0	38	☐	🟨	🟥	🟩
1.80	12.0	2.0	38	☐	🟨	🟥	🟩
1.81	12.0	2.0	38	☐	🟨	🟥	🟩
1.82	12.0	2.0	38	☐	🟨	🟥	🟩
1.83	12.0	2.0	38	☐	🟨	🟥	🟩
1.84	12.0	2.0	38	☐	🟨	🟥	🟩
1.85	12.0	2.0	38	☐	🟨	🟥	🟩
1.86	12.0	2.0	38	☐	🟨	🟥	🟩
1.87	12.0	2.0	38	☐	🟨	🟥	🟩
1.88	12.0	2.0	38	☐	🟨	🟥	🟩
1.89	12.0	2.0	38	☐	🟨	🟥	🟩

P. 65

P. 74

DIN 1899

Steel < 600MPa
Steel > 600MPa
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



DIXI 1131 R

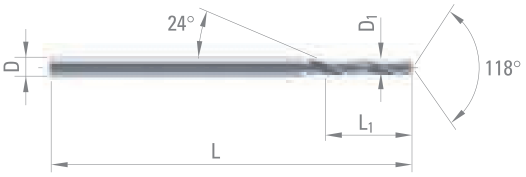
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
1.90	12.0	2.0	38	☐	🟨	🟥	🟩
1.91	12.0	2.0	38	☐	🟨	🟥	🟩
1.92	12.0	2.0	38	☐	🟨	🟥	🟩
1.93	12.0	2.0	38	☐	🟨	🟥	🟩
1.94	12.0	2.0	38	☐	🟨	🟥	🟩
1.95	12.0	2.0	38	☐	🟨	🟥	🟩
1.96	12.0	2.0	38	☐	🟨	🟥	🟩
1.97	12.0	2.0	38	☐	🟨	🟥	🟩
1.98	12.0	2.0	38	☐	🟨	🟥	🟩
1.99	12.0	2.0	38	☐	🟨	🟥	🟩
2.00	12.0	2.5	43	☐	🟨	🟥	🟩
2.01	12.0	2.5	43	☐	🟨	🟥	🟩
2.02	12.0	2.5	43	☐	🟨	🟥	🟩
2.03	12.0	2.5	43	☐	🟨	🟥	🟩
2.04	12.0	2.5	43	☐	🟨	🟥	🟩
2.05	12.0	2.5	43	☐	🟨	🟥	🟩
2.10	12.0	2.5	43	☐	🟨	🟥	🟩
2.15	12.0	2.5	43	☐	🟨	🟥	🟩
2.20	12.0	2.5	43	☐	🟨	🟥	🟩
2.25	12.0	2.5	43	☐	🟨	🟥	🟩
2.30	12.0	2.5	43	☐	🟨	🟥	🟩
2.34	12.0	2.5	43	☐	🟨	🟥	🟩
2.35	12.0	2.5	43	☐	🟨	🟥	🟩
2.40	12.0	2.5	43	☐	🟨	🟥	🟩
2.45	12.0	2.5	43	☐	🟨	🟥	🟩

P. 65

P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	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			



DIXI 1131 L

LEFT HAND TWIST DRILLS
REINFORCED SHANK

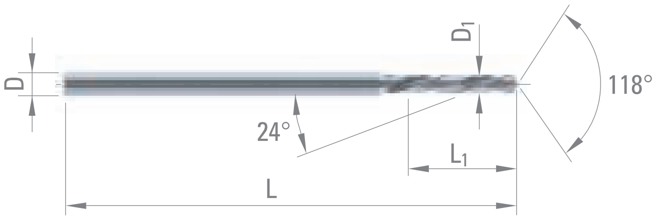
Z = 2

P. 65

P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	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			



$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.10	0.7	1.0	30	☐		
0.11	0.7	1.0	30	☐		
0.12	0.7	1.0	30	☐		
0.13	0.7	1.0	30	☐		
0.14	0.7	1.0	30	☐		
0.15	1.0	1.0	30	☐		
0.16	1.0	1.0	30	☐		
0.17	1.0	1.0	30	☐		
0.18	1.0	1.0	30	☐		
0.19	1.0	1.0	30	☐		
0.20	1.0	1.0	30	☐	🟨	🟪
0.21	1.0	1.0	30	☐	🟨	🟪
0.22	1.0	1.0	30	☐	🟨	🟪
0.23	1.0	1.0	30	☐	🟨	🟪
0.24	1.0	1.0	30	☐	🟨	🟪
0.25	1.0	1.0	30	☐	🟨	🟪
0.26	1.0	1.0	30	☐	🟨	🟪
0.27	1.0	1.0	30	☐	🟨	🟪
0.28	1.0	1.0	30	☐	🟨	🟪
0.29	1.0	1.0	30	☐	🟨	🟪
0.30	1.5	1.0	30	☐	🟨	🟪
0.31	1.5	1.0	30	☐	🟨	🟪
0.32	1.5	1.0	30	☐	🟨	🟪
0.33	1.5	1.0	30	☐	🟨	🟪
0.34	1.5	1.0	30	☐	🟨	🟪
0.35	1.5	1.0	30	☐	🟨	🟪
0.36	1.5	1.0	30	☐	🟨	🟪
0.37	1.5	1.0	30	☐	🟨	🟪
0.38	1.5	1.0	30	☐	🟨	🟪
0.39	1.5	1.0	30	☐	🟨	🟪
0.40	2.0	1.0	30	☐	🟨	🟪
0.41	2.0	1.0	30	☐	🟨	🟪
0.42	2.0	1.0	30	☐	🟨	🟪
0.43	2.0	1.0	30	☐	🟨	🟪
0.44	2.0	1.0	30	☐	🟨	🟪
0.45	3.6	1.0	30	☐	🟨	🟪
0.46	3.6	1.0	30	☐	🟨	🟪
0.47	3.6	1.0	30	☐	🟨	🟪
0.48	3.6	1.0	30	☐	🟨	🟪
0.49	4.0	1.0	30	☐	🟨	🟪

DIXI 1131 L

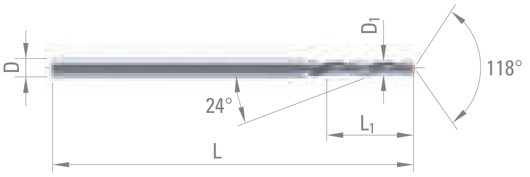
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.50	4.0	1.0	30	☐	🟨	🟪
0.51	4.0	1.0	30	☐	🟨	🟪
0.52	4.0	1.0	30	☐	🟨	🟪
0.53	4.0	1.0	30	☐	🟨	🟪
0.54	4.5	1.0	30	☐	🟨	🟪
0.55	4.5	1.0	30	☐	🟨	🟪
0.56	4.5	1.0	30	☐	🟨	🟪
0.57	4.5	1.0	30	☐	🟨	🟪
0.58	4.5	1.0	30	☐	🟨	🟪
0.59	4.5	1.0	30	☐	🟨	🟪
0.60	4.5	1.0	30	☐	🟨	🟪
0.61	5.0	1.0	30	☐	🟨	🟪
0.62	5.0	1.0	30	☐	🟨	🟪
0.63	5.0	1.0	30	☐	🟨	🟪
0.64	5.0	1.0	30	☐	🟨	🟪
0.65	5.0	1.0	30	☐	🟨	🟪
0.66	5.0	1.0	30	☐	🟨	🟪
0.67	5.0	1.0	30	☐	🟨	🟪
0.68	5.6	1.0	30	☐	🟨	🟪
0.69	5.6	1.0	30	☐	🟨	🟪
0.70	5.6	1.0	30	☐	🟨	🟪
0.71	5.6	1.0	30	☐	🟨	🟪
0.72	5.6	1.0	30	☐	🟨	🟪
0.73	5.6	1.0	30	☐	🟨	🟪
0.74	5.6	1.0	30	☐	🟨	🟪
0.75	5.6	1.0	30	☐	🟨	🟪
0.76	6.3	1.0	30	☐	🟨	🟪
0.77	6.3	1.0	30	☐	🟨	🟪
0.78	6.3	1.0	30	☐	🟨	🟪
0.79	6.3	1.0	30	☐	🟨	🟪
0.80	6.3	1.5	30	☐	🟨	🟪
0.81	6.3	1.5	30	☐	🟨	🟪
0.82	6.3	1.5	30	☐	🟨	🟪
0.83	6.3	1.5	30	☐	🟨	🟪
0.84	6.3	1.5	30	☐	🟨	🟪
0.85	6.3	1.5	30	☐	🟨	🟪
0.86	7.1	1.5	30	☐	🟨	🟪
0.87	7.1	1.5	30	☐	🟨	🟪
0.88	7.1	1.5	30	☐	🟨	🟪
0.89	7.1	1.5	30	☐	🟨	🟪
0.90	7.1	1.5	30	☐	🟨	🟪
0.91	7.1	1.5	30	☐	🟨	🟪
0.92	7.1	1.5	30	☐	🟨	🟪
0.93	7.1	1.5	30	☐	🟨	🟪
0.94	7.1	1.5	30	☐	🟨	🟪
0.95	7.1	1.5	30	☐	🟨	🟪
0.96	8.0	1.5	30	☐	🟨	🟪
0.97	8.0	1.5	30	☐	🟨	🟪
0.98	8.0	1.5	30	☐	🟨	🟪
0.99	8.0	1.5	30	☐	🟨	🟪
1.00	9.0	1.5	30	☐	🟨	🟪
1.01	9.0	1.5	30	☐	🟨	🟪
1.02	9.0	1.5	30	☐	🟨	🟪
1.03	9.0	1.5	30	☐	🟨	🟪
1.04	9.0	1.5	30	☐	🟨	🟪

P. 65

P. 74

DIN 1899

Steel < 600MPa
Steel > 600MPa
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



DIXI 1131 L

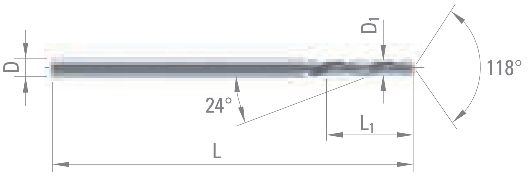
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.05	9.0	1.5	30	☐	🟨	🟪
1.06	9.0	1.5	30	☐	🟨	🟪
1.07	9.0	1.5	30	☐	🟨	🟪
1.08	9.0	1.5	30	☐	🟨	🟪
1.09	9.0	1.5	30	☐	🟨	🟪
1.10	9.0	1.5	30	☐	🟨	🟪
1.11	9.0	1.5	30	☐	🟨	🟪
1.12	9.0	1.5	30	☐	🟨	🟪
1.13	9.0	1.5	30	☐	🟨	🟪
1.14	9.0	1.5	30	☐	🟨	🟪
1.15	9.0	1.5	30	☐	🟨	🟪
1.16	9.0	1.5	30	☐	🟨	🟪
1.17	9.0	1.5	30	☐	🟨	🟪
1.18	9.0	1.5	30	☐	🟨	🟪
1.19	10.0	1.5	30	☐	🟨	🟪
1.20	10.0	1.5	30	☐	🟨	🟪
1.21	10.0	1.5	30	☐	🟨	🟪
1.22	10.0	1.5	30	☐	🟨	🟪
1.23	10.0	1.5	30	☐	🟨	🟪
1.24	10.0	1.5	30	☐	🟨	🟪
1.25	10.0	1.5	30	☐	🟨	🟪
1.26	10.0	1.5	30	☐	🟨	🟪
1.27	10.0	1.5	30	☐	🟨	🟪
1.28	10.0	1.5	30	☐	🟨	🟪
1.29	10.0	1.5	30	☐	🟨	🟪
1.30	10.0	1.5	30	☐	🟨	🟪
1.31	10.0	1.5	30	☐	🟨	🟪
1.32	10.0	1.5	30	☐	🟨	🟪
1.33	11.2	1.5	30	☐	🟨	🟪
1.34	11.2	1.5	30	☐	🟨	🟪
1.35	11.2	1.5	30	☐	🟨	🟪
1.36	11.2	1.5	30	☐	🟨	🟪
1.37	11.2	1.5	30	☐	🟨	🟪
1.38	11.2	1.5	30	☐	🟨	🟪
1.39	11.2	1.5	30	☐	🟨	🟪
1.40	11.2	1.5	30	☐	🟨	🟪
1.41	11.2	1.5	30	☐	🟨	🟪
1.42	11.2	1.5	30	☐	🟨	🟪
1.43	11.2	1.5	30	☐	🟨	🟪
1.44	11.2	1.5	30	☐	🟨	🟪
1.45	11.2	1.5	30	☐	🟨	🟪
1.46	11.2	1.5	30	☐	🟨	🟪
1.47	11.2	1.5	30	☐	🟨	🟪
1.48	11.2	1.5	30	☐	🟨	🟪
1.49	11.2	1.5	30	☐	🟨	🟪
1.50	11.2	2.0	38	☐	🟨	🟪
1.51	12.0	2.0	38	☐	🟨	🟪
1.52	12.0	2.0	38	☐	🟨	🟪
1.53	12.0	2.0	38	☐	🟨	🟪
1.54	12.0	2.0	38	☐	🟨	🟪
1.55	12.0	2.0	38	☐	🟨	🟪
1.56	12.0	2.0	38	☐	🟨	🟪
1.57	12.0	2.0	38	☐	🟨	🟪
1.58	12.0	2.0	38	☐	🟨	🟪
1.59	12.0	2.0	38	☐	🟨	🟪

P. 65

P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	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			



DIXI 1131 L

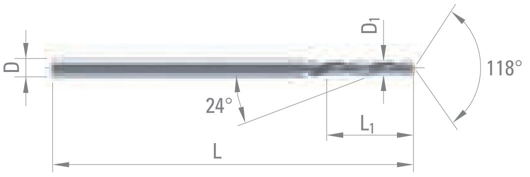
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.60	12.0	2.0	38	☐	🟨	🟪
1.61	12.0	2.0	38	☐	🟨	🟪
1.62	12.0	2.0	38	☐	🟨	🟪
1.63	12.0	2.0	38	☐	🟨	🟪
1.64	12.0	2.0	38	☐	🟨	🟪
1.65	12.0	2.0	38	☐	🟨	🟪
1.66	12.0	2.0	38	☐	🟨	🟪
1.67	12.0	2.0	38	☐	🟨	🟪
1.68	12.0	2.0	38	☐	🟨	🟪
1.69	12.0	2.0	38	☐	🟨	🟪
1.70	12.0	2.0	38	☐	🟨	🟪
1.71	12.0	2.0	38	☐	🟨	🟪
1.72	12.0	2.0	38	☐	🟨	🟪
1.73	12.0	2.0	38	☐	🟨	🟪
1.74	12.0	2.0	38	☐	🟨	🟪
1.75	12.0	2.0	38	☐	🟨	🟪
1.76	12.0	2.0	38	☐	🟨	🟪
1.77	12.0	2.0	38	☐	🟨	🟪
1.78	12.0	2.0	38	☐	🟨	🟪
1.79	12.0	2.0	38	☐	🟨	🟪
1.80	12.0	2.0	38	☐	🟨	🟪
1.81	12.0	2.0	38	☐	🟨	🟪
1.82	12.0	2.0	38	☐	🟨	🟪
1.83	12.0	2.0	38	☐	🟨	🟪
1.84	12.0	2.0	38	☐	🟨	🟪
1.85	12.0	2.0	38	☐	🟨	🟪
1.86	12.0	2.0	38	☐	🟨	🟪
1.87	12.0	2.0	38	☐	🟨	🟪
1.88	12.0	2.0	38	☐	🟨	🟪
1.89	12.0	2.0	38	☐	🟨	🟪
1.90	12.0	2.0	38	☐	🟨	🟪
1.91	12.0	2.0	38	☐	🟨	🟪
1.92	12.0	2.0	38	☐	🟨	🟪
1.93	12.0	2.0	38	☐	🟨	🟪
1.94	12.0	2.0	38	☐	🟨	🟪
1.95	12.0	2.0	38	☐	🟨	🟪
1.96	12.0	2.0	38	☐	🟨	🟪
1.97	12.0	2.0	38	☐	🟨	🟪
1.98	12.0	2.0	38	☐	🟨	🟪
1.99	12.0	2.0	38	☐	🟨	🟪
2.00	12.0	2.5	43	☐	🟨	🟪
2.01	12.0	2.5	43	☐	🟨	🟪
2.02	12.0	2.5	43	☐	🟨	🟪
2.03	12.0	2.5	43	☐	🟨	🟪
2.04	12.0	2.5	43	☐	🟨	🟪
2.05	12.0	2.5	43	☐	🟨	🟪
2.10	12.0	2.5	43	☐	🟨	🟪
2.12	12.0	2.5	43	☐	🟨	🟪
2.15	12.0	2.5	43	☐	🟨	🟪
2.45	12.0	2.5	43	☐	🟨	🟪

P. 65

P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	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			



DIXI 1134 R

TWIST DRILLS
REINFORCED SHANK

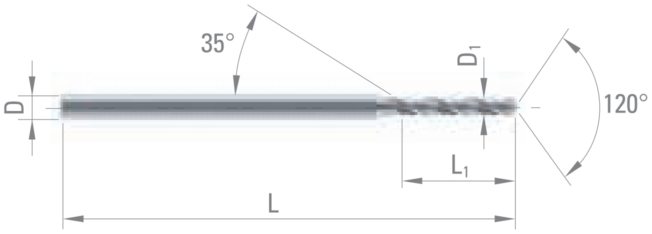
Z = 2

P. 65

P. 76

DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.50	4.0	1.0	30	☐	🟨	🟪
0.55	4.5	1.0	30	☐	🟨	🟪
0.60	4.5	1.0	30	☐	🟨	🟪
0.65	5.0	1.0	30	☐	🟨	🟪
0.70	5.6	1.0	30	☐	🟨	🟪
0.75	5.6	1.0	30	☐	🟨	🟪
0.80	6.3	1.5	30	☐	🟨	🟪
0.81	6.3	1.5	30	☐	🟨	🟪
0.82	6.3	1.5	30	☐	🟨	🟪
0.83	6.3	1.5	30	☐	🟨	🟪
0.84	6.3	1.5	30	☐	🟨	🟪
0.85	6.3	1.5	30	☐	🟨	🟪
0.86	7.1	1.5	30	☐	🟨	🟪
0.87	7.1	1.5	30	☐	🟨	🟪
0.88	7.1	1.5	30	☐	🟨	🟪
0.89	7.1	1.5	30	☐	🟨	🟪
0.90	7.1	1.5	30	☐	🟨	🟪
0.91	7.1	1.5	30	☐	🟨	🟪
0.92	7.1	1.5	30	☐	🟨	🟪
0.93	7.1	1.5	30	☐	🟨	🟪
0.94	7.1	1.5	30	☐	🟨	🟪
0.95	7.1	1.5	30	☐	🟨	🟪
0.96	9.0	1.5	30	☐	🟨	🟪
0.97	9.0	1.5	30	☐	🟨	🟪
0.98	9.0	1.5	30	☐	🟨	🟪
0.99	9.0	1.5	30	☐	🟨	🟪
1.00	9.0	1.5	30	☐	🟨	🟪
1.01	9.0	1.5	30	☐	🟨	🟪
1.02	9.0	1.5	30	☐	🟨	🟪
1.03	9.0	1.5	30	☐	🟨	🟪
1.04	9.0	1.5	30	☐	🟨	🟪
1.05	9.0	1.5	30	☐	🟨	🟪
1.06	9.0	1.5	30	☐	🟨	🟪
1.07	9.0	1.5	30	☐	🟨	🟪
1.08	9.0	1.5	30	☐	🟨	🟪
1.09	9.0	1.5	30	☐	🟨	🟪

DIXI 1134 R

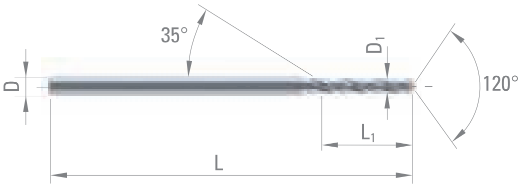
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.10	9.0	1.5	30	☐	🟨	🟪
1.11	9.0	1.5	30	☐	🟨	🟪
1.12	9.0	1.5	30	☐	🟨	🟪
1.13	9.0	1.5	30	☐	🟨	🟪
1.14	9.0	1.5	30	☐	🟨	🟪
1.15	9.0	1.5	30	☐	🟨	🟪
1.16	10.0	1.5	30	☐	🟨	🟪
1.17	10.0	1.5	30	☐	🟨	🟪
1.18	10.0	1.5	30	☐	🟨	🟪
1.19	10.0	1.5	30	☐	🟨	🟪
1.20	10.0	1.5	30	☐	🟨	🟪
1.21	10.0	1.5	30	☐	🟨	🟪
1.22	10.0	1.5	30	☐	🟨	🟪
1.23	10.0	1.5	30	☐	🟨	🟪
1.24	10.0	1.5	30	☐	🟨	🟪
1.25	10.0	1.5	30	☐	🟨	🟪
1.26	10.0	1.5	30	☐	🟨	🟪
1.27	10.0	1.5	30	☐	🟨	🟪
1.28	10.0	1.5	30	☐	🟨	🟪
1.29	10.0	1.5	30	☐	🟨	🟪
1.30	10.0	1.5	30	☐	🟨	🟪
1.31	11.2	1.5	30	☐	🟨	🟪
1.32	11.2	1.5	30	☐	🟨	🟪
1.33	11.2	1.5	30	☐	🟨	🟪
1.34	11.2	1.5	30	☐	🟨	🟪
1.35	11.2	1.5	30	☐	🟨	🟪
1.36	11.2	1.5	30	☐	🟨	🟪
1.37	11.2	1.5	30	☐	🟨	🟪
1.38	11.2	1.5	30	☐	🟨	🟪
1.39	11.2	1.5	30	☐	🟨	🟪
1.40	11.2	1.5	30	☐	🟨	🟪
1.45	11.2	1.5	30	☐	🟨	🟪
1.50	11.2	2.0	38	☐	🟨	🟪
1.55	12.0	2.0	38	☐	🟨	🟪
1.60	12.0	2.0	38	☐	🟨	🟪
1.65	12.0	2.0	38	☐	🟨	🟪
1.70	12.0	2.0	38	☐	🟨	🟪
1.75	12.0	2.0	38	☐	🟨	🟪
1.80	12.0	2.0	38	☐	🟨	🟪
1.85	12.0	2.0	38	☐	🟨	🟪
1.90	12.0	2.0	38	☐	🟨	🟪
1.95	12.0	2.0	38	☐	🟨	🟪

P. 65

P. 76

DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



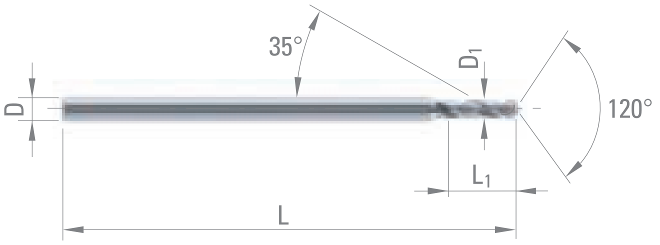
DIXI 1135 R

TWIST DRILLS
REINFORCED SHANK

Z = 2

P. 65 P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



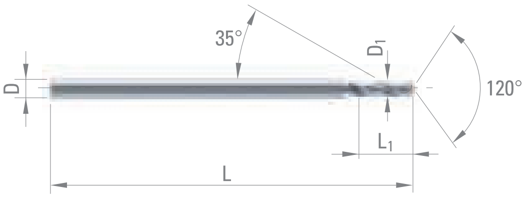
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.20	1.5	1.5	30	☐	🟨	🟪
0.21	1.5	1.5	30	☐	🟨	🟪
0.22	1.5	1.5	30	☐	🟨	🟪
0.23	1.5	1.5	30	☐	🟨	🟪
0.24	1.5	1.5	30	☐	🟨	🟪
0.25	2.0	1.5	30	☐	🟨	🟪
0.26	2.0	1.5	30	☐	🟨	🟪
0.27	2.0	1.5	30	☐	🟨	🟪
0.28	2.0	1.5	30	☐	🟨	🟪
0.29	2.0	1.5	30	☐	🟨	🟪
0.30	2.0	1.5	30	☐	🟨	🟪
0.31	2.5	1.5	30	☐	🟨	🟪
0.32	2.5	1.5	30	☐	🟨	🟪
0.33	2.5	1.5	30	☐	🟨	🟪
0.34	2.5	1.5	30	☐	🟨	🟪
0.35	2.5	1.5	30	☐	🟨	🟪
0.36	2.5	1.5	30	☐	🟨	🟪
0.37	2.5	1.5	30	☐	🟨	🟪
0.38	2.5	1.5	30	☐	🟨	🟪
0.39	3.0	1.5	30	☐	🟨	🟪
0.40	3.0	1.5	30	☐	🟨	🟪
0.41	3.0	1.5	30	☐	🟨	🟪
0.42	3.0	1.5	30	☐	🟨	🟪
0.43	3.0	1.5	30	☐	🟨	🟪
0.44	3.0	1.5	30	☐	🟨	🟪
0.45	3.0	1.5	30	☐	🟨	🟪
0.46	3.0	1.5	30	☐	🟨	🟪
0.47	3.0	1.5	30	☐	🟨	🟪
0.48	3.0	1.5	30	☐	🟨	🟪
0.49	3.0	1.5	30	☐	🟨	🟪
0.50	4.0	1.5	30	☐	🟨	🟪
0.51	4.0	1.5	30	☐	🟨	🟪
0.52	4.0	1.5	30	☐	🟨	🟪
0.53	4.0	1.5	30	☐	🟨	🟪
0.54	4.0	1.5	30	☐	🟨	🟪
0.55	4.0	1.5	30	☐	🟨	🟪
0.56	4.0	1.5	30	☐	🟨	🟪
0.57	4.0	1.5	30	☐	🟨	🟪
0.58	4.0	1.5	30	☐	🟨	🟪
0.59	4.0	1.5	30	☐	🟨	🟪

DIXI 1135 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.60	4.5	1.5	30	☐	🟨	🟪
0.61	4.5	1.5	30	☐	🟨	🟪
0.62	4.5	1.5	30	☐	🟨	🟪
0.63	4.5	1.5	30	☐	🟨	🟪
0.64	4.5	1.5	30	☐	🟨	🟪
0.65	4.5	1.5	30	☐	🟨	🟪
0.66	4.5	1.5	30	☐	🟨	🟪
0.67	4.5	1.5	30	☐	🟨	🟪
0.68	4.5	1.5	30	☐	🟨	🟪
0.69	4.5	1.5	30	☐	🟨	🟪
0.70	4.5	1.5	30	☐	🟨	🟪
0.71	4.5	1.5	30	☐	🟨	🟪
0.72	4.5	1.5	30	☐	🟨	🟪
0.73	4.5	1.5	30	☐	🟨	🟪
0.74	4.5	1.5	30	☐	🟨	🟪
0.75	4.5	1.5	30	☐	🟨	🟪
0.76	4.5	1.5	30	☐	🟨	🟪
0.77	4.5	1.5	30	☐	🟨	🟪
0.78	4.5	1.5	30	☐	🟨	🟪
0.79	4.5	1.5	30	☐	🟨	🟪
0.80	5.0	1.5	30	☐	🟨	🟪
0.81	5.0	1.5	30	☐	🟨	🟪
0.82	5.0	1.5	30	☐	🟨	🟪
0.83	5.0	1.5	30	☐	🟨	🟪
0.84	5.0	1.5	30	☐	🟨	🟪
0.85	5.0	1.5	30	☐	🟨	🟪
0.86	5.0	1.5	30	☐	🟨	🟪
0.87	5.0	1.5	30	☐	🟨	🟪
0.88	5.0	1.5	30	☐	🟨	🟪
0.89	5.0	1.5	30	☐	🟨	🟪
0.90	5.0	1.5	30	☐	🟨	🟪
0.91	5.0	1.5	30	☐	🟨	🟪
0.92	5.0	1.5	30	☐	🟨	🟪
0.93	5.0	1.5	30	☐	🟨	🟪
0.94	5.0	1.5	30	☐	🟨	🟪
0.95	5.0	1.5	30	☐	🟨	🟪
0.96	5.0	1.5	30	☐	🟨	🟪
0.97	5.0	1.5	30	☐	🟨	🟪
0.98	5.0	1.5	30	☐	🟨	🟪
0.99	5.0	1.5	30	☐	🟨	🟪
1.00	5.0	1.5	30	☐	🟨	🟪
1.01	5.0	1.5	30	☐	🟨	🟪
1.02	5.0	1.5	30	☐	🟨	🟪
1.03	5.0	1.5	30	☐	🟨	🟪
1.04	5.0	1.5	30	☐	🟨	🟪
1.05	5.0	1.5	30	☐	🟨	🟪
1.06	5.0	1.5	30	☐	🟨	🟪
1.07	5.0	1.5	30	☐	🟨	🟪
1.08	5.0	1.5	30	☐	🟨	🟪
1.09	5.0	1.5	30	☐	🟨	🟪
1.10	5.0	1.5	30	☐	🟨	🟪
1.11	5.0	1.5	30	☐	🟨	🟪
1.12	5.0	1.5	30	☐	🟨	🟪
1.13	5.0	1.5	30	☐	🟨	🟪
1.14	5.0	1.5	30	☐	🟨	🟪

P. 65 P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



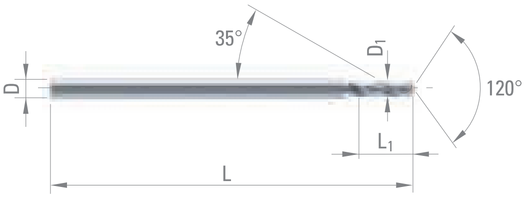
DIXI 1135 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.15	5.0	1.5	30	☐	🟨	🟪
1.16	5.0	1.5	30	☐	🟨	🟪
1.17	5.0	1.5	30	☐	🟨	🟪
1.18	5.0	1.5	30	☐	🟨	🟪
1.19	5.0	1.5	30	☐	🟨	🟪
1.20	6.0	1.5	30	☐	🟨	🟪
1.21	6.0	1.5	30	☐	🟨	🟪
1.22	6.0	1.5	30	☐	🟨	🟪
1.23	6.0	1.5	30	☐	🟨	🟪
1.24	6.0	1.5	30	☐	🟨	🟪
1.25	6.0	1.5	30	☐	🟨	🟪
1.26	6.0	1.5	30	☐	🟨	🟪
1.27	6.0	1.5	30	☐	🟨	🟪
1.28	6.0	1.5	30	☐	🟨	🟪
1.29	6.0	1.5	30	☐	🟨	🟪
1.30	6.0	1.5	30	☐	🟨	🟪
1.31	6.0	1.5	30	☐	🟨	🟪
1.32	6.0	1.5	30	☐	🟨	🟪
1.33	6.0	1.5	30	☐	🟨	🟪
1.34	6.0	1.5	30	☐	🟨	🟪
1.35	6.0	1.5	30	☐	🟨	🟪
1.36	6.0	1.5	30	☐	🟨	🟪
1.37	6.0	1.5	30	☐	🟨	🟪
1.38	6.0	1.5	30	☐	🟨	🟪
1.39	6.0	1.5	30	☐	🟨	🟪
1.40	6.0	1.5	30	☐	🟨	🟪
1.41	6.0	1.5	30	☐	🟨	🟪
1.42	6.0	1.5	30	☐	🟨	🟪
1.43	6.0	1.5	30	☐	🟨	🟪
1.44	6.0	1.5	30	☐	🟨	🟪
1.45	6.0	1.5	30	☐	🟨	🟪
1.46	6.0	1.5	30	☐	🟨	🟪
1.47	6.0	1.5	30	☐	🟨	🟪
1.48	6.0	1.5	30	☐	🟨	🟪
1.49	6.0	1.5	30	☐	🟨	🟪
1.50	7.0	2.0	38	☐	🟨	🟪
1.51	7.0	2.0	38	☐	🟨	🟪
1.52	7.0	2.0	38	☐	🟨	🟪
1.53	7.0	2.0	38	☐	🟨	🟪
1.54	7.0	2.0	38	☐	🟨	🟪
1.55	7.0	2.0	38	☐	🟨	🟪
1.56	7.0	2.0	38	☐	🟨	🟪
1.57	7.0	2.0	38	☐	🟨	🟪
1.58	7.0	2.0	38	☐	🟨	🟪
1.59	7.0	2.0	38	☐	🟨	🟪
1.60	7.0	2.0	38	☐	🟨	🟪
1.61	7.0	2.0	38	☐	🟨	🟪
1.62	7.0	2.0	38	☐	🟨	🟪
1.63	7.0	2.0	38	☐	🟨	🟪
1.64	7.0	2.0	38	☐	🟨	🟪
1.65	7.0	2.0	38	☐	🟨	🟪
1.66	7.0	2.0	38	☐	🟨	🟪
1.67	7.0	2.0	38	☐	🟨	🟪
1.68	7.0	2.0	38	☐	🟨	🟪
1.69	7.0	2.0	38	☐	🟨	🟪

P. 65

P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al

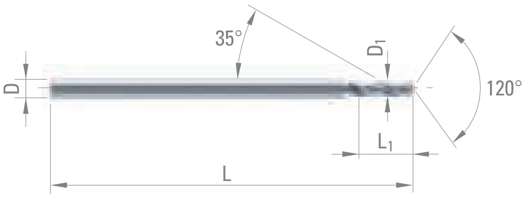


DIXI 1135 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.70	7.0	2.0	38	☐	🟨	🟪
1.71	7.0	2.0	38	☐	🟨	🟪
1.72	7.0	2.0	38	☐	🟨	🟪
1.73	7.0	2.0	38	☐	🟨	🟪
1.74	7.0	2.0	38	☐	🟨	🟪
1.75	7.0	2.0	38	☐	🟨	🟪
1.76	8.0	2.0	38	☐	🟨	🟪
1.77	8.0	2.0	38	☐	🟨	🟪
1.78	8.0	2.0	38	☐	🟨	🟪
1.79	8.0	2.0	38	☐	🟨	🟪
1.80	8.0	2.0	38	☐	🟨	🟪
1.81	8.0	2.0	38	☐	🟨	🟪
1.82	8.0	2.0	38	☐	🟨	🟪
1.83	8.0	2.0	38	☐	🟨	🟪
1.84	8.0	2.0	38	☐	🟨	🟪
1.85	8.0	2.0	38	☐	🟨	🟪
1.86	8.0	2.0	38	☐	🟨	🟪
1.87	8.0	2.0	38	☐	🟨	🟪
1.88	8.0	2.0	38	☐	🟨	🟪
1.89	8.0	2.0	38	☐	🟨	🟪
1.90	8.0	2.0	38	☐	🟨	🟪
1.91	8.0	2.0	38	☐	🟨	🟪
1.92	8.0	2.0	38	☐	🟨	🟪
1.93	8.0	2.0	38	☐	🟨	🟪
1.94	8.0	2.0	38	☐	🟨	🟪
1.95	8.0	2.0	38	☐	🟨	🟪
1.96	8.0	2.0	38	☐	🟨	🟪
1.97	8.0	2.0	38	☐	🟨	🟪
1.98	8.0	2.0	38	☐	🟨	🟪
1.99	8.0	2.0	38	☐	🟨	🟪
2.00	9.0	2.5	43	☐	🟨	🟪
2.01	9.0	2.5	43	☐	🟨	🟪
2.02	9.0	2.5	43	☐	🟨	🟪
2.03	9.0	2.5	43	☐	🟨	🟪
2.04	9.0	2.5	43	☐	🟨	🟪
2.05	9.0	2.5	43	☐	🟨	🟪
2.06	9.0	2.5	43	☐	🟨	🟪
2.07	9.0	2.5	43	☐	🟨	🟪
2.08	9.0	2.5	43	☐	🟨	🟪
2.09	9.0	2.5	43	☐	🟨	🟪
2.10	9.0	2.5	43	☐	🟨	🟪
2.11	9.0	2.5	43	☐	🟨	🟪
2.12	9.0	2.5	43	☐	🟨	🟪
2.13	9.0	2.5	43	☐	🟨	🟪
2.14	9.0	2.5	43	☐	🟨	🟪
2.15	9.0	2.5	43	☐	🟨	🟪
2.16	9.0	2.5	43	☐	🟨	🟪
2.17	9.0	2.5	43	☐	🟨	🟪
2.18	9.0	2.5	43	☐	🟨	🟪
2.19	9.0	2.5	43	☐	🟨	🟪
2.20	9.0	2.5	43	☐	🟨	🟪
2.21	9.0	2.5	43	☐	🟨	🟪
2.22	9.0	2.5	43	☐	🟨	🟪
2.23	9.0	2.5	43	☐	🟨	🟪
2.24	9.0	2.5	43	☐	🟨	🟪

P. 65 P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



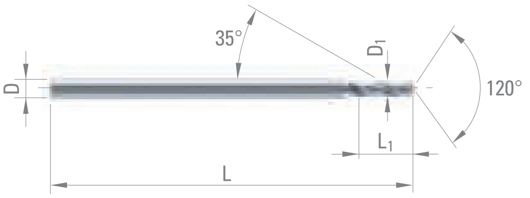
DIXI 1135 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
2.25	9.0	2.5	43	☐	🟨	🟪
2.26	9.0	2.5	43	☐	🟨	🟪
2.27	9.0	2.5	43	☐	🟨	🟪
2.28	9.0	2.5	43	☐	🟨	🟪
2.29	9.0	2.5	43	☐	🟨	🟪
2.30	9.0	2.5	43	☐	🟨	🟪
2.31	9.0	2.5	43	☐	🟨	🟪
2.32	9.0	2.5	43	☐	🟨	🟪
2.33	9.0	2.5	43	☐	🟨	🟪
2.34	9.0	2.5	43	☐	🟨	🟪
2.35	9.0	2.5	43	☐	🟨	🟪
2.36	9.0	2.5	43	☐	🟨	🟪
2.37	9.0	2.5	43	☐	🟨	🟪
2.38	9.0	2.5	43	☐	🟨	🟪
2.39	9.0	2.5	43	☐	🟨	🟪
2.40	9.0	2.5	43	☐	🟨	🟪
2.41	9.0	2.5	43	☐	🟨	🟪
2.42	9.0	2.5	43	☐	🟨	🟪
2.43	9.0	2.5	43	☐	🟨	🟪
2.44	9.0	2.5	43	☐	🟨	🟪
2.45	9.0	2.5	43	☐	🟨	🟪
2.46	9.0	2.5	43	☐	🟨	🟪
2.47	9.0	2.5	43	☐	🟨	🟪
2.48	9.0	2.5	43	☐	🟨	🟪
2.49	9.0	2.5	43	☐	🟨	🟪

P. 65

P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



DIXI 1138 R

TWIST DRILLS
REINFORCED SHANK

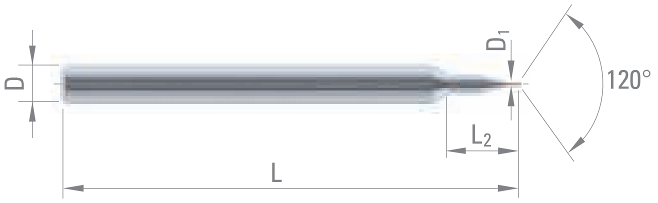
Z = 2

P. 65

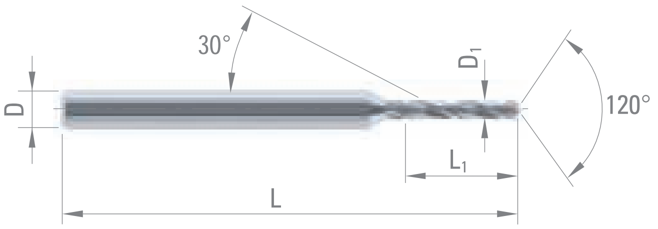
P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al

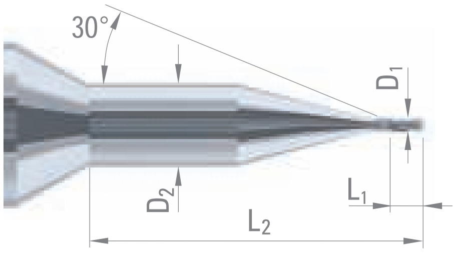
Ø 0.05 ≤ Ø 0.45



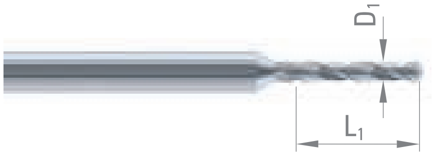
Ø 0.50 ≤ Ø 2.80



$D_{1\ h6}$	L_1	D_2	L_2	D_{h6}	L	CARBIDE	TiAlN
0.05	0.35	1.5	5.35	3	38	☐	
0.06	0.40	1.5	5.40	3	38	☐	
0.07	0.50	1.5	5.50	3	38	☐	
0.08	0.60	1.5	5.65	3	38	☐	
0.09	0.65	1.5	5.70	3	38	☐	
0.10	0.70	1.5	5.70	3	38	☐	🟦
0.15	1.00	1.5	6.00	3	38	☐	🟦
0.20	1.00	1.5	6.00	3	38	☐	🟦
0.25	1.00	1.5	6.00	3	38	☐	🟦
0.30	1.50	1.5	6.50	3	38	☐	🟦
0.35	1.50	1.5	6.50	3	38	☐	🟦
0.40	2.00	1.5	7.00	3	38	☐	🟦
0.45	3.60	1.5	8.60	3	38	☐	🟦



$D_{1\ h6}$	L_1	D_{h6}	L	CARBIDE	TiAlN
0.50	4.0	3	38	☐	🟦
0.53	4.5	3	38	☐	🟦
0.55	4.5	3	38	☐	🟦
0.60	4.5	3	38	☐	🟦
0.62	5.0	3	38	☐	🟦
0.65	5.0	3	38	☐	🟦
0.70	5.6	3	38	☐	🟦
0.71	5.6	3	38	☐	🟦
0.75	5.6	3	38	☐	🟦
0.80	6.3	3	38	☐	🟦
0.81	6.3	3	38	☐	🟦
0.82	6.3	3	38	☐	🟦
0.83	6.3	3	38	☐	🟦
0.84	6.3	3	38	☐	🟦
0.85	6.3	3	38	☐	🟦
0.86	7.1	3	38	☐	🟦
0.87	7.1	3	38	☐	🟦
0.88	7.1	3	38	☐	🟦
0.89	7.1	3	38	☐	🟦
0.90	7.1	3	38	☐	🟦
0.91	7.1	3	38	☐	🟦
0.92	7.1	3	38	☐	🟦
0.93	7.1	3	38	☐	🟦
0.94	7.1	3	38	☐	🟦
0.95	7.1	3	38	☐	🟦
0.96	9.0	3	38	☐	🟦
0.97	9.0	3	38	☐	🟦
0.98	9.0	3	38	☐	🟦
0.99	9.0	3	38	☐	🟦
1.00	9.0	3	38	☐	🟦
1.01	9.0	3	38	☐	🟦



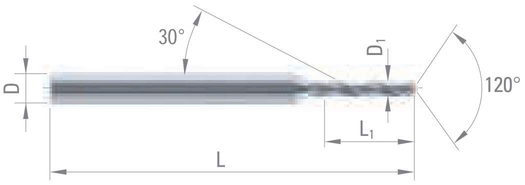
DIXI 1138 R

$D_{1\ h6}$	L_1	D_{h6}	L	CARBIDE	TiAlN
1.02	9.0	3	38	☐	■
1.03	9.0	3	38	☐	■
1.04	9.0	3	38	☐	■
1.05	9.0	3	38	☐	■
1.06	9.0	3	38	☐	■
1.07	9.0	3	38	☐	■
1.08	9.0	3	38	☐	■
1.09	9.0	3	38	☐	■
1.10	9.0	3	38	☐	■
1.11	9.0	3	38	☐	■
1.12	9.0	3	38	☐	■
1.13	9.0	3	38	☐	■
1.14	9.0	3	38	☐	■
1.15	9.0	3	38	☐	■
1.16	10.0	3	38	☐	■
1.17	10.0	3	38	☐	■
1.18	10.0	3	38	☐	■
1.19	10.0	3	38	☐	■
1.20	10.0	3	38	☐	■
1.21	10.0	3	38	☐	■
1.22	10.0	3	38	☐	■
1.23	10.0	3	38	☐	■
1.24	10.0.	3	38	☐	■
1.25	10.0	3	38	☐	■
1.26	10.0	3	38	☐	■
1.27	10.0	3	38	☐	■
1.28	10.0	3	38	☐	■
1.29	10.0	3	38	☐	■
1.30	10.0	3	38	☐	■
1.31	11.2	3	38	☐	■
1.32	11.2	3	38	☐	■
1.33	11.2	3	38	☐	■
1.34	11.2	3	38	☐	■
1.35	11.2	3	38	☐	■
1.36	11.2	3	38	☐	■
1.37	11.2	3	38	☐	■
1.38	11.2	3	38	☐	■
1.39	11.2	3	38	☐	■
1.40	11.2	3	38	☐	■
1.45	11.2	3	38	☐	■
1.50	11.2	3	38	☐	■
1.55	12.0	3	38	☐	■
1.60	12.0	3	38	☐	■
1.65	12.0	3	38	☐	■
1.70	12.0	3	38	☐	■
1.75	12.0	3	38	☐	■
1.80	12.0	3	38	☐	■
1.85	12.0	3	38	☐	■
1.90	12.0	3	38	☐	■
1.95	12.0	3	38	☐	■
2.00	12.0	3	38	☐	■
2.05	15.0	3	38	☐	■
2.10	15.0	3	38	☐	■
2.15	15.0	3	38	☐	■
2.20	15.0	3	38	☐	■
2.25	15.0	3	38	☐	■
2.30	15.0	3	38	☐	■
2.35	15.0	3	38	☐	■
2.40	15.0	3	38	☐	■
2.45	15.0	3	38	☐	■
2.50	15.0	3	38	☐	■
2.55	15.0	3	38	☐	■
2.80	16.0	3	38	☐	■

P. 65

P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



DIXI 1149 R TiAlN

SELF-CENTERING TWIST DRILLS
REINFORCED SHANK

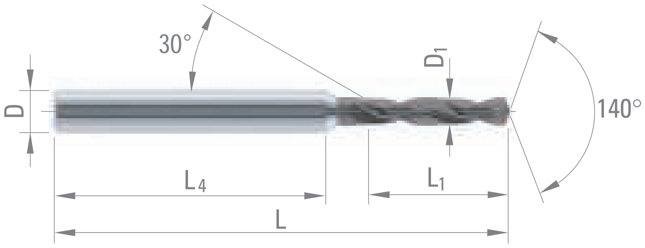
Z = 2

P. 65

P. 78

DIN 6537K

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy difficult to machine	Al	



$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAlN
1.00	5	26	3	38	■
1.10	5	26	3	38	■
1.20	5	26	3	38	■
1.30	5	26	3	38	■
1.40	5	26	3	38	■
1.50	7	25	3	38	■
1.60	7	25	3	38	■
1.70	7	25	3	38	■
1.80	7	25	3	38	■
1.90	7	25	3	38	■
2.00	9	35	3	50	■
2.10	9	35	3	50	■
2.20	9	35	3	50	■
2.30	9	35	3	50	■
2.40	9	35	3	50	■
2.50	9	36	3	50	■
2.60	11	31	4	50	■
2.70	11	31	4	50	■
2.80	11	31	4	50	■
2.90	11	31	4	50	■
3.00	14	39	6	62	■
3.10	14	39	6	62	■
3.175	14	39	6	62	■
3.20	14	39	6	62	■
3.30	14	39	6	62	■
3.40	14	39	6	62	■
3.50	14	39	6	62	■
3.60	14	39	6	62	■
3.70	14	40	6	62	■
3.80	17	40	6	66	■
3.90	17	40	6	66	■
4.00	17	40	6	66	■
4.10	17	40	6	66	■
4.20	17	40	6	66	■
4.30	17	40	6	66	■
4.40	17	40	6	66	■
4.50	17	40	6	66	■
4.60	17	40	6	66	■
4.70	17	40	6	66	■

DIXI 1149 R TiAlN

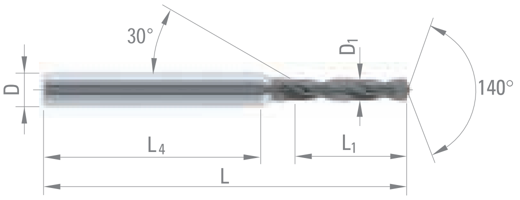
$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAlN
4.762	20	37	6	66	🟦
4.80	20	37	6	66	🟦
4.90	20	38	6	66	🟦
5.00	20	38	6	66	🟦
5.10	20	38	6	66	🟦
5.20	20	38	6	66	🟦
5.30	20	38	6	66	🟦
5.40	20	38	6	66	🟦
5.50	20	38	6	66	🟦
5.60	22	37	6	66	🟦
5.70	22	37	6	66	🟦
5.80	22	37	6	66	🟦
5.90	22	37	6	66	🟦
6.00	22	37	6	66	🟦
6.20	24	43	8	79	🟦
6.30	24	43	8	79	🟦
6.35	24	43	8	79	🟦
6.40	24	43	8	79	🟦
6.50	24	43	8	79	🟦
6.60	24	43	8	79	🟦
6.70	24	43	8	79	🟦
6.80	24	44	8	79	🟦
6.90	24	44	8	79	🟦
7.00	29	43	8	79	🟦
7.20	29	38	8	79	🟦
7.50	29	38	8	79	🟦
7.80	29	38	8	79	🟦
8.00	29	39	8	79	🟦
8.20	35	40	10	89	🟦
8.40	35	40	10	89	🟦
8.50	35	40	10	89	🟦
8.70	35	41	10	89	🟦
8.80	35	41	10	89	🟦
9.00	35	41	10	89	🟦
9.20	35	41	10	89	🟦
9.50	35	41	10	89	🟦
9.80	35	41	10	89	🟦
10.00	35	42	10	89	🟦
10.20	40	47	12	102	🟦
10.50	40	47	12	102	🟦
10.80	40	48	12	102	🟦
11.00	40	48	12	102	🟦
11.50	41	47	12	102	🟦
12.00	42	47	12	102	🟦
13.00	46	47	14	107	🟦
14.00	49	45	14	107	🟦

P. 65

P. 78

DIN 6537K

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy difficult to machine	Al	



DIXI 1147 R TiAlN

SELF-CENTERING TWIST DRILLS
REINFORCED SHANK

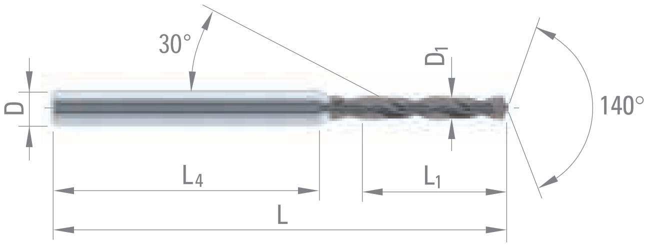
Z = 2

P. 65

P. 80

$L_1 = 6.5 \times D_1$

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Al		



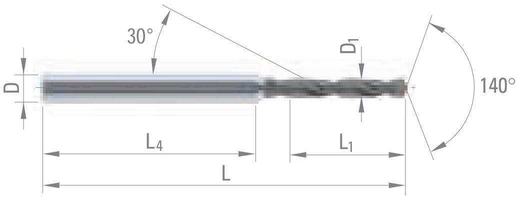
$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAlN
0.50	3.3	29	3	38	🟦
0.55	3.6	29	3	38	🟦
0.60	3.9	29	3	38	🟦
0.65	4.2	33	3	43	🟦
0.70	4.6	33	3	43	🟦
0.75	4.9	33	3	43	🟦
0.80	5.2	32	3	43	🟦
0.85	5.5	32	3	43	🟦
0.90	5.9	32	3	43	🟦
0.95	6.2	32	3	43	🟦
1.00	6.5	31	3	43	🟦
1.10	7.2	31	3	43	🟦
1.20	7.8	37	3	50	🟦
1.30	8.5	37	3	50	🟦
1.40	9.1	36	3	50	🟦
1.50	9.8	35	3	50	🟦
1.60	10.4	35	3	50	🟦
1.70	11.1	34	3	50	🟦
1.80	11.7	34	3	50	🟦
1.90	12.4	33	3	50	🟦
2.00	13.0	43	4	62	🟦
2.10	13.7	42	4	62	🟦
2.20	14.3	42	4	62	🟦
2.30	15.0	41	4	62	🟦
2.40	15.6	41	4	62	🟦
2.50	16.3	40	4	62	🟦
2.60	16.9	39	4	62	🟦
2.70	17.6	39	4	62	🟦
2.80	18.2	38	4	62	🟦
2.90	18.9	38	4	62	🟦
3.00	19.5	37	4	62	🟦
3.10	20.2	53	6	79	🟦
3.20	20.8	52	6	79	🟦
3.30	21.5	51	6	79	🟦
3.40	22.1	51	6	79	🟦
3.50	22.8	50	6	79	🟦
3.60	23.4	50	6	79	🟦
3.75	24.4	49	6	79	🟦
3.80	24.7	48	6	79	🟦
3.90	25.4	47	6	79	🟦

DIXI 1147 R TiAlN

$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAlN
4.00	26.0	47	6	79	🟦
4.10	26.7	46	6	79	🟦
4.20	27.3	45	6	79	🟦
4.30	28.0	45	6	79	🟦
4.40	28.6	44	6	79	🟦
4.50	29.3	43	6	79	🟦
4.60	29.9	43	6	79	🟦
4.70	30.6	42	6	79	🟦
4.80	31.2	42	6	79	🟦
4.90	31.9	41	6	79	🟦
5.00	32.5	50	6	89	🟦
5.10	33.2	49	6	89	🟦
5.20	33.8	49	6	89	🟦
5.30	33.5	48	6	89	🟦
5.40	35.1	48	6	89	🟦
5.50	35.8	47	6	89	🟦
5.60	36.4	46	6	89	🟦
5.70	37.1	46	6	89	🟦
5.80	37.7	45	6	89	🟦
5.90	38.4	44	6	89	🟦
6.00	39.0	44	6	89	🟦
6.10	39.7	54	8	102	🟦
6.20	40.3	53	8	102	🟦
6.30	41.0	53	8	102	🟦
6.35	41.3	53	8	102	🟦
6.40	41.6	52	8	102	🟦
6.50	42.3	51	8	102	🟦
6.60	42.9	51	8	102	🟦
6.70	43.6	50	8	102	🟦
6.80	44.2	50	8	102	🟦
6.90	44.9	49	8	102	🟦
7.00	45.5	48	8	102	🟦
7.20	46.8	47	8	102	🟦
7.50	48.8	45	8	102	🟦
7.80	50.7	43	8	102	🟦
8.00	52.0	42	8	102	🟦
8.20	53.3	54	10	118	🟦
8.40	54.0	54	10	118	🟦
8.50	55.3	52	10	118	🟦
8.80	57.2	51	10	118	🟦
9.00	58.5	49	10	118	🟦
9.50	61.8	46	10	118	🟦
9.80	63.7	44	10	118	🟦
10.00	65.0	43	10	118	🟦

P. 65 P. 80

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Al		



DIXI 1145 R TiAlN

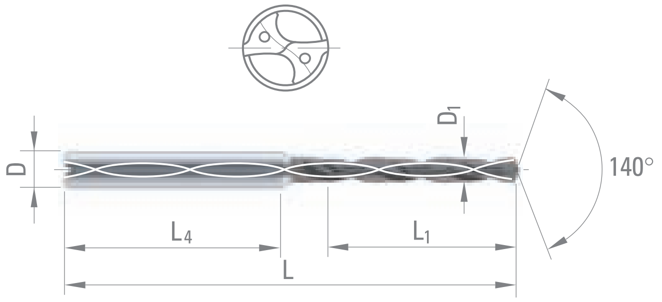
SELF-CENTERING TWIST DRILLS
REINFORCED SHANK
WITH THROUGH COOLANT

Z = 2

P. 65 P. 78

DIN 6537L

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy difficult to machine	Al	



$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAlN
0.70	5	26	3	38	■
0.80	5	26	3	38	■
0.90	5	27	3	38	■
1.00	7	24	3	38	■
1.10	7	24	3	38	■
1.20	7	24	3	38	■
1.30	7	24	3	38	■
1.40	7	25	3	38	■
1.50	11	20	3	38	■
1.60	11	20	3	38	■
1.70	11	20	3	38	■
1.80	11	20	3	38	■
1.90	11	20	3	38	■
2.00	15	18	3	38	■
2.10	15	18	3	38	■
2.20	15	18	3	38	■
2.30	15	26	4	50	■
2.40	15	27	4	50	■
2.50	18	24	4	50	■
2.60	18	24	4	50	■
2.70	18	24	4	50	■
2.80	18	24	4	50	■
2.90	23	35	6	66	■
3.00	23	35	6	66	■
3.10	23	35	6	66	■
3.20	23	35	6	66	■
3.30	23	35	6	66	■
3.40	23	35	6	66	■
3.50	23	35	6	66	■
3.60	29	35	6	74	■
3.70	29	35	6	74	■
3.75	29	36	6	74	■
3.80	29	36	6	74	■
3.90	29	36	6	74	■
4.00	29	36	6	74	■
4.10	29	36	6	74	■
4.20	29	36	6	74	■
4.30	29	36	6	74	■
4.40	29	36	6	74	■
4.50	35	38	6	82	■
4.60	35	38	6	82	■
4.70	35	38	6	82	■
4.80	35	38	6	82	■
4.90	35	38	6	82	■

DIXI 1145 R TiAIN

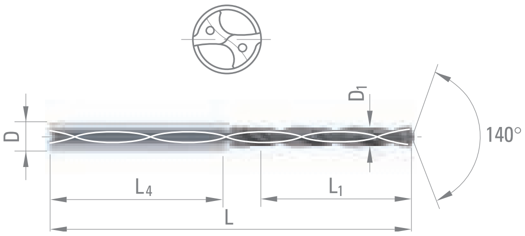
D_{1} h6	L_{1}	L_{4}	D_{h6}	L	TiAIN
5.00	35	39	6	82	🟦
5.10	35	39	6	82	🟦
5.20	35	39	6	82	🟦
5.30	35	39	6	82	🟦
5.40	35	39	6	82	🟦
5.50	35	39	6	82	🟦
5.60	35	39	6	82	🟦
5.70	35	39	6	82	🟦
5.80	35	39	6	82	🟦
5.90	35	39	6	82	🟦
6.00	35	40	6	82	🟦
6.10	43	36	8	91	🟦
6.20	43	36	8	91	🟦
6.30	43	36	8	91	🟦
6.35	43	36	8	91	🟦
6.40	43	36	8	91	🟦
6.50	43	36	8	91	🟦
6.60	43	36	8	91	🟦
6.70	43	36	8	91	🟦
6.80	43	36	8	91	🟦
6.90	43	36	8	91	🟦
7.00	43	36	8	91	🟦
7.20	43	36	8	91	🟦
7.30	43	36	8	91	🟦
7.40	43	36	8	91	🟦
7.50	43	36	8	91	🟦
7.60	43	36	8	91	🟦
7.80	43	36	8	91	🟦
8.00	43	-	8	91	🟦
8.10	49	40	10	103	🟦
8.20	49	40	10	103	🟦
8.30	49	40	10	103	🟦
8.40	49	40	10	103	🟦
8.50	49	40	10	103	🟦
8.60	49	40	10	103	🟦
8.80	49	40	10	103	🟦
9.00	49	41	10	103	🟦
9.20	49	41	10	103	🟦
9.40	49	41	10	103	🟦
9.50	49	41	10	103	🟦
9.525	49	41	10	103	🟦
9.60	49	41	10	103	🟦
9.70	49	41	10	103	🟦
9.80	49	41	10	103	🟦
10.00	49	-	10	103	🟦
10.10	56	47	12	118	🟦
10.20	56	47	12	118	🟦
10.30	56	47	12	118	🟦
10.50	56	47	12	118	🟦
10.60	56	47	12	118	🟦
10.80	56	47	12	118	🟦
11.00	56	48	12	118	🟦
11.30	58	46	12	118	🟦
11.50	58	46	12	118	🟦
12.00	60	45	12	118	🟦
13.00	65	45	14	124	🟦
14.00	70	-	14	124	🟦

P. 65

P. 78

DIN 6537L

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy difficult to machine	Al	



DIXI 1146 R TiAIN

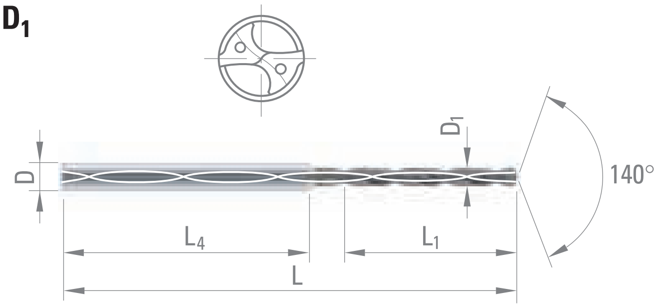
SELF-CENTERING TWIST DRILLS
REINFORCED SHANK
WITH THROUGH COOLANT

Z = 2

P. 65 P. 80

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Al		

$L_1 = 10 \times D_1$



$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAIN
0.80	8.0	37	3	50	🟦
0.85	9.0	37	3	50	🟦
0.90	9.0	36	3	50	🟦
0.95	10.0	36	3	50	🟦
1.00	10.0	35	3	50	🟦
1.10	11.0	34	3	50	🟦
1.20	12.0	33	3	50	🟦
1.30	13.0	33	3	50	🟦
1.40	14.0	32	3	50	🟦
1.50	15.0	43	3	50	🟦
1.60	16.0	42	3	62	🟦
1.70	17.0	41	3	62	🟦
1.80	18.0	40	3	62	🟦
1.90	19.0	39	3	62	🟦
2.00	20.0	38	3	62	🟦
2.10	21.0	37	3	62	🟦
2.20	22.0	36	3	62	🟦
2.30	23.0	51	4	79	🟦
2.40	24.0	50	4	79	🟦
2.50	25.0	49	4	79	🟦
2.60	26.0	48	4	79	🟦
2.70	27.0	47	4	79	🟦
2.80	28.0	46	4	79	🟦
2.90	29.0	44	6	79	🟦
3.00	30.0	43	6	79	🟦
3.10	31.0	52	6	89	🟦
3.20	32.0	51	6	89	🟦
3.30	33.0	50	6	89	🟦
3.40	34.0	49	6	89	🟦
3.50	35.0	48	6	89	🟦
3.60	36.0	47	6	89	🟦
3.75	37.5	46	6	89	🟦
3.80	38.0	44	6	89	🟦
3.90	39.0	44	6	89	🟦
4.00	40.0	56	6	102	🟦
4.10	41.0	55	6	102	🟦
4.20	42.0	54	6	102	🟦
4.30	43.0	53	6	102	🟦
4.40	44.0	52	6	102	🟦
4.50	45.0	51	6	102	🟦

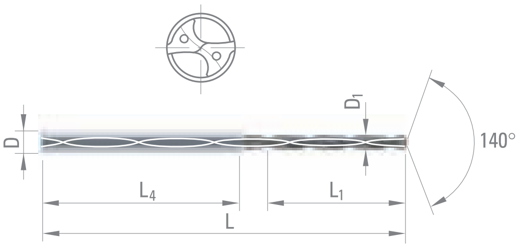
DIXI 1146 R TiAlN

$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAlN
4.60	46.0	50	6	102	🟦
4.70	47.0	49	6	102	🟦
4.80	48.0	48	6	102	🟦
4.90	49.0	47	6	102	🟦
5.00	50.0	46	6	102	🟦
5.10	51.0	45	6	102	🟦
5.20	52.0	44	6	102	🟦
5.30	53.0	43	6	102	🟦
5.40	54.0	42	6	102	🟦
5.50	55.0	41	6	102	🟦
5.60	56.0	56	6	118	🟦
5.70	57.0	55	6	118	🟦
5.80	58.0	54	6	118	🟦
5.90	59.0	53	6	118	🟦
6.00	60.0	52	6	118	🟦
6.10	61.0	49	8	118	🟦
6.20	62.0	48	8	118	🟦
6.30	63.0	47	8	118	🟦
6.35	63.5	47	8	118	🟦
6.50	65.0	45	8	118	🟦
6.60	66.0	59	8	133	🟦
6.80	68.0	57	8	133	🟦
6.90	69.0	56	8	133	🟦
7.00	70.0	55	8	133	🟦
7.20	72.0	53	8	133	🟦
7.50	75.0	50	8	133	🟦
7.80	78.0	47	8	133	🟦
8.00	80.0	45	8	133	🟦
8.20	82.0	59	10	151	🟦
8.40	84.0	57	10	151	🟦
8.50	85.0	56	10	151	🟦
8.80	88.0	53	10	151	🟦
9.00	90.0	60	10	160	🟦
9.20	92.0	58	10	160	🟦
9.40	94.0	56	10	160	🟦
9.525	95.3	55	10	160	🟦
9.80	98.0	52	10	160	🟦
10.00	100.0	50	10	160	🟦

P. 65

P. 80

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Al



DIXI 1280 R XIDUR

TWIST DRILLS FOR HARDENED STEEL REINFORCED SHANK

Z = 2

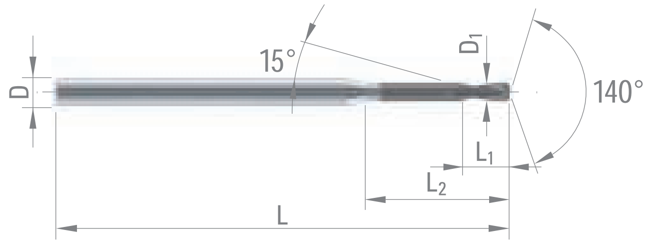
P. 65

P. 82

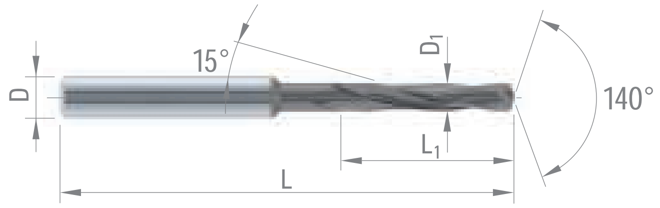
>45 HRC

High alloyed steel	Steel Cast iron > 45 HRC	Refractory alloy

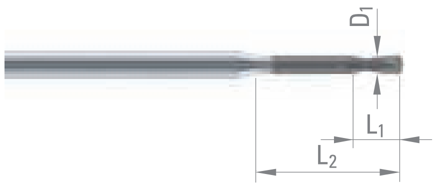
Ø 0.25 ≤ Ø 2.00



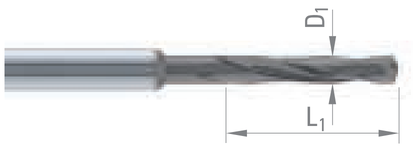
Ø 2.50 ≤ Ø 12.00



$D_{1\ h6}$	L_1	L_2	D_{h6}	L	XIDUR
0.25	0.75	2.0	3	38	🟪
0.30	0.90	2.5	3	38	🟪
0.40	1.20	3.2	3	38	🟪
0.50	1.50	4.0	3	38	🟪
0.60	1.80	4.8	3	38	🟪
0.70	2.10	5.6	3	38	🟪
0.80	2.40	6.5	3	38	🟪
0.90	2.70	7.5	3	38	🟪
1.00	3.00	8.0	3	38	🟪
1.10	3.30	8.0	3	50	🟪
1.20	3.60	10.0	3	50	🟪
1.30	3.90	12.0	3	50	🟪
1.40	4.20	12.0	3	50	🟪
1.50	4.50	12.0	3	50	🟪
1.60	4.80	15.0	3	50	🟪
1.70	5.10	15.0	3	50	🟪
1.80	5.40	15.0	3	50	🟪
1.90	5.80	15.0	3	50	🟪
2.00	6.00	16.0	3	50	🟪



$D_{1\ h6}$	L_1	D_{h6}	L	XIDUR
2.50	15	3	62	🟪
2.60	15	3	62	🟪
2.70	15	3	62	🟪
2.80	15	3	62	🟪
2.90	15	3	62	🟪
3.00	20	4	66	🟪
3.175	20	4	66	🟪
3.30	20	4	66	🟪
3.40	20	4	66	🟪
3.50	20	4	66	🟪
3.57	20	4	66	🟪
3.70	20	4	66	🟪
3.80	20	4	66	🟪
3.90	20	4	66	🟪
4.00	30	6	66	🟪
4.10	30	6	66	🟪
4.20	30	6	66	🟪
4.30	30	6	66	🟪
4.365	30	6	66	🟪
4.50	30	6	66	🟪



DIXI 1280 R XIDUR

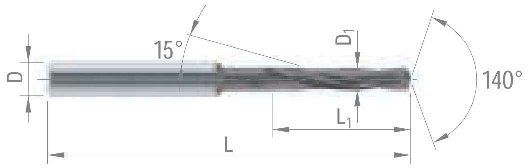
$D_{1\,h6}$	L_1	D_{h6}	L	XIDUR
4.60	30	6	66	■
4.70	30	6	66	■
4.762	30	6	66	■
4.90	30	6	66	■
5.00	30	6	66	■
5.10	30	6	66	■
5.16	30	6	66	■
5.50	30	6	66	■
5.80	30	6	66	■
6.00	40	8	79	■
6.35	40	8	79	■
6.50	40	8	79	■
6.80	40	8	79	■
7.00	40	8	79	■
7.14	40	8	79	■
7.50	40	8	79	■
7.80	40	8	79	■
8.00	50	10	89	■
8.33	50	10	89	■
8.50	50	10	89	■
8.73	50	10	89	■
9.00	50	10	89	■
9.525	50	10	89	■
9.80	50	10	89	■
10.00	60	12	102	■
10.20	60	12	102	■
10.50	60	12	102	■
10.80	60	12	102	■
11.00	60	12	102	■
11.50	60	12	102	■
12.00	60	12	102	■

i P. 65

f Vc Ap ? P. 82

>45 HRC

High alloyed steel	Steel Hardened cast iron	Refractory alloy



DIXI 1151 R

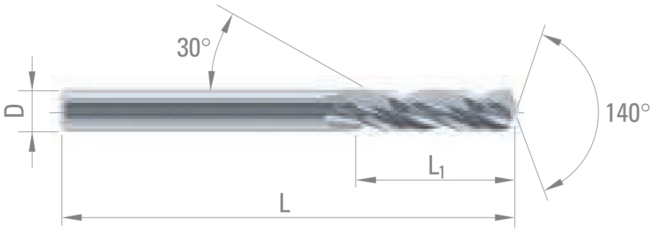
3 FLUTE TWIST DRILLS

Z = 3

P. 65

P. 82

Steel < 600MPa	Steel > 600MPa	Cast iron	Titanium, titanium alloy	Al



D_{h6}	L_1	L	CARBIDE	TiN
1.00	8	30	☐	🟨
1.05	8	30	☐	🟨
1.10	10	30	☐	🟨
1.15	10	30	☐	🟨
1.20	10	30	☐	🟨
1.25	10	30	☐	🟨
1.30	10	30	☐	🟨
1.35	10	30	☐	🟨
1.40	10	30	☐	🟨
1.45	10	30	☐	🟨
1.50	10	30	☐	🟨
1.55	12	38	☐	🟨
1.60	12	38	☐	🟨
1.65	12	38	☐	🟨
1.70	12	38	☐	🟨
1.75	12	38	☐	🟨
1.80	12	38	☐	🟨
1.85	12	38	☐	🟨
1.90	12	38	☐	🟨
1.95	12	38	☐	🟨
2.00	12	38	☐	🟨
2.10	12	38	☐	🟨
2.20	13	40	☐	🟨
2.30	13	40	☐	🟨
2.40	14	43	☐	🟨
2.50	14	43	☐	🟨
2.60	14	43	☐	🟨
2.70	16	46	☐	🟨
2.80	16	46	☐	🟨
2.90	16	46	☐	🟨
3.00	16	46	☐	🟨
3.10	18	49	☐	🟨
3.20	18	49	☐	🟨
3.30	18	49	☐	🟨
3.40	20	52	☐	🟨
3.50	20	52	☐	🟨
3.60	20	52	☐	🟨
3.70	20	52	☐	🟨
3.80	22	55	☐	🟨
3.90	22	55	☐	🟨

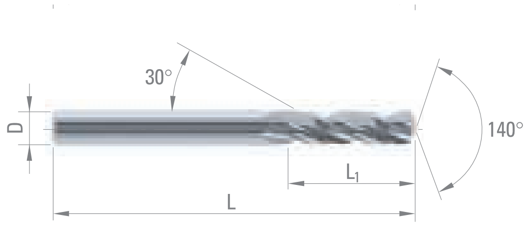
DIXI 1151 R

D_{h6}	L_1	L	CARBIDE	TiN
t 4.00	22	55	☐	🟨
4.10	22	55	☐	🟨
4.20	22	55	☐	🟨
4.30	24	58	☐	🟨
4.40	24	58	☐	🟨
4.50	24	58	☐	🟨
4.60	24	58	☐	🟨
4.70	24	58	☐	🟨
4.80	26	62	☐	🟨
4.90	26	62	☐	🟨
5.00	26	62	☐	🟨
5.10	26	62	☐	🟨
5.20	26	62	☐	🟨
5.30	26	62	☐	🟨
5.40	28	66	☐	🟨
5.50	28	66	☐	🟨
5.60	28	66	☐	🟨
5.70	28	66	☐	🟨
5.80	28	66	☐	🟨
5.90	28	66	☐	🟨
6.00	28	66	☐	🟨
6.10	31	70	☐	🟨
6.20	31	70	☐	🟨
6.30	31	70	☐	🟨
6.40	31	70	☐	🟨
6.50	31	70	☐	🟨
6.60	31	70	☐	🟨
6.70	31	70	☐	🟨
6.80	34	74	☐	🟨
6.90	34	74	☐	🟨
7.00	34	74	☐	🟨
7.50	34	74	☐	🟨
7.80	37	79	☐	🟨
8.00	37	79	☐	🟨
8.20	37	79	☐	🟨
8.50	37	79	☐	🟨
8.80	40	84	☐	🟨
9.00	40	84	☐	🟨
9.50	40	84	☐	🟨
9.80	43	89	☐	🟨
10.00	43	89	☐	🟨
10.20	43	89	☐	🟨
10.50	43	89	☐	🟨
11.00	47	95	☐	🟨
11.50	47	95	☐	🟨
12.00	51	102	☐	🟨
12.50	51	102	☐	🟨
13.00	51	102	☐	🟨
13.50	54	107	☐	🟨
14.00	54	107	☐	🟨

P. 65

P. 82

Steel < 600MPa	Steel > 600MPa	Cast iron	Titanium, titanium alloy	Al



DIXI 1152 R

3 FLUTE TWIST DRILLS REINFORCED SHANK

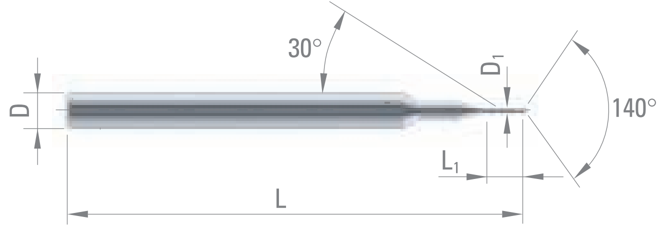
Z = 3

P. 65

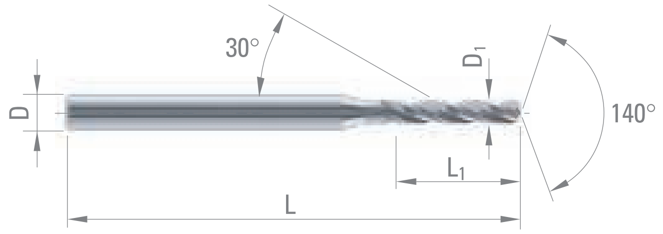
P. 82

Steel < 600MPa	Steel > 600MPa	Cast iron	Titanium, titanium alloy	Al

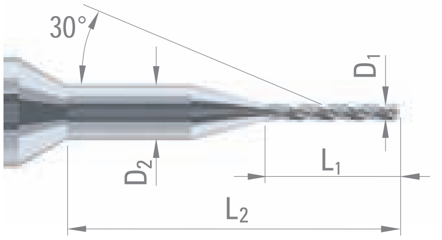
Ø 0.15 ≤ Ø 0.45



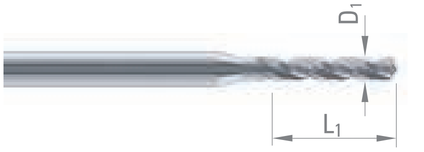
Ø 0.50 ≤ Ø 2.90



$D_{1\ 0/-0.004}$	L_1	D_2	L_2	D_{h6}	L	CARBIDE
0.15	1.5	1.5	6.80	3.0	38	☐
0.20	1.5	1.5	6.80	3.0	38	☐
0.25	2.0	1.5	7.35	3.0	38	☐
0.30	2.0	1.5	7.35	3.0	38	☐
0.35	2.0	1.5	7.35	3.0	38	☐
0.40	2.0	1.5	7.35	3.0	38	☐
0.45	3.6	1.5	8.95	3.0	38	☐



$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE
0.50	4.0	3.0	38	☐
0.53	4.5	3.0	38	☐
0.55	4.5	3.0	38	☐
0.60	4.5	3.0	38	☐
0.62	5.0	3.0	38	☐
0.65	5.0	3.0	38	☐
0.70	5.6	3.0	38	☐
0.71	5.6	3.0	38	☐
0.75	5.6	3.0	38	☐
0.80	6.3	3.0	38	☐
0.81	6.3	3.0	38	☐
0.82	6.3	3.0	38	☐
0.83	6.3	3.0	38	☐
0.84	6.3	3.0	38	☐
0.85	6.3	3.0	38	☐
0.86	7.1	3.0	38	☐
0.87	7.1	3.0	38	☐
0.88	7.1	3.0	38	☐
0.89	7.1	3.0	38	☐
0.90	7.1	3.0	38	☐
0.91	7.1	3.0	38	☐
0.92	7.1	3.0	38	☐
0.93	7.1	3.0	38	☐
0.94	7.1	3.0	38	☐
0.95	7.1	3.0	38	☐
0.96	9.0	3.0	38	☐
0.97	9.0	3.0	38	☐
0.98	9.0	3.0	38	☐
0.99	9.0	3.0	38	☐
1.00	9.0	3.0	38	☐
1.01	9.0	3.0	38	☐
1.02	9.0	3.0	38	☐
1.03	9.0	3.0	38	☐
1.04	9.0	3.0	38	☐
1.05	9.0	3.0	38	☐
1.06	9.0	3.0	38	☐
1.07	9.0	3.0	38	☐



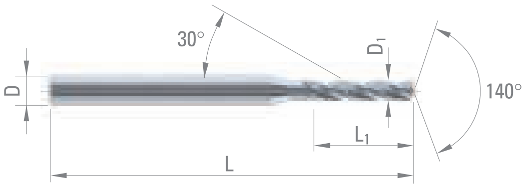
DIXI 1152 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE
1.08	9.0	3.0	38	☐
1.09	9.0	3.0	38	☐
1.10	9.0	3.0	38	☐
1.11	9.0	3.0	38	☐
1.12	9.0	3.0	38	☐
1.13	9.0	3.0	38	☐
1.14	9.0	3.0	38	☐
1.15	9.0	3.0	38	☐
1.16	10.0	3.0	38	☐
1.17	10.0	3.0	38	☐
1.18	10.0	3.0	38	☐
1.19	10.0	3.0	38	☐
1.20	10.0	3.0	38	☐
1.21	10.0	3.0	38	☐
1.22	10.0	3.0	38	☐
1.23	10.0	3.0	38	☐
1.24	10.0	3.0	38	☐
1.25	10.0	3.0	38	☐
1.26	10.0	3.0	38	☐
1.27	10.0	3.0	38	☐
1.28	10.0	3.0	38	☐
1.29	10.0	3.0	38	☐
1.30	10.0	3.0	38	☐
1.31	11.2	3.0	38	☐
1.32	11.2	3.0	38	☐
1.33	11.2	3.0	38	☐
1.34	11.2	3.0	38	☐
1.35	11.2	3.0	38	☐
1.36	11.2	3.0	38	☐
1.37	11.2	3.0	38	☐
1.38	11.2	3.0	38	☐
1.39	11.2	3.0	38	☐
1.40	11.2	3.0	38	☐
1.45	11.2	3.0	38	☐
1.50	11.2	3.0	38	☐
1.55	12.0	3.0	38	☐
1.60	12.0	3.0	38	☐
1.65	12.0	3.0	38	☐
1.67	12.0	3.0	38	☐
1.70	12.0	3.0	38	☐
1.75	12.0	3.0	38	☐
1.80	12.0	3.0	38	☐
1.85	12.0	3.0	38	☐
1.90	12.0	3.0	38	☐
1.95	12.0	3.0	38	☐
2.00	12.0	3.0	38	☐
2.03	15.0	3.0	38	☐
2.04	15.0	3.0	38	☐
2.05	15.0	3.0	38	☐
2.10	15.0	3.0	38	☐
2.15	15.0	3.0	38	☐
2.20	15.0	3.0	38	☐
2.25	15.0	3.0	38	☐
2.30	15.0	3.0	38	☐
2.35	15.0	3.0	38	☐
2.40	15.0	3.0	38	☐
2.45	15.0	3.0	38	☐
2.50	15.0	3.0	38	☐
2.55	15.0	3.0	38	☐
2.60	15.0	3.0	38	☐
2.70	16.0	3.0	38	☐
2.80	16.0	3.0	38	☐
2.90	16.0	3.0	38	☐

i P. 65

f Vc Ap P. 82

Steel < 600MPa	Steel > 600MPa	Cast iron	Titanium, titanium alloy	Al

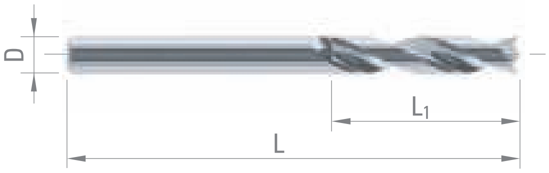


DIXI 1290 R

TWIST DRILLS FOR COMPOSITES / KEVLAR®

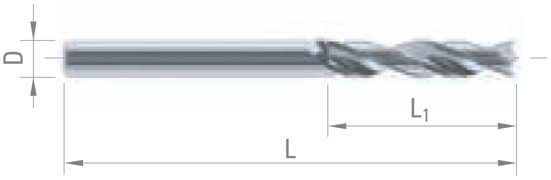
Z = 2

Ø 2.50 ≤ Ø 5.556



Kevlar®

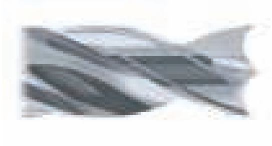
Ø 5.60 ≤ Ø 12.70



Cutting conditions:	Vc = 100 - 150 m/min f = 0.05 - 0.15 mm/rev

D_{h6}	inches	L_1	L	CARBIDE
2.50		18	50	☐
3.00		18	50	☐
3.175	1/8"	18	50	☐
3.20		18	50	☐
3.30		18	50	☐
3.50		20	50	☐
3.80		20	50	☐
3.968	5/32"	22	50	☐
4.00		22	50	☐
4.10		22	50	☐
4.20		25	55	☐
4.50		25	58	☐
4.80		25	62	☐
5.00		25	62	☐
5.20		25	62	☐
5.50		25	66	☐
5.556	7/32"	25	60	☐

D_{h6}	inches	L_1	L	CARBIDE
5.60		30	66	☐
6.00		30	66	☐
6.35	1/4"	30	70	☐
6.50		30	70	☐
7.00		35	74	☐
8.00		35	75	☐
9.00		35	75	☐
9.525	3/8"	35	75	☐
10.00		35	75	☐
11.00		50	100	☐
12.00		50	100	☐
12.70	1/2"	50	100	☐

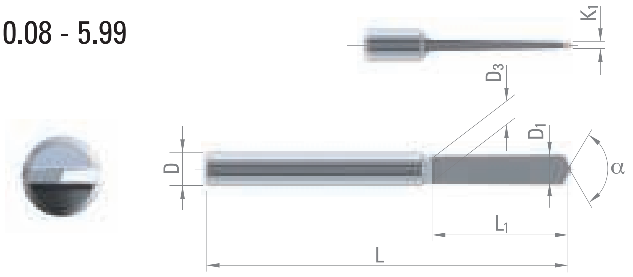


DIXI 1112 R+L

Z = 2

SPADE DRILLS

Ø 0.08 - 5.99



P. 68

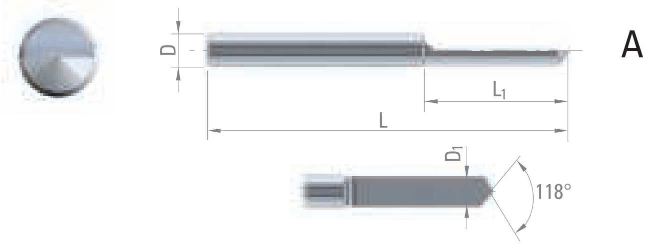
Steel < 600MPa
Cast iron
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Plastic

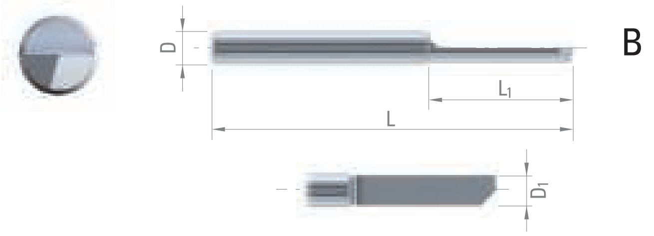
DIXI 1114 R+L

Z = 1

HALF-MOON BITS
EXECUTION A OR B

Ø 0.08 - 5.99





Indicative values to define
DIXI 1112, 1114 and **1118**'s geometry.

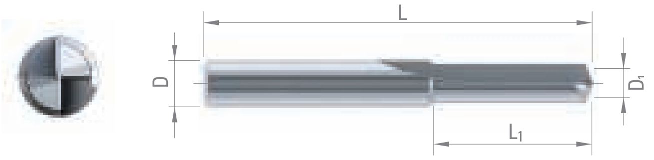
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L
0.08 - 0.14	0.7	1.0	30
0.15 - 0.29	1.0	1.0	30
0.30 - 0.39	1.5	1.0	30
0.40 - 0.44	2.0	1.0	30
0.45 - 0.48	3.6	1.0	30
0.49 - 0.53	4.0	1.0	30
0.54 - 0.60	4.5	1.0	30
0.61 - 0.67	5.0	1.0	30
0.68 - 0.75	5.6	1.0	30
0.76 - 0.79	6.3	1.0	30
0.80 - 0.85	6.3	1.5	30
0.86 - 0.95	7.1	1.5	30
0.96 - 0.99	8.0	1.5	30
1.00 - 1.18	9.0	1.5	30
1.19 - 1.32	10.0	1.5	30
1.33 - 1.49	11.2	1.5	30
1.50 - 1.99	12.0	2.0	38
2.00 - 2.49	12.0	2.5	43
2.50 - 2.99	15.0	3.0	46
3.00 - 3.49	18.0	3.5	50
3.50 - 3.99	18.0	4.0	50
4.00 - 4.49	20.0	4.5	50
4.50 - 4.99	22.0	5.0	50
5.00 - 5.49	25.0	5.5	50
5.50 - 5.99	25.0	6.0	50

DIXI 1118 R+L

Z = 2

STRAIGHT FLUTE SLOT DRILLS

Ø 0.08 - 5.99



TOOLS ON REQUEST

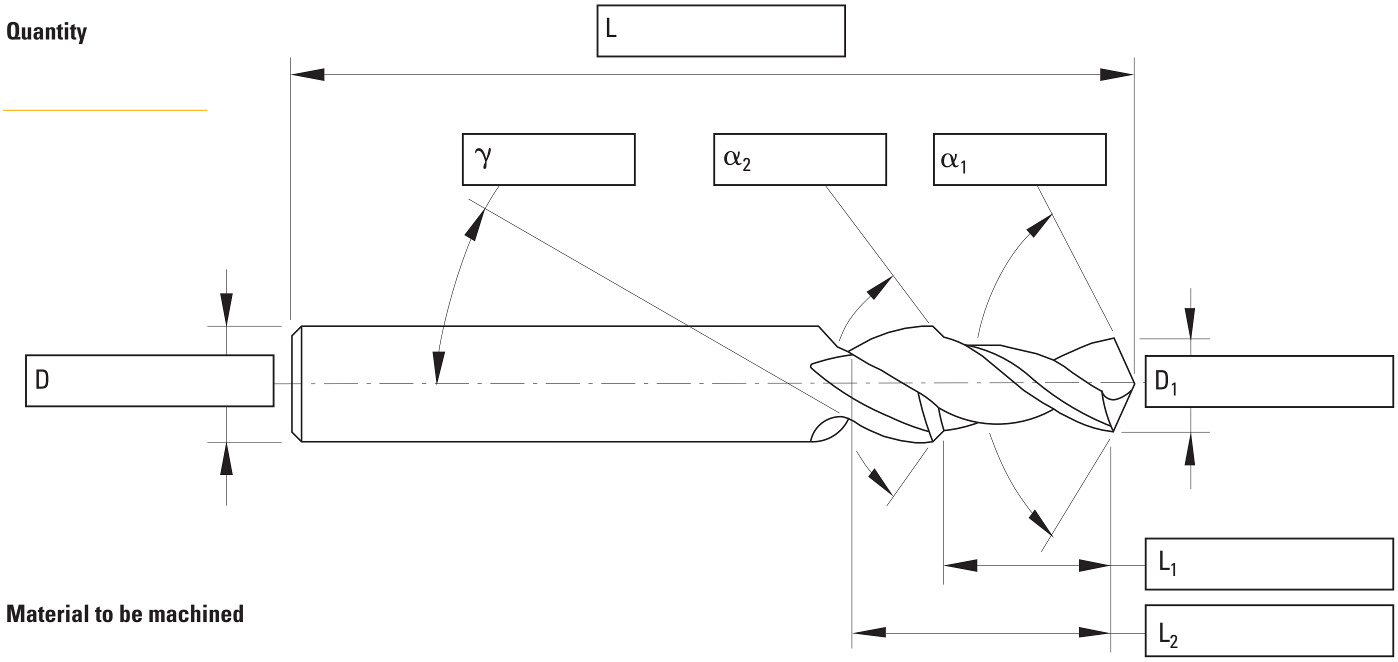
☎

P. 84

DIXI 1501 **R** ☐ **L** ☐

Z = ☐

Quantity

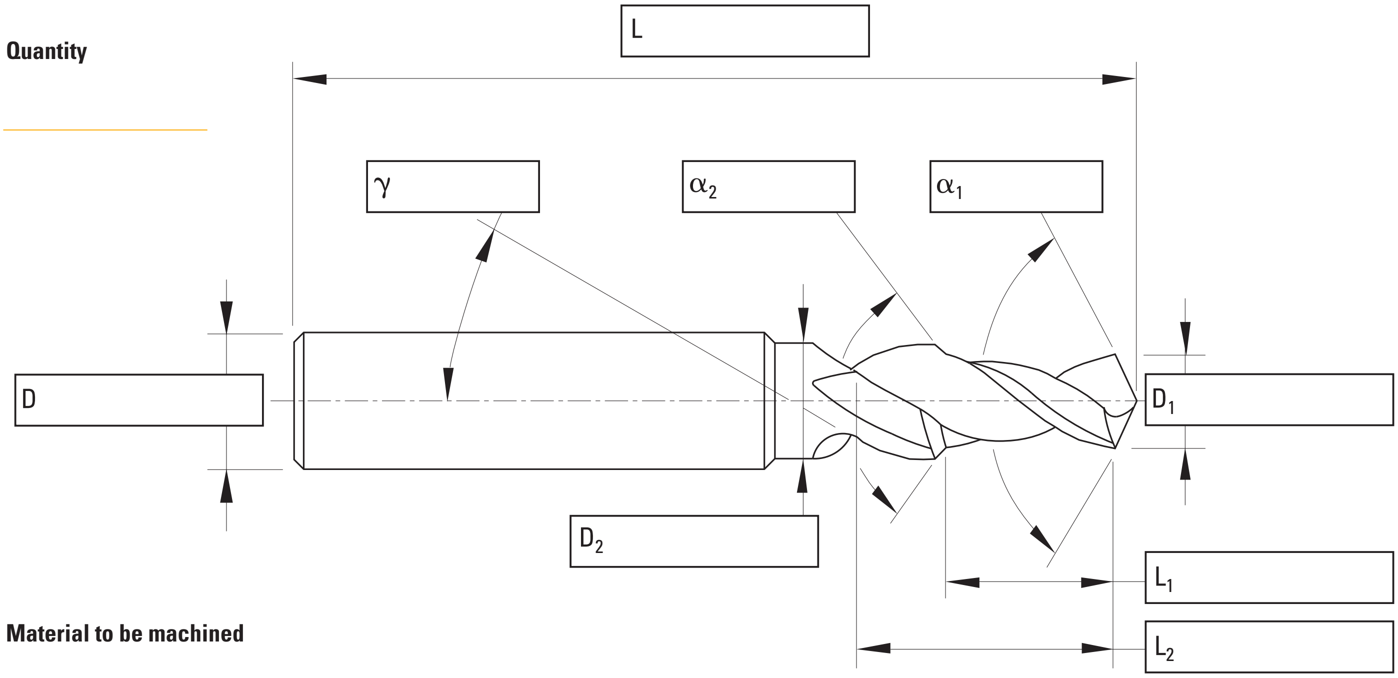


Material to be machined

DIXI 1502 **R** ☐ **L** ☐

Z = ☐

Quantity



Material to be machined

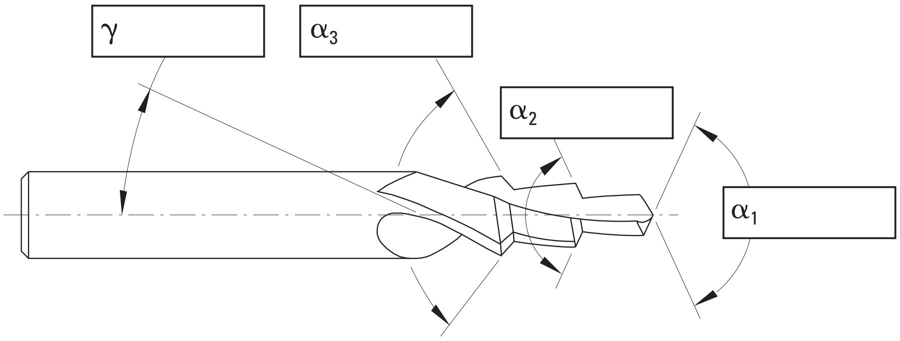
TOOLS ON REQUEST

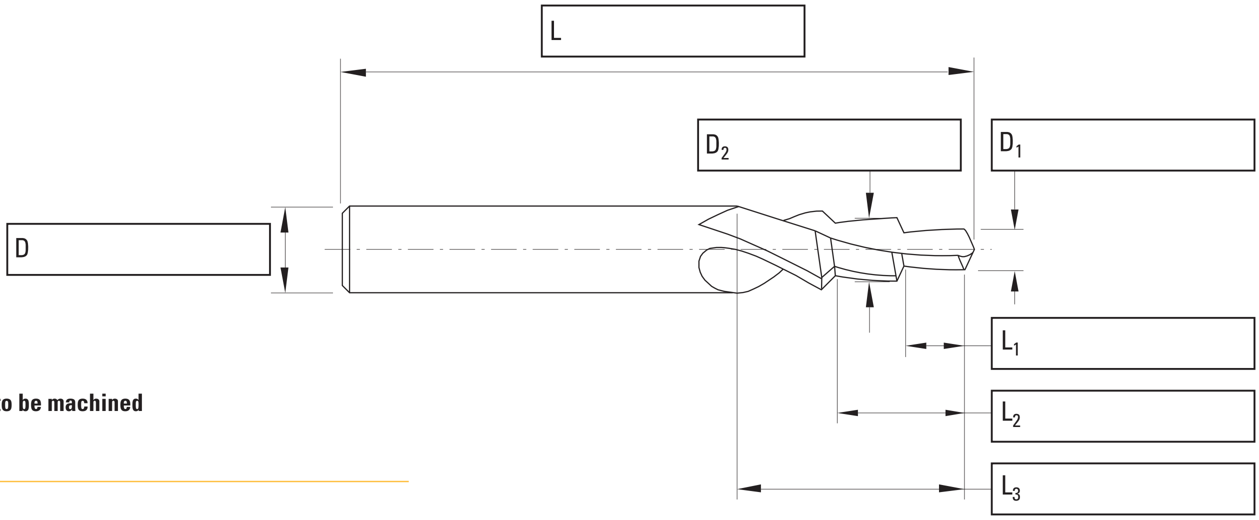
P. 84

DIXI 1503 **R** ☐ **L** ☐

Z = ☐

Quantity



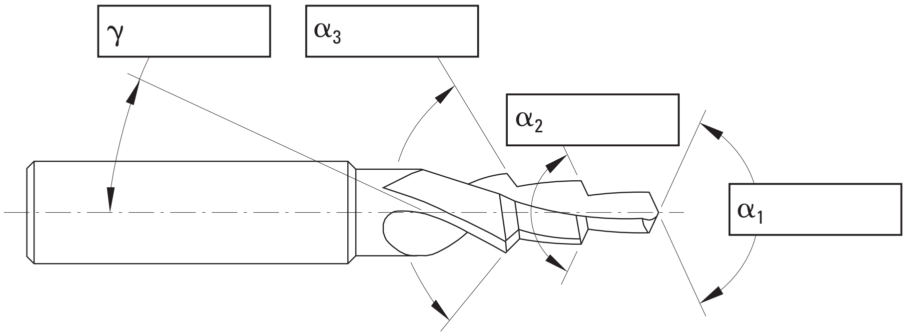


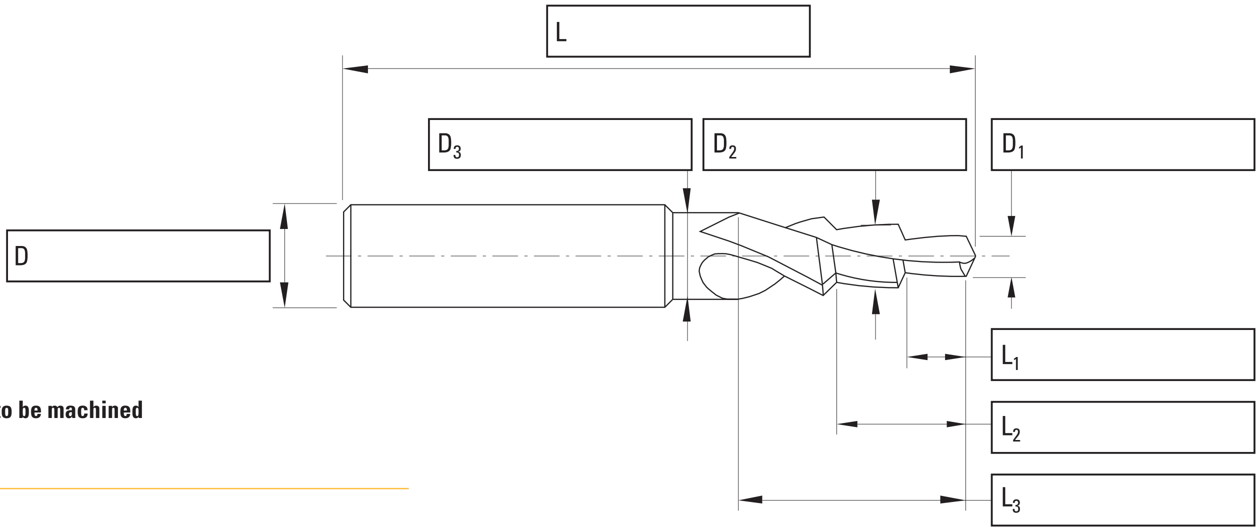
Material to be machined

DIXI 1504 **R** ☐ **L** ☐

Z = ☐

Quantity

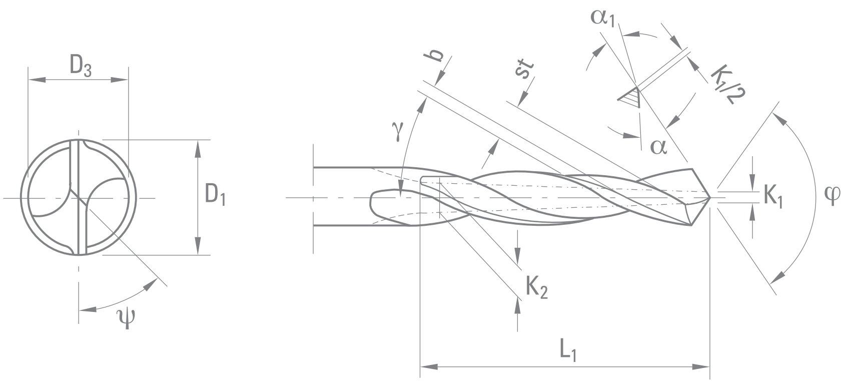




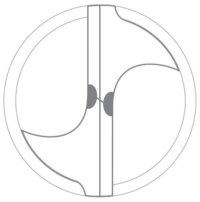
Material to be machined

DRILL GEOMETRY

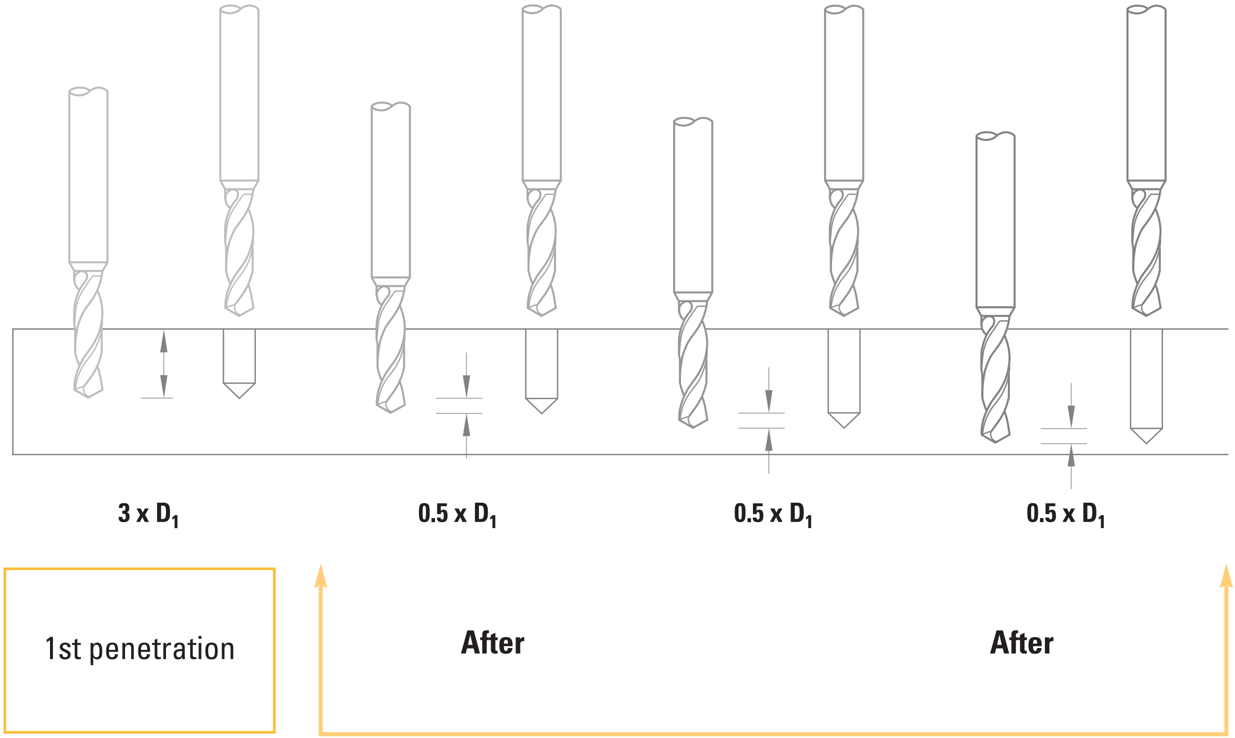
The geometrical nomenclature
of our twist drills for general use
is illustrated alongside.
Straight or reinforced shanks are available.



WEB THINNING



SOLUTION FOR DIFFICULT DRILLING



DIXI 1101 - 1106 - 1107 - 1108 - 1109 - 1110

CUTTING CONDITIONS

	Materials to be machined		CARBIDE		TiN		DICUT - TiAlN	
			Vc [m/min]		Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**40**	60	**50**	70	**50**	70
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2	**30**	50	**40**	60	**40**	60
P	Lead alloyed cutting steel		**60**	90				
P	High alloyed steel	700 – 1500 N/mm^2	**15**	40	**25**	50	**25**	50
M	Stainless steel	400 – 700 N/mm^2	**35**	50	**40**	60	**40**	60
M	DUPLEX stainless steel	> 800 N/mm^2	**20**	40	**30**	50	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**30**	50	**40**	60	**40**	60
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**30**	50	**40**	60	**40**	60
K	Nodular ferritic cast iron / Malleable cast iron		**10**	30	**20**	40	**20**	40
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**10**	25	**20**	50	**20**	50
S	Titanium, titanium alloys		**80**	100				
N	Copper alloys - easy to machine (brass - bronze)		**40**	70	**60**	80	**60**	80
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**80**	100	**90**	120	**90**	120
N	Aluminium alloys	Si < 8%	**90**	150	**120**	160	**120**	160
N	Cast aluminium	Si > 8%	**70**	110	**90**	130	**90**	130
N	Plastic		**30**	60	**50**	80	**50**	80
N	Gold, silver		**50**	80	**65**	100	**65**	100

$$n\,[\text{tr/min}] = \frac{Vc\,[\text{m/min}] \times 1000}{\pi \times D_1\,[\text{mm}]}$$

$$Vf\,[\text{mm/min}] = n\,[\text{tr/min}] \times f\,[\text{mm}]$$

Feed per revolution **f [mm]**

Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.009 - 0.020	**0.016** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.05** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.16** - 0.28	**0.22** - 0.32	**0.26** - 0.40
0.007 - 0.015	**0.013** - 0.023	**0.020** - 0.03	**0.03** - 0.04	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24	**0.21** - 0.30
0.009 - 0.020	**0.016** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.05** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.16** - 0.28	**0.22** - 0.32	**0.26** - 0.40
0.006 - 0.015	**0.011** - 0.023	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.007 - 0.015	**0.013** - 0.023	**0.020** - 0.03	**0.03** - 0.04	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24	**0.21** - 0.30
0.006 - 0.015	**0.011** - 0.023	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.006 - 0.015	**0.011** - 0.023	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.007 - 0.015	**0.013** - 0.023	**0.020** - 0.03	**0.03** - 0.04	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24	**0.21** - 0.30
0.006 - 0.015	**0.011** - 0.020	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.006 - 0.015	**0.011** - 0.023	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60
0.009 - 0.020	**0.016** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.05** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.16** - 0.28	**0.22** - 0.32	**0.26** - 0.40
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60
0.013 - 0.045	**0.027** - 0.068	**0.041** - 0.09	**0.05** - 0.11	**0.08** - 0.23	**0.14** - 0.32	**0.19** - 0.45	**0.27** - 0.63	**0.38** - 0.72	**0.43** - 0.90
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60

DIXI 1111 - 1114 A - 1114 B

CUTTING CONDITIONS

	Materials to be machined		CARBIDE	
			Vc [m/min]	
P	Lead alloyed cutting steel		**40**	60
N	Copper alloys - easy to machine (brass - bronze)		**50**	70
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**30**	50
N	Gold, silver		**30**	60
N	Plastic		**30**	60

DIXI 1112 - 1118

			CARBIDE	
			Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**20**	40
P	Lead alloyed cutting steel		**40**	60
K	Nodular ferritic cast iron / Malleable cast iron		**20**	40
N	Copper alloys - easy to machine (brass - bronze)		**50**	80
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**30**	50
N	Aluminium alloys	Si < 8%	**60**	100
N	Cast aluminium	Si > 8%	**50**	90
N	Plastic		**30**	60

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times f\,[mm]$$

Feed per revolution f [mm]

Ø D_1 0.08 - 0.70	Ø D_1 0.70 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.02	**0.02** - 0.03	**0.02** - 0.05	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.04	**0.02** - 0.05	**0.03** - 0.08	**0.05** - 0.10	**0.06** - 0.15
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.024	**0.018** - 0.032	**0.024** - 0.048	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.04	**0.02** - 0.05	**0.03** - 0.08	**0.05** - 0.10	**0.06** - 0.15
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** -0.14	**0.09** - 0.22	**0.13** - 0.29

Feed per revolution f [mm]

Ø D_1 0.08 - 0.70	Ø D_1 0.70 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.024	**0.018** - 0.032	**0.024** - 0.048	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.024	**0.018** - 0.032	**0.024** - 0.048	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.009	**0.008** - 0.013	**0.011** - 0.020	**0.017** - 0.026	**0.022** - 0.039	**0.03** - 0.05	**0.04** - 0.08
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.038	**0.023** - 0.050	**0.030** - 0.075	**0.05** - 0.10	**0.06** - 0.15
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.024	**0.018** - 0.032	**0.024** - 0.048	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.038	**0.023** - 0.050	**0.030** - 0.075	**0.05** - 0.10	**0.06** - 0.15
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.038	**0.023** - 0.050	**0.030** - 0.075	**0.05** - 0.10	**0.06** - 0.15
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** -0.14	**0.09** - 0.22	**0.13** - 0.29

$$D_1 < 1mm \Rightarrow Vc - 30\,\%$$

CUTTING CONDITIONS

Materials to be machined			CARBIDE Vc [m/min]		DICUT Vc [m/min]		TiN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70	**50**	70
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**30**	40	**30**	40
P	Lead alloyed cutting steel		**70**	100				
M	Stainless steel	400 – 700 N/mm²			**45**	60	**45**	60
M	DUPLEX stainless steel	> 800 N/mm²			**30**	50	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	90	**60**	90
K	Nodular ferritic cast iron / Malleable cast iron				**40**	60	**40**	60
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy			**20**	40	**20**	40
S	Titanium, titanium alloys		**30**	50				
N	Copper alloy - easy to machine (brass - bronze)		**80**	100				
N	Copper alloy - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**50**	80	**50**	80
N	Aluminium alloys	Si < 8%	**90**	110	**120**	130	**120**	130
N	Cast aluminium	Si > 8%	**70**	110	**90**	130	**90**	130
N	Plastic		**30**	60				
N	Gold, silver		**50**	80				

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times f\,[mm]$$

Feed per revolution **f [mm]**

Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 14.00
0.014 - 0.032	**0.027** - 0.041	**0.034** - 0.06	**0.05** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.14	**0.11** - 0.18	**0.14** - 0.22	**0.17** - 0.25
0.011 - 0.025	**0.023** - 0.032	**0.029** - 0.05	**0.04** - 0.06	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.11	**0.10** - 0.14	**0.12** - 0.17	**0.14** - 0.20
0.014 - 0.032	**0.027** - 0.041	**0.034** - 0.06	**0.05** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.14	**0.11** - 0.18	**0.14** - 0.22	**0.17** - 0.25
0.011 - 0.025	**0.023** - 0.032	**0.029** - 0.05	**0.04** - 0.06	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.11	**0.10** - 0.14	**0.12** - 0.17	**0.14** - 0.20
0.008 - 0.023	**0.020** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.13	**0.10** - 0.16	**0.12** - 0.18
0.011 - 0.025	**0.023** - 0.032	**0.029** - 0.05	**0.04** - 0.06	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.11	**0.10** - 0.14	**0.12** - 0.17	**0.14** - 0.20
0.008 - 0.023	**0.020** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.13	**0.10** - 0.16	**0.12** - 0.18
0.008 - 0.023	**0.020** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.13	**0.10** - 0.16	**0.12** - 0.18
0.011 - 0.025	**0.023** - 0.032	**0.029** - 0.05	**0.04** - 0.06	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.11	**0.10** - 0.14	**0.12** - 0.17	**0.14** - 0.20
0.008 - 0.023	**0.020** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.13	**0.10** - 0.16	**0.12** - 0.18
0.014 - 0.032	**0.027** - 0.041	**0.034** - 0.06	**0.05** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.14	**0.11** - 0.18	**0.14** - 0.22	**0.17** - 0.25
0.017 - 0.050	**0.035** - 0.064	**0.043** - 0.09	**0.06** - 0.12	**0.07** - 0.14	**0.09** - 0.17	**0.11** - 0.22	**0.14** - 0.28	**0.18** - 0.34	**0.22** - 0.39
0.017 - 0.050	**0.035** - 0.064	**0.043** - 0.09	**0.06** - 0.12	**0.07** - 0.14	**0.09** - 0.17	**0.11** - 0.22	**0.14** - 0.28	**0.18** - 0.34	**0.22** - 0.39
0.021 - 0.072	**0.049** - 0.092	**0.060** - 0.13	**0.08** - 0.17	**0.10** - 0.20	**0.13** - 0.24	**0.15** - 0.32	**0.20** - 0.40	**0.25** - 0.48	**0.30** - 0.56
0.017 - 0.050	**0.035** - 0.064	**0.043** - 0.09	**0.06** - 0.21	**0.07** - 0.14	**0.09** - 0.17	**0.11** - 0.22	**0.14** - 0.28	**0.18** - 0.34	**0.22** - 0.39

DIXI 1130

CUTTING CONDITIONS

Materials to be machined			CARBIDE		DICUT		TiN		DLC	
			Vc [m/min]		Vc [m/min]		Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**40**	60	**50**	70	**50**	70		
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2			**30**	40	**30**	40		
P	Lead alloyed cutting steel		**60**	90						
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	90	**60**	90		
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB			**30**	50	**30**	50		
K	Nodular ferritic cast iron / Malleable cast iron				**40**	60	**40**	60		
S	Titanium, titanium alloys		**30**	50						
N	Copper alloys - easy to machine (brass - bronze)		**80**	100					**90**	110
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**50**	80	**50**	80	**50**	80
N	Aluminium alloys	Si < 8%	**80**	130					**100**	150
N	Cast aluminium	Si > 8%	**70**	110					**90**	130
N	Plastic		**30**	60	**50**	80	**50**	80	**50**	80
N	Gold, silver		**50**	80	**70**	100	**70**	100	**70**	100

$$n\,[\text{tr/min}] = \frac{Vc\,[\text{m/min}] \times 1000}{\pi \times D_1\,[\text{mm}]}$$

$$Vf\,[\text{mm/min}] = n\,[\text{tr/min}] \times f\,[\text{mm}]$$

Feed per revolution f [mm]

Ø D_1 0.10 - 0.30	Ø D_1 0.30 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.021	**0.015** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.09** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.042	**0.27** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48
0.002 - 0.004	**0.003** - 0.042	**0.027** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** - 0.14	**0.09** - 0.22	**0.13** - 0.29	**0.18** - 0.42	**0.26** - 0.59	**0.36** - 0.67
0.002 - 0.004	**0.003** - 0.042	**0.027** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48

$$D_1 < 1\text{mm} \Rightarrow Vc - 30\,\%$$

CUTTING CONDITIONS

Materials to be machined			CARBIDE		DICUT		TiN		DLC	
			Vc [m/min]		Vc [m/min]		Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70	**50**	70		
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**30**	40	**30**	40		
P	Lead alloyed cutting steel		**60**	90						
M	Stainless steel	400 – 700 N/mm²			**45**	60	**45**	60		
M	DUPLEX stainless steel	> 800 N/mm²			**30**	50	**30**	50		
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	90	**60**	90		
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB			**30**	50	**30**	50		
K	Nodular ferritic cast iron / Malleable cast iron				**40**	60	**40**	60		
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy			**20**	40	**20**	40		
S	Titanium, titanium alloys		**30**	50						
N	Copper alloys - easy to machine (brass - bronze)		**80**	100					**90**	110
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**50**	80	**50**	80	**50**	80
N	Aluminium alloys	Si < 8%	**80**	130					**100**	150
N	Cast aluminium	Si > 8%	**70**	110					**90**	130
N	Graphite								**60**	100
N	Plastic		**30**	60	**50**	80	**50**	80	**50**	80
N	Gold, silver		**50**	80	**70**	100	**70**	100	**70**	100

$$n\,[\text{tr/min}] = \frac{Vc\,[\text{m/min}] \times 1000}{\pi \times D_1\,[\text{mm}]}$$

$$Vf\,[\text{mm/min}] = n\,[\text{tr/min}] \times f\,[\text{mm}]$$

Feed per revolution f [mm]

Ø D_1 0.10 - 0.30	Ø D_1 0.30 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.021	**0.015** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.09** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.042	**0.27** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48
0.002 - 0.004	**0.003** - 0.042	**0.027** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** - 0.14	**0.09** - 0.22	**0.13** - 0.29	**0.18** - 0.42	**0.26** - 0.59	**0.36** - 0.67
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** - 0.14	**0.09** - 0.22	**0.13** - 0.29	**0.18** - 0.42	**0.26** - 0.59	**0.36** - 0.67
0.002 - 0.004	**0.003** - 0.042	**0.027** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48

$D_1 < 1\text{mm} \Rightarrow Vc - 30\ \%$

DIXI 1132 - 1134 - 1135 - 1138

CUTTING CONDITIONS

Materials to be machined			CARBIDE		TiN		DICUT- TiAIN	
			Vc [m/min]		Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**40**	60	**50**	70	**50**	70
P	Lead alloyed cutting steel		**60**	90				
P	High alloyed steel	700 – 1500 N/mm^2			**40**	60	**40**	60
M	Stainless steel	400 – 700 N/mm^2	**40**	60	**50**	70	**50**	70
M	DUPLEX stainless steel	> 800 N/mm^2	**20**	40	**30**	50	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	80	**60**	80
K	Nodular ferritic cast iron / Malleable cast iron		**30**	50	**40**	60	**40**	60
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**15**	25	**20**	40	**20**	40
S	Titanium, titanium alloys		**35**	55				
N	Copper alloys - easy to machine (brass - bronze)		**80**	100				
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**60**	90	**60**	90
N	Aluminium alloys	Si < 8%	**80**	100			**90**	130
N	Plastic		**30**	60				
N	Gold, silver		**50**	80				

$$n\,[\mathrm{tr/min}] = \frac{Vc\,[\mathrm{m/min}] \times 1000}{\pi \times D_1\,[\mathrm{mm}]}$$

$$Vf\,[\mathrm{mm/min}] = n\,[\mathrm{tr/min}] \times f\,[\mathrm{mm}]$$

Feed per revolution f [mm]

Ø D_1 0.20 - 0.40	Ø D_1 0.40 - 0.60	Ø D_1 0.60 - 0.80	Ø D_1 0.80 - 1.00	Ø D_1 1.00 - 1.20	Ø D_1 1.20 - 1.40	Ø D_1 1.40 - 1.60	Ø D_1 1.60 - 1.80	Ø D_1 1.80 - 2.00	Ø D_1 2.00 - 2.50
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070

$$D_1 < 1\,\mathrm{mm} \Rightarrow Vc - 30\ \%$$

CUTTING CONDITIONS

Materials to be machined			CARBIDE Vc [m/min]		TiN Vc [m/min]		DICUT - TiAlN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70	**50**	70
P	Lead alloyed cutting steel		**60**	90				
P	High alloyed steel	700 – 1500 N/mm²	**15**	30	**20**	40	**20**	40
M	Stainless steel	400 – 700 N/mm²	**35**	50	**40**	60	**40**	60
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	80	**60**	80
K	Nodular ferritic cast iron / Malleable cast iron		**30**	50	**40**	60	**40**	60
S	Titanium, titanium alloys		**30**	50				
N	Copper alloys - easy to machine (brass - bronze)		**80**	100				
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**50**	80	**50**	80
N	Aluminium alloys	Si < 8%	**80**	100			**90**	110
N	Plastic		**30**	60				
N	Gold, silver		**50**	80				

$$n\ [\text{tr/min}] = \frac{Vc\ [\text{m/min}] \times 1000}{\pi \times D_1\ [\text{mm}]}$$

$$Vf\ [\text{mm/min}] = n\ [\text{tr/min}] \times f\ [\text{mm}]$$

Feed per revolution **f [mm]**

Ø D_1 0.20 - 0.40	Ø D_1 0.40 - 0.60	Ø D_1 0.60 - 0.80	Ø D_1 0.80 - 1.00	Ø D_1 1.00 - 1.20	Ø D_1 1.20 - 1.40	Ø D_1 1.40 - 1.60	Ø D_1 1.60 - 1.80	Ø D_1 1.80 - 2.00	Ø D_1 2.00 - 2.50
0.005 - 0.013	**0.010** - 0.018	**0.014** - 0.04	**0.02** - 0.05	**0.04** - 0.06	**0.04** - 0.09	**0.06** - 0.10	**0.08** - 0.11		
0.005 - 0.013	**0.010** - 0.018	**0.014** - 0.04	**0.02** - 0.05	**0.04** - 0.06	**0.04** - 0.09	**0.06** - 0.10	**0.08** - 0.11		
0.003 - 0.009	**0.007** - 0.013	**0.010** - 0.03	**0.02** - 0.05	**0.03** - 0.04	**0.03** - 0.06	**0.04** - 0.07	**0.06** - 0.08		
0.005 - 0.010	**0.008** - 0.014	**0.012** - 0.03	**0.02** - 0.035	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.08		
0.004 - 0.010	**0.008** - 0.014	**0.012** - 0.03	**0.02** - 0.035	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.08		
0.004 - 0.010	**0.008** - 0.014	**0.012** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.08		
0.003 - 0.009	**0.007** - 0.013	**0.010** - 0.03	**0.02** - 0.04	**0.03** - 0.04	**0.03** - 0.06	**0.04** - 0.07	**0.06** - 0.08		
0.006 - 0.020	**0.013** - 0.028	**0.018** - 0.05	**0.03** - 0.06	**0.05** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.10** - 0.17		
0.005 - 0.013	**0.010** - 0.018	**0.014** - 0.04	**0.02** - 0.05	**0.04** - 0.06	**0.04** - 0.09	**0.06** - 0.10	**0.08** - 0.11		
0.006 - 0.020	**0.013** - 0.028	**0.018** - 0.05	**0.03** - 0.06	**0.05** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.10** - 0.17		
0.008 - 0.028	**0.018** - 0.040	**0.025** - 0.08	**0.04** - 0.08	**0.07** - 0.13	**0.08** - 0.19	**0.10** - 0.22	**0.14** - 0.24		
0.006 - 0.020	**0.013** - 0.028	**0.018** - 0.05	**0.03** - 0.06	**0.05** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.10** - 0.17		

$D_1 < 1\text{mm} \Rightarrow Vc - 30\ \%$

DIXI 1145

CUTTING CONDITIONS

	Materials to be machined		$Ø D_1 < 2.00$ TiAlN Vc [m/min]		$Ø D_1 \geq 2.00$ TiAlN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**30**	60	**70**	90
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**35**	50	**40**	60
P	High alloyed steel	700 – 1500 N/mm²	**15**	30	**70**	90
M	Stainless steel	400 – 700 N/mm²	**10**	25	**35**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**30**	60	**70**	100
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**10**	25	**50**	80
K	Nodular ferritic cast iron / Malleable cast iron		**15**	30	**50**	80
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**10**	25	**15**	35
S	Titanium, titanium alloys		**20**	45	**40**	70
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**50**	90	**90**	110

DIXI 1149

			TiAlN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70**	90
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**40**	60
P	High alloyed steel	700 – 1500 N/mm²	**35**	50
M	Stainless steel	400 – 700 N/mm²	**35**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70**	100
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40**	60
K	Nodular ferritic cast iron / Malleable cast iron		**30**	50
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**12**	30
S	Titanium, titanium alloys		**30**	60
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**70**	90
N	Aluminium alloys	Si < 8%	**130**	16h0

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution **f [mm]**

Ø D_1 < 1.00	Ø D_1 1.00 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.50	Ø D_1 4.50 - 6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 14.00
0.02 - 0.03	**0.03** - 0.05	**0.03** - 0.06	**0.04** - 0.10	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.20	**0.15** - 0.25	**0.20** - 0.30
0.01 - 0.02	**0.015** - 0.04	**0.02** - 0.05	**0.04** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.15	**0.13** - 0.18	**0.16** - 0.20
0.005 - 0.008	**0.007** - 0.012	**0.01** - 0.04	**0.03** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.15	**0.13** - 0.18	**0.16** - 0.20
0.005 - 0.008	**0.009** - 0.02	**0.008** - 0.04	**0.03** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.15	**0.12** - 0.18	**0.15** - 0.20
0.02 - 0.03	**0.03** - 0.04	**0.04** - 0.05	**0.04** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.15	**0.13** - 0.18	**0.16** - 0.20
0.01 - 0.02	**0.02** - 0.03	**0.03** - 0.04	**0.03** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.15	**0.12** - 0.18	**0.15** - 0.20
0.02 - 0.03	**0.03** - 0.04	**0.04** - 0.05	**0.04** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.15	**0.13** - 0.18	**0.16** - 0.20
0.008 - 0.02	**0.01** - 0.03	**0.01** - 0.04	**0.03** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.15	**0.12** - 0.18	**0.15** - 0.20
0.008 - 0.02	**0.01** - 0.03	**0.01** - 0.04	**0.03** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.15	**0.12** - 0.18	**0.15** - 0.20
0.03 - 0.04	**0.04** - 0.05	**0.045** - 0.06	**0.04** - 0.10	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.20	**0.16** - 0.25	**0.20** - 0.30

Ø D_1 1.00 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 9.00	Ø D_1 9.00 - 10.00	Ø D_1 10.00 - 14.00
0.02 - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.06** - 0.11	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.18	**0.15** - 0.20	**0.15** - 0.30
0.02 - 0.04	**0.02** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.14	**0.12** - 0.15	**0.13** - 0.20
0.01 - 0.03	**0.01** - 0.40	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.01 - 0.03	**0.01** - 0.04	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.02 - 0.04	**0.04** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.14	**0.12** - 0.15	**0.13** - 0.20
0.02 - 0.04	**0.04** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.14	**0.12** - 0.15	**0.13** - 0.20
0.02 - 0.04	**0.03** - 0.04	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.008 - 0.03	**0.01** - 0.03	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.008 - 0.03	**0.01** - 0.03	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.07** - 0.12	**0.08** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.02 - 0.04	**0.02** - 0.06	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.18	**0.13** - 0.20	**0.16** - 0.30
0.02 - 0.04	**0.02** - 0.06	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.18	**0.13** - 0.20	**0.16** - 0.30

DIXI 1146

CUTTING CONDITIONS

Materials to be machined

			TiAlN	
			Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**80**	120
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2	**70**	100
P	Lead alloyed cutting steel		**80**	120
P	High alloyed steel	700 – 1500 N/mm^2	**40**	70
M	DUPLEX stainless steel	> 800 N/mm^2	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**90**	130
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**80**	120
K	Nodular ferritic cast iron / Malleable cast iron		**70**	100
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**15**	30
S	Titanium, titanium alloys		**50**	100

DIXI 1147

			TiAlN	
			Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**70**	100
P	Unalloyed steel / Low alloy steel	600 – 1500 N/mm^{2ed}	**60**	90
P	Lead alloyed cutting steel		**80**	110
P	High alloyed steel	700 – 1500 N/mm^2	**30**	60
M	DUPLEX cast iron	> 800 N/mm^2	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**90**	130
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**80**	120
K	Nodular ferritic cast iron / Malleable cast iron		**70**	100
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**15**	30
N	Aluminium alloys	Si < 8%	**130**	160

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution f [mm]

Ø D_1 0.80 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00
0.03 - 0.11	**0.06** - 0.16	**0.08** - 0.21	**0.11** - 0.25	**0.13** - 0.27	**0.16** - 0.33	**0.19** - 0.35
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.23	**0.12** - 0.25	**0.15** - 0.27	**0.18** - 0.30
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.11** - 0.25	**0.14** - 0.27	**0.17** - 0.30	**0.21** - 0.35
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.17	**0.12** - 0.22	**0.12** - 0.23	**0.15** - 0.25	**0.18** - 0.28
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14

Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00
0.03 - 0.11	**0.06** - 0.16	**0.08** - 0.21	**0.11** - 0.26	**0.13** - 0.32	**0.16** - 0.37	**0.19** - 0.42
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.12** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40

DIXI 1151 - 1152

CUTTING CONDITIONS

Materials to be machined			CARBIDE Vc [m/min]		TiN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**40**	60
P	Lead alloyed cutting steel		**60**	90		
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	90
K	Nodular ferritic cast iron / Malleable cast iron		**40**	55	**50**	70
S	Titanium, titanium alloys		**30**	50		
N	Copper alloys - easy to machine (brass - bronze)		**60**	100		
N	Cast aluminium	Si > 8%	**70**	110	**80**	120
N	Gold, silver		**50**	80	**60**	90

DIXI 1280

			XIDUR Vc [m/min]	
H	Hardened tool steel and cast iron	> 1500 N/mm² (45 - 65 HRC)	**15**	25
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**15**	30

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution f [mm]

Ø D_1 0.20 - 0.50	Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30

D_1 < 1mm ⇒ Vc - 30 %

Ø D_1 0.25 - 0.50	Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 2.50	Ø D_1 2.50 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 8.00	Ø D_1 8.00 - 12.00
0.01	0.02	0.025	0.03	0.04	0.05	0.05	0.06
0.01	0.02	0.025	0.03	0.04	0.05	0.05	0.06

Pecking cycle = 0.25 x ØD_1

DIXI 1501 - 1502 - 1503 - 1504

CUTTING CONDITIONS

	Materials to be machined		CARBIDE		TiAlN	
			Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**30**	50	**40**	60
P	Lead alloyed cutting steel		**60**	90	**70**	100
P	High alloyed steel	700 – 1500 N/mm²	**35**	50	**25**	50
M	Stainless steel	400 – 700 N/mm²	**15**	40	**40**	60
M	DUPLEX stainless steel	> 800 N/mm²	**30**	50	**40**	60
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**10**	30	**60**	90
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**50**	80	**40**	60
K	Nodular ferritic cast iron / Malleable cast iron		**30**	50	**40**	60
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**20**	40	**30**	50
S	Titanium, titanium alloys		**30**	50	**40**	60
N	Copper alloys - easy to machine (brass - bronze)		**80**	100	**90**	120
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**60**	80
N	Aluminium alloys	Si < 8%	**80**	120	**100**	160
N	Cast aluminium	Si > 8%	**70**	110	**90**	130
N	Plastic		**30**	60	**50**	80
N	Gold, silver		**50**	80	**65**	100

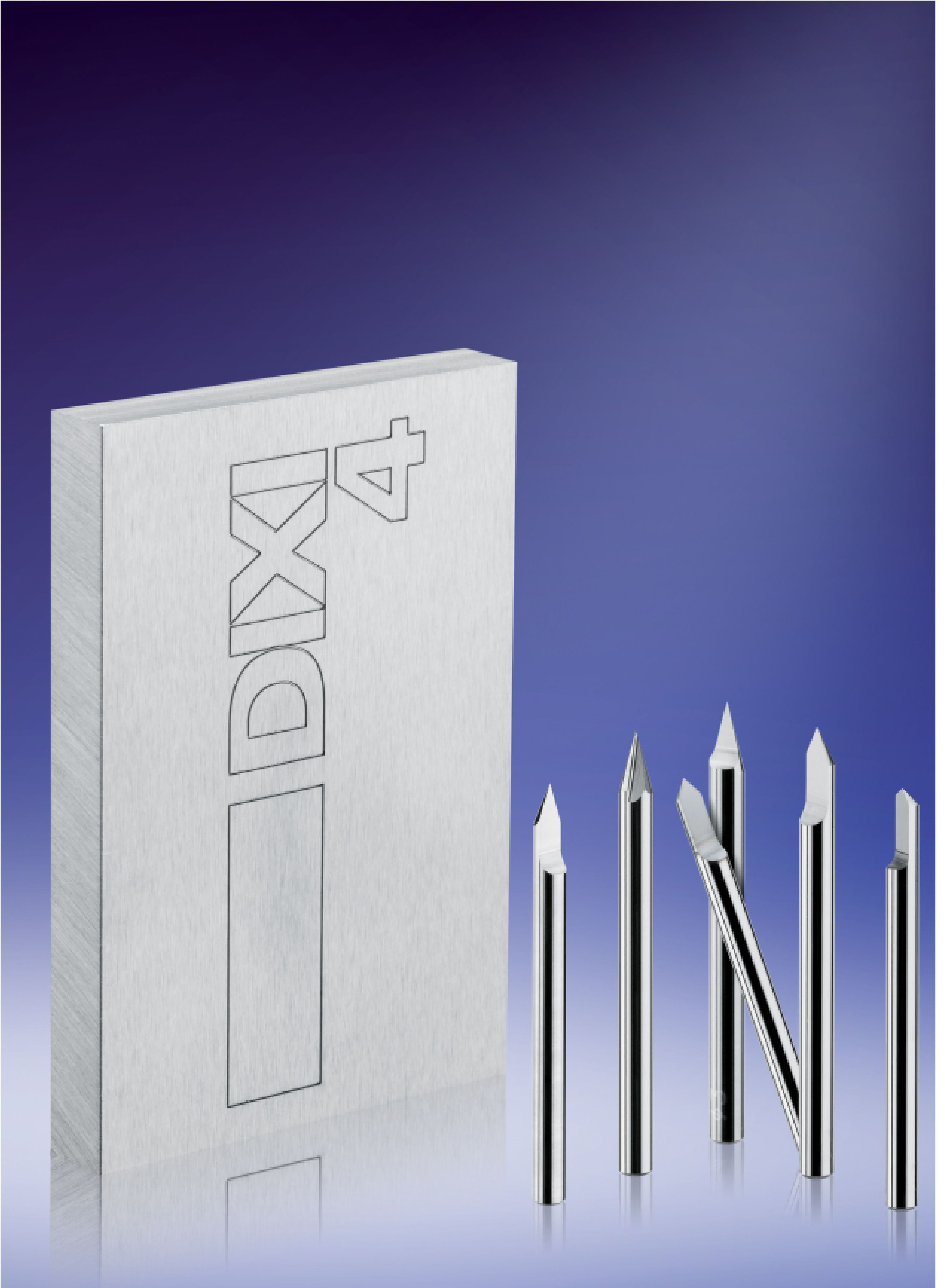
$$n\,[\text{tr/min}] = \frac{Vc\,[\text{m/min}] \times 1000}{\pi \times D_1\,[\text{mm}]}$$

$$Vf\,[\text{mm/min}] = n\,[\text{tr/min}] \times f\,[\text{mm}]$$

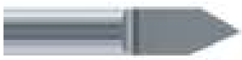
Feed per revolution **f [mm]**

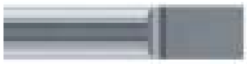
Ø D_1 0.30 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.003 - 0.018	**0.014** - 0.027	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.25	**0.20** - 0.29	**0.22** - 0.36
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.003 - 0.018	**0.014** - 0.027	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.25	**0.20** - 0.29	**0.22** - 0.36
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.002 - 0.013	**0.010** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.07	**0.05** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.21	**0.16** - 0.26
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.002 - 0.013	**0.010** - 0.02	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.07	**0.05** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.21	**0.16** - 0.26
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.002 - 0.013	**0.010** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.07	**0.05** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.21	**0.16** - 0.26
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.002 - 0.013	**0.010** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.07	**0.05** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.21	**0.16** - 0.26
0.004 - 0.028	**0.018** - 0.042	**0.027** - 0.06	**0.04** - 0.07	**0.05** - 0.14	**0.09** - 0.20	**0.13** - 0.28	**0.18** - 0.39	**0.25** - 0.45	**0.29** - 0.56
0.003 - 0.018	**0.014** - 0.027	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.25	**0.20** - 0.29	**0.22** - 0.36
0.004 - 0.028	**0.018** - 0.042	**0.027** - 0.06	**0.04** - 0.07	**0.05** - 0.14	**0.09** - 0.20	**0.13** - 0.28	**0.18** - 0.39	**0.25** - 0.45	**0.29** - 0.56
0.004 - 0.028	**0.018** - 0.042	**0.027** - 0.06	**0.04** - 0.07	**0.05** - 0.14	**0.09** - 0.20	**0.13** - 0.28	**0.18** - 0.39	**0.25** - 0.45	**0.29** - 0.56
0.005 - 0.040	**0.025** - 0.060	**0.038** - 0.08	**0.05** - 0.10	**0.08** - 0.20	**0.13** - 0.28	**0.18** - 0.40	**0.25** - 0.56	**0.35** - 0.64	**0.40** - 0.80
0.004 - 0.028	**0.018** - 0.042	**0.027** - 0.06	**0.04** - 0.07	**0.05** - 0.14	**0.09** - 0.20	**0.13** - 0.28	**0.18** - 0.39	**0.25** - 0.45	**0.29** - 0.56

$D_1 < 1\text{mm} \Rightarrow Vc - 30\ \%$


DIXI
4

ENGRAVING

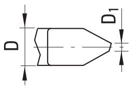
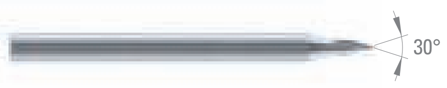
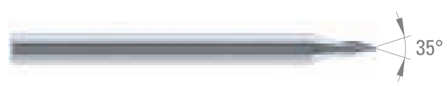
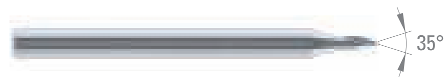
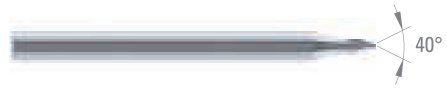
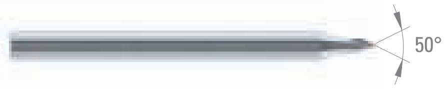
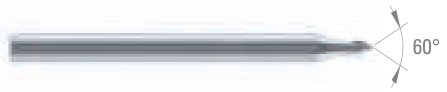
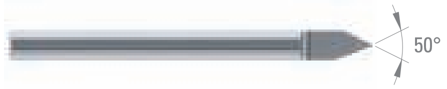
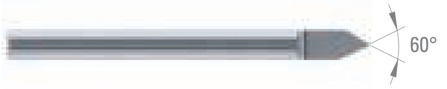
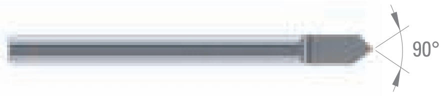
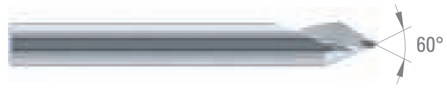




SELECTION OF ENGRAVING TOOLS

✓ = item from stock

FINISHED ENGRAVING TOOLS

		Page		☐ CARBIDE	🟦 DINAC	🟩 DLC	
3/4 ENGRAVING TOOLS							
DIXI 7009		205	Ø 3.00 D_1 0.05 - 0.15	✓	✓		
DIXI 7001		205	Ø 3.00 D_1 0.05 - 0.20	✓	✓		
DIXI 7003		206	Ø 3.00 R 0.05 - 0.20	✓	✓		
DIXI 7002		206	Ø 3.00 D_1 0.05 - 0.20	✓	✓		
DIXI 7005		207	Ø 3.00 D_1 0.05 - 0.15	✓	✓		
DIXI 7006		207	Ø 3.00 D_1 0.05 - 0.15	✓	✓		
1/2 ENGRAVING TOOLS							
DIXI 7013		208	Ø 3.00 D_1 0.05 - 0.20	✓	✓	* ✓	
DIXI 7015		208	Ø 3.00 D_1 0.05 - 0.20	✓	✓		
DIXI 7017		209	Ø 3.00 - 4.00 D_1 0.05 - 0.20	✓	✓		
DIXI 7018		209	Ø 3.00 D_1 0.05 - 0.10	✓	✓		
DIXI 7019		210	Ø 3.00 D_1 0.05 - 0.10	✓	✓		
HELICAL ENGRAVING TOOLS							
DIXI 7025		210	Ø 3.00 - 4.00 D_1 0.10 - 0.15	✓			

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron 45-55 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
○	◎	◎	◎		○	◎	◎	○	◎	○	○	○
○	◎	◎	◎	○	○	◎	◎	○	◎	○	○	○
○	◎	◎	◎	○	○	◎	◎	○	◎	○	○	○
○	◎	◎	◎	○	○	◎	◎	○	◎	○	○	○
○	◎	◎	◎	○	○	◎	◎	○	◎	○	○	○
○	◎	◎	◎	○	○	◎	◎	○	◎	○	○	○

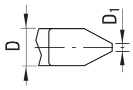
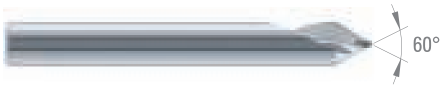
◎	○	○	○		◎	○	○	◎	○	◎	◎	○
◎	○	○	○		◎	○	○	◎	○	◎	◎	○
◎	○	○	○		◎	○	○	◎	○	◎	◎	○
◎	○	○	○		◎	○	○	◎	○	◎	◎	○
◎	○	○	○		◎	○	○	◎	○	◎	◎	○

					◎			◎		◎		

SELECTION OF ENGRAVING TOOLS

✓ = item from stock

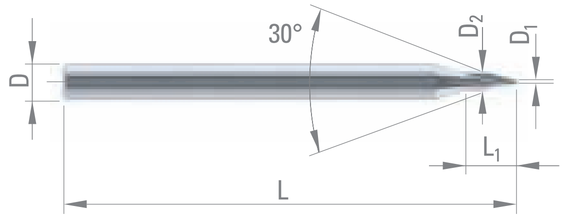
SEMI-FINISHED ENGRAVING TOOLS

				☐ CARBIDE			
DIXI 7012		211	Ø 3.00 - 10.00 D_1 1.00 - 3.30	✓			
DIXI 7016		211	Ø 2.00 - 8.00	✓			
DIXI 7020		212	Ø 2.00 - 10.00	✓			
DIXI 7024		212	Ø 3.00 - 6.00	✓			

DIXI 7009

3/4 ENGRAVING TOOLS, 30°
FINISHED STYLE

P. 214



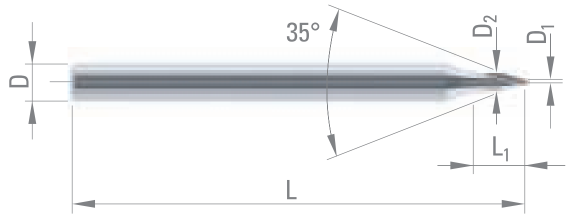
Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Alu
Graphite
Plastic

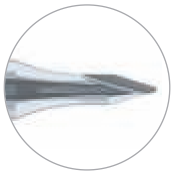
D_1 ±0.01	L_1	D_2	D_{h6}	L	CARBIDE	DINAC
0.05	3.4	1.5	3	38	☐	🟦
0.08	3.4	1.5	3	38	☐	🟦
0.10	3.4	1.5	3	38	☐	🟦
0.15	3.4	1.5	3	38	☐	🟦

DIXI 7001

3/4 ENGRAVING TOOLS, 35°
FINISHED STYLE

P. 214





Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Steel Cast iron 45-55 HRC
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Alu
Graphite
Plastic

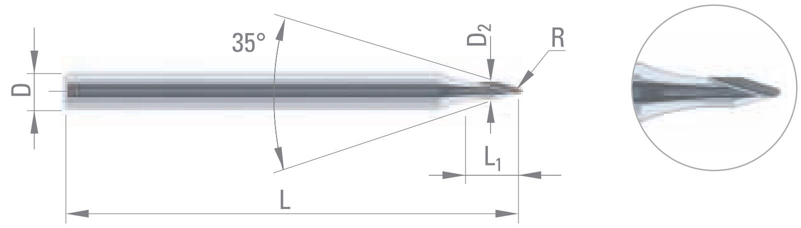
D_1 ±0.01	L_1	D_2	D_{h6}	L	CARBIDE	DINAC
0.05	3.4	1.5	3	38	☐	🟦
0.08	3.4	1.5	3	38	☐	🟦
0.10	3.4	1.5	3	38	☐	🟦
0.15	3.4	1.5	3	38	☐	🟦
0.20	3.4	1.5	3	38	☐	🟦

DIXI 7003

3/4 ENGRAVING TOOLS, 35°
FINISHED STYLE

f Vc Ap

P. 214



Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Steel Cast iron 45-55 HRC
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Alu
Graphite
Plastic

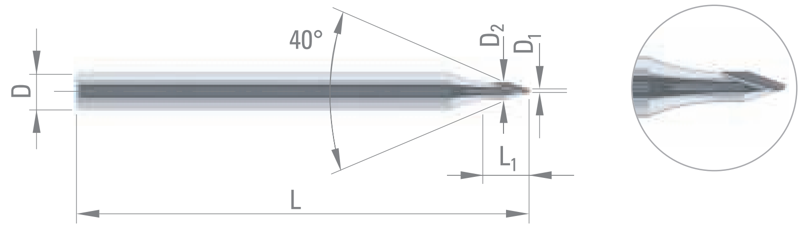
R $_{\pm 0.01}$	L_1	D_2	D_{h6}	L	CARBIDE	DINAC
0.05	3.4	1.5	3	38	☐	🟦
0.10	3.4	1.5	3	38	☐	🟦
0.15	3.4	1.5	3	38	☐	🟦
0.20	3.4	1.5	3	38	☐	🟦

DIXI 7002

3/4 ENGRAVING TOOLS, 40°
FINISHED STYLE

f Vc Ap

P. 214



Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Steel Cast iron 45-55 HRC
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Alu
Graphite
Plastic

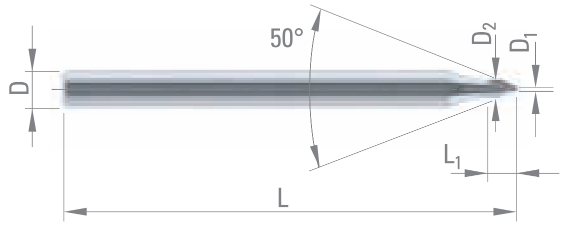
D_1 $_{\pm 0.01}$	L_1	D_2	D_{h6}	L	CARBIDE	DINAC
0.05	3.2	1.5	3	38	☐	🟦
0.08	3.2	1.5	3	38	☐	🟦
0.10	3.2	1.5	3	38	☐	🟦
0.15	3.2	1.5	3	38	☐	🟦
0.20	3.2	1.5	3	38	☐	🟦

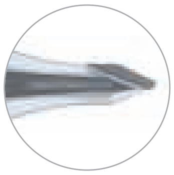
DIXI 7005

3/4 ENGRAVING TOOLS, 50°
FINISHED STYLE

P. 215

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Cast iron 45-55 HRC
Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Alu	Graphite	Plastic		





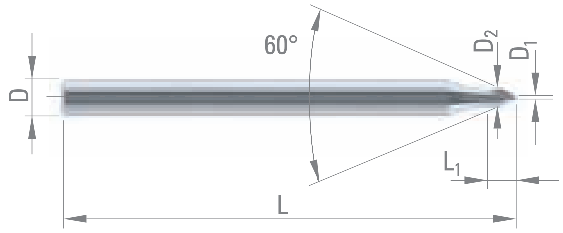
D1 ±0.01	L1	D2	Dh6	L	CARBIDE	DINAC
0.05	2.3	1.5	3	38	☐	■
0.08	2.3	1.5	3	38	☐	■
0.10	2.3	1.5	3	38	☐	■
0.15	2.3	1.5	3	38	☐	■

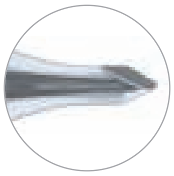
DIXI 7006

3/4 ENGRAVING TOOLS, 60°
FINISHED STYLE

P. 215

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Cast iron 45-55 HRC
Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Alu	Graphite	Plastic		



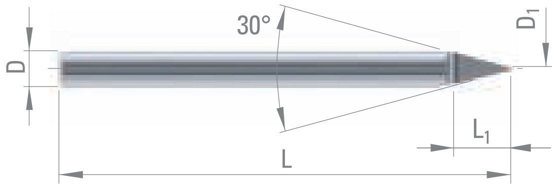


D1 ±0.01	L1	D2	Dh6	L	CARBIDE	DINAC
0.05	2.3	1.5	3	38	☐	■
0.08	2.3	1.5	3	38	☐	■
0.10	2.3	1.5	3	38	☐	■
0.15	2.3	1.5	3	38	☐	■

DIXI 7013

1/2 ENGRAVING TOOLS, 30°
SEMI-FINISHED STYLE

P. 214



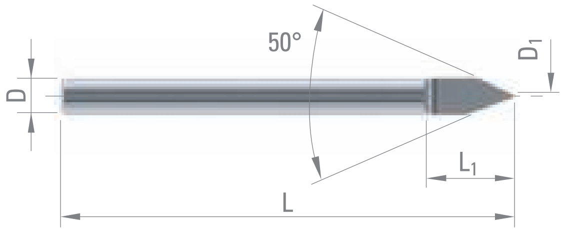
Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Alu
Graphite	Plastic			

$D_{1\ \pm 0.01}$	L_1	D_{h6}	L	CARBIDE	DINAC	DLC
0.05	4	3	38	☐	🟦	🟩
0.10	4	3	38	☐	🟦	🟩
0.15	4	3	38	☐	🟦	🟩
0.20	4	3	38	☐	🟦	🟩

DIXI 7015

1/2 ENGRAVING TOOLS, 50°
FINISHED STYLE

P. 215



Steel < 600MPa	Steel > 600MPa	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			

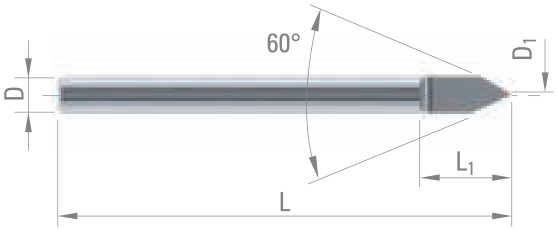
$D_{1\ \pm 0.01}$	L_1	D_{h6}	L	CARBIDE	DINAC
0.05	6	3	38	☐	🟦
0.08	6	3	38	☐	🟦
0.10	6	3	38	☐	🟦
0.15	6	3	38	☐	🟦
0.20	6	3	38	☐	🟦

DIXI 7017

1/2 ENGRAVING TOOLS, 60°
FINISHED STYLE

P. 215

Steel < 600MPa	Steel > 600MPa	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			



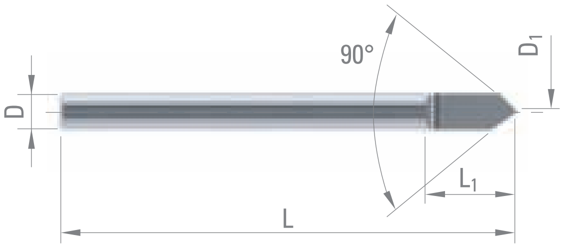
$D_{1\ \pm 0.01}$	L_1	D_{h6}	L	CARBIDE	DINAC
0.05	6	3	38	☐	🟦
0.08	6	3	38	☐	🟦
0.10	6	3	38	☐	🟦
0.15	6	3	38	☐	🟦
0.20	6	3	38	☐	🟦
0.05	8	4	50	☐	🟦
0.10	8	4	50	☐	🟦
0.20	8	4	50	☐	🟦

DIXI 7018

1/2 ENGRAVING TOOLS, 90°
FINISHED STYLE

P. 215

Steel < 600MPa	Steel > 600MPa	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			



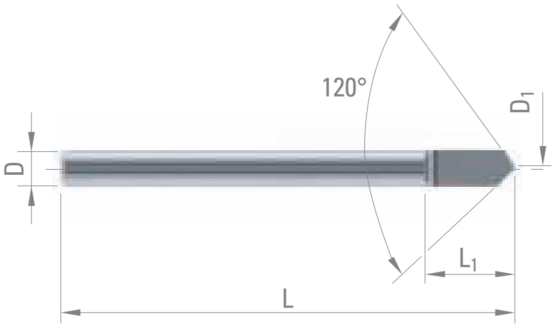
$D_{1\ \pm 0.01}$	L_1	D_{h6}	L	CARBIDE	DINAC
0.05	6	3	38	☐	🟦
0.10	6	3	38	☐	🟦

DIXI 7019

1/2 ENGRAVING TOOLS, 120°
FINISHED STYLE

P. 215

Steel < 600MPa	Steel > 600MPa	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			



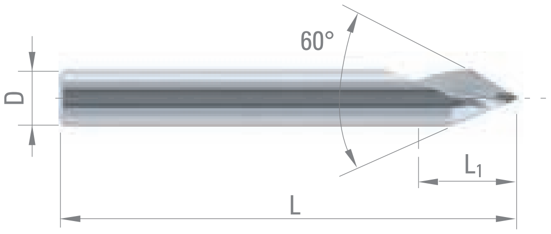
$D_{1\ \pm 0.01}$	L_1	D_{h6}	L	CARBIDE	DINAC
0.05	6	3	38	☐	🟦
0.10	6	3	38	☐	🟦

DIXI 7025

SPIRAL ENGRAVING TOOLS, 60°
FINISHED STYLE

P. 215

Cast iron	Cu alloy Silver Gold	Al

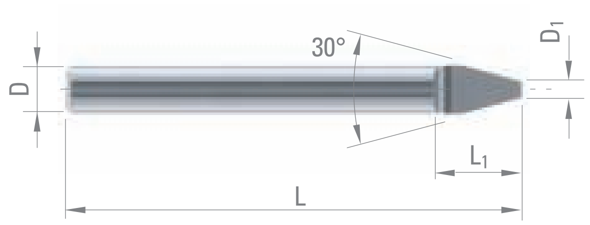


$D_{1\ \pm 0.02}$	L_1	D_{h6}	L	CARBIDE
0.10	9	3	38	☐
0.15	12	4	50	☐

DIXI 7012

1/2 ENGRAVING TOOLS, 30°
SEMI-FINISHED STYLE

P. 213

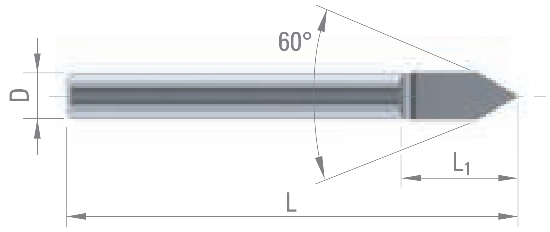


D_1	L_1	D_{h6}	L	CARBIDE
1.00	4	3	38	☐
1.30	5	4	50	☐
2.00	8	6	57	☐
2.60	10	8	63	☐
3.30	10	10	72	☐

DIXI 7016

1/2 ENGRAVING TOOLS, 60°
SEMI-FINISHED STYLE

P. 213

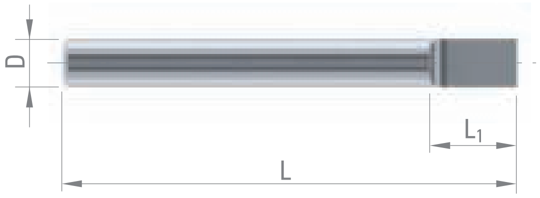


D_{h6}	L_1	L	CARBIDE
2	4	25	☐
3	6	38	☐
4	8	50	☐
5	10	50	☐
6	12	57	☐
8	14	63	☐

DIXI 7020

1/2 ENGRAVING TOOLS, 180°
SEMI-FINISHED STYLE

P. 213

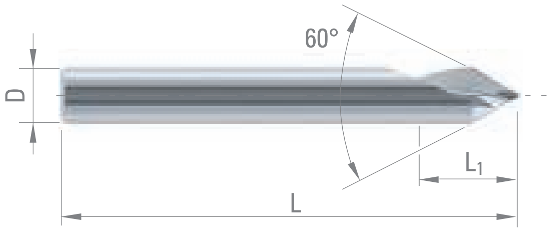


D h6	L1	L	CARBIDE
2	3	25	☐
3	4	38	☐
4	5	50	☐
5	6	50	☐
6	8	57	☐
8	10	63	☐
10	12	72	☐

DIXI 7024

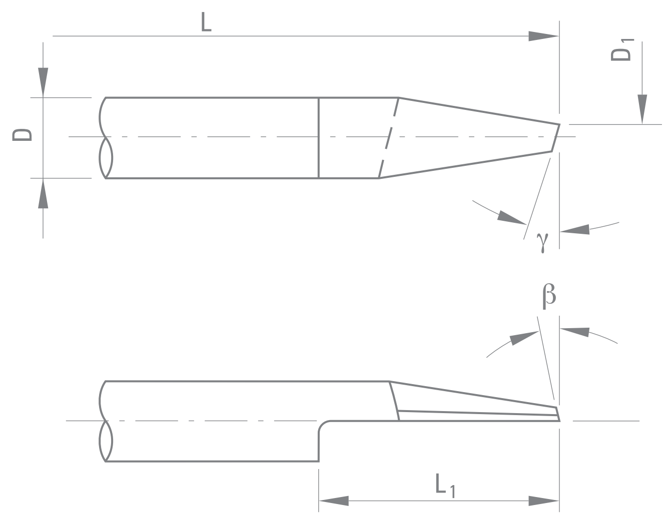
SPIRAL ENGRAVING TOOLS, 60°
SEMI-FINISHED STYLE

P. 213



D h6	L1	L	CARBIDE
3	9	38	☐
4	12	50	☐
6	15	50	☐

GEOMETRY OF ENGRAVING TOOLS



Materials	β	γ
Tool steel	10°	3° - 5°
Steel	15°	3° - 5°
Stainless steel	15°	3° - 5°
Cast iron	15°	3° - 5°
Copper	20°	3° - 5°
Brass	15°	3° - 5°
Nickel-silver	15°	3° - 5°
Duralumin	20°	3° - 5°
Aluminium	20°	3° - 5°
Gold	15°	3° - 5°
Pure titanium	15°	3° - 5°
Celluloïd	25°	3° - 5°
Plastic	20°	3° - 5°
Wood	25°	3° - 5°

Mainly used for engraving symbols and texts, these tools can also be used for machining contours (cutting of profiles) and for copying operations for moulds and dies.

FINISHED EXECUTIONS

On request, DIXI will supply these tools ground according to the customer's specifications.
The grinding angles will correspond to the opposite table.
Please indicate D_1 and material to be machined when ordering.

DIXI 7001 - 7002 - 7003 - 7009 - 7013

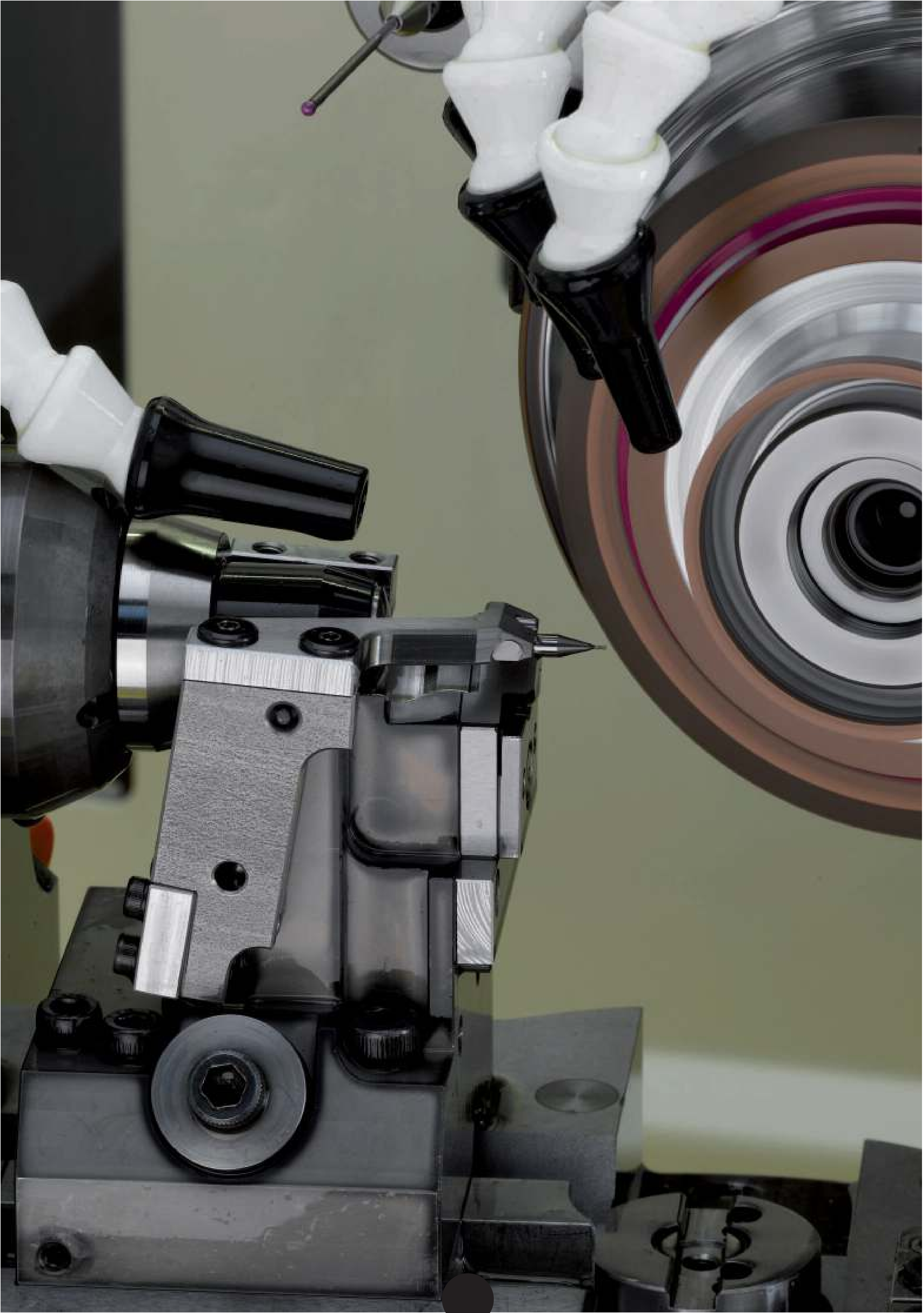
CUTTING CONDITIONS

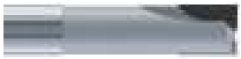
Materials to be machined			CARBIDE	DINAC	Ø D_1 0.05 - 0.10		Ø D_1 0.15 - 0.40	
			n [tr/min]	n [tr/min]	Vf[mm/min]	ap[mm]	Vf[mm/min]	ap[mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**20** - 35'000	**20** - 35'000	**50** - 250	**0.05** - 0.30	**100** - 300	**0.10** - 0.40
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2		**20** - 35'000	**50** - 200	**0.05** - 0.25	**80** - 250	**0.10** - 0.35
P	Lead alloyed cutting steel			**20** - 35'000	**50** - 250	**0.05** - 0.30	**100** - 300	**0.10** - 0.40
P	High alloyed steel	700 – 1500 N/mm^2		**20** - 35'000	**50** - 150	**0.05** - 0.15	**80** - 250	**0.10** - 0.30
M	Stainless steel	400 – 700 N/mm^2		**20** - 35'000	**50** - 150	**0.05** - 0.20	**80** - 250	**0.10** - 0.30
M	DUPLEX stainless steel	> 800 N/mm^2		**20** - 35'000	**50** - 150	**0.05** - 0.15	**80** - 250	**0.10** - 0.30
H	Tool steel and cast iron	> 1500 N/mm^2 (45 - 55 HRC)		**20** - 35'000			**80** - 250	**0.02** - 0.05
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**20** - 35'000	**20** - 35'000	**50** - 250	**0.05** -0.30	**100** - 300	**0.10** - 0.40
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**20** - 35'000	**20** - 35'000	**50** - 200	**0.05** -0.25	**80** - 250	**0.10** - 0.35
K	Nodular ferritic cast iron / Malleable cast iron		**20** - 35'000	**20** - 35'000	**50** - 200	**0.05** - 0.25	**80** - 250	**0.10** - 0.35
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy		**15** - 25'000			**80** - 200	**0.03** - 0.10
S	Titanium, titanium alloys		**20** - 35'000	**20** - 35'000	**50** - 200	**0.05** - 0.25	**100** - 250	**0.10** - 0.35
N	Copper alloys - easy to machine (brass - bronze)		**20** - 35'000	**20** - 35'000	**50** - 300	**0.05** - 0.30	**150** -450	**0.10** - 0.40
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**20** - 35'000	**20** - 35'000	**50** - 200	**0.05** - 0.30	**100** - 300	**0.10** - 0.45
N	Aluminium alloys	Si < 8%	**20** - 35'000	**20** - 35'000	**50** - 300	**0.05** - 0.30	**150** - 450	**0.10** - 0.45
N	Cast aluminium	Si > 8%	**20** - 35'000	**20** - 35'000	**50** - 300	**0.05** - 0.30	**150** - 450	**0.10** - 0.45
N	Graphite		**20** - 35'000	**20** - 35'000	**50** - 300	**0.05** - 0.30	**150** - 450	**0.10** - 0.45
N	Plastic		**20** - 35'000	**20** - 35'000	**50** - 300	**0.05** - 0.30	**150** - 450	**0.10** - 0.45
N	Gold, silver		**20** - 35'000	**20** - 35'000	**50** - 300	**0.05** - 0.30	**150** - 450	**0.10** - 0.45

DIXI 7005 - 7006 - 7015 - 7017 - 7018 - 7019 - 7025

CUTTING CONDITIONS

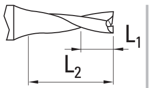
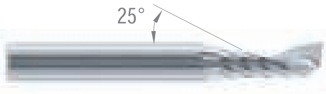
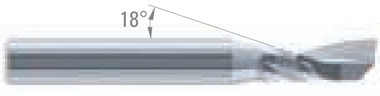
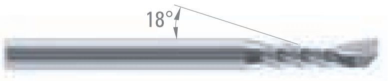
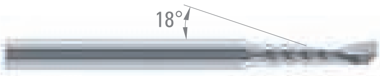
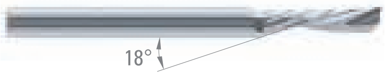
Materials to be machined			CARBIDE n [tr/min]	DINAC n [tr/min]	Ø D_1 0.05 - 0.10		Ø D_1 0.15 - 0.50	
					Vf[mm/min]	ap[mm]	Vf[mm/min]	ap[mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**25** - 35'000		**75** - 250	**0.05** - 0.35	**100** - 350	**0.10** - 0.45
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2		**25** - 35'000	**60** - 250	**0.05** - 0.30	**80** - 300	**0.10** - 0.40
P	Lead alloyed cutting steel		**30** - 35'000		**75** - 250	**0.05** - 0.35	**100** - 350	**0.10** - 0.45
P	High alloyed steel	700 – 1500 N/mm^2		**15** - 35'000	**50** - 200	**0.05** - 0.10	**80** - 300	**0.10** - 0.35
M	Stainless steel	400 – 700 N/mm^2		**20** - 35'000	**50** - 200	**0.05** - 0.25	**80** - 300	**0.10** - 0.35
M	DUPLEX stainless steel	> 800 N/mm^2		**15** - 35'000	**50** - 200	**0.05** - 0.20	**80** - 300	**0.10** - 0.35
H	Tool steel and cast iron	> 1500 N/mm^2 (45 - 55 HRC)		**20** - 35'000			**80** - 250	**0.02** - 0.07
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**25** - 35'000		**50** - 300	**0.05** - 0.35	**100** - 350	**0.10** - 0.45
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**15** - 35'000	**15** - 35'000	**50** - 250	**0.05** - 0.30	**80** - 300	**0.10** - 0.40
K	Nodular ferritic cast iron / Malleable cast iron		**15** - 35'000	**15** - 35'000	**50** - 250	**0.05** - 0.30	**80** - 300	**0.10** - 0.40
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy		**10** - 15'000			**80** - 250	**0.05** - 0.10
S	Titanium, titanium alloys		**20** - 35'000		**75** - 200	**0.05** - 0.20	**100** - 300	**0.10** - 0.40
N	Copper alloys - easy to machine (brass - bronze)		**30** - 35'000		**75** - 300	**0.05** - 0.20	**150** - 450	**0.20** - 0.30
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**20** - 35'000		**75** - 350	**0.05** - 0.15	**150** - 300	**0.10** - 0.20
N	Aluminium alloys	Si < 8%	**25** - 35'000		**75** - 300	**0.05** - 0.30	**150** - 450	**0.15** - 0.50
N	Cast aluminium	Si > 8%	**20** - 35'000		**75** - 350	**0.05** - 0.20	**150** - 450	**0.15** - 0.45
N	Graphite		**20** - 35'000		**75** - 350	**0.05** - 0.20	**150** - 450	**0.15** - 0.40
N	Plastic		**30** - 35'000		**100** - 350	**0.05** - 0.30	**180** - 450	**0.15** - 0.50
N	Gold, silver		**25** - 35'000		**75** - 350	**0.05** - 0.20	**150** - 450	**0.15** - 0.40



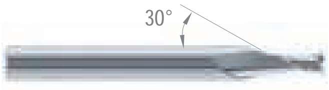
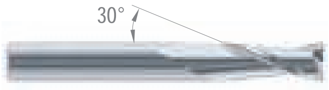
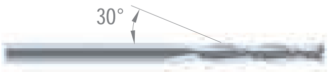
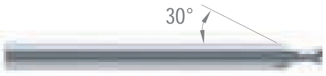
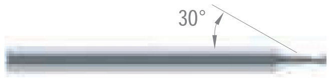
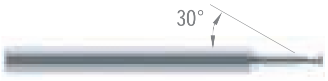
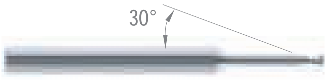


SELECTION OF END MILLS

✓ = item from stock

END MILLS Z=1		Z	Page			☐ CARBIDE	TiAIN	■ DIAMANT		
DIXI 7561 Ø 2.00 - 12.00		1	100	L_1 = 2-3 x Ø		✓				
DIXI 7301 Ø 2.00 - 8.00		1	101	L_1 = 2.5-4 x Ø		✓				
DIXI 7302 Ø 3.00 - 12.00		1	101	L_1 = 2.5-6 x Ø		✓				
DIXI 7303 Ø 2.00 - 5.00		1	102	L_1 = 4-6 x Ø		✓				
DIXI 7304 Ø 3.00 - 10.00		1	102	L_1 = 3-6 x Ø		✓				
DIXI 7060 Ø 0.50 - 6.00		1	103	L_1 = 1-2 x Ø		✓				

END MILLS Z=2

DIXI 7242 Ø 0.15 - 20.00		2	104	L_1 = 1.5-5 x Ø DIN 6527	$D_1 > 6$	✓	✓			
DIXI 7202 Ø 1.50 - 16.00		2	106	L_1 = 1.5-4 x Ø		✓	✓	* ✓		
DIXI 7222 Ø 3.00 - 20.00		2	107	L_1 = 3-10 x Ø		✓	✓	* ✓		
DIXI 7240 Ø 0.04 - 5.50		2	108	L_1 = 1 x Ø		✓	✓			
DIXI 7237 Ø 0.15 - 3.00		2	110	L_1 = 1 x Ø L_2 = 3 x Ø		✓	✓			
DIXI 7238 Ø 0.30 - 3.00		2	110	L_1 = 1 x Ø L_2 = 5 x Ø		✓	✓			
DIXI 7239 Ø 0.40 - 3.00		2	110	L_1 = 1 x Ø L_2 = 8 x Ø		✓	✓			

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
○								○		◎		○
												◎
												◎
												◎
												◎
					○			◎	○	○		○

◎	○	○	○		◎		◎	◎	◎	○		○
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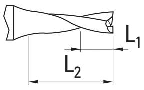
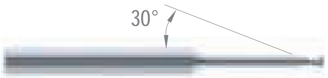
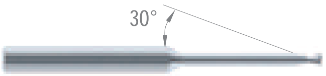
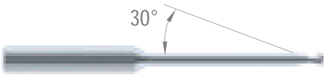
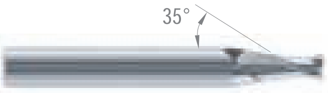
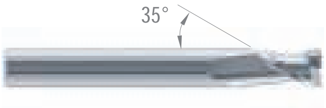
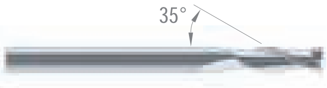
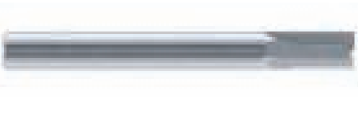
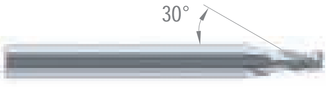
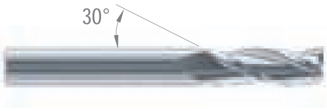
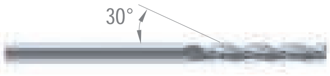
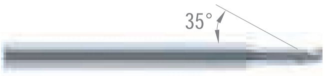
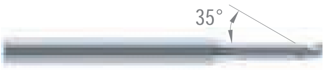
SELECTION OF END MILLS

✓ = item from stock

END MILLS Z=2

		Z	Page			☐ CARBIDE	🟦 TiAlN	🟧 CUTINOX	■ DIAMANT
DIXI 7239-10D Ø 0.50 - 3.00		2	111	L_1 = 1 x Ø L_2 = 10 x Ø		✓	✓		
DIXI 7239-12D Ø 0.50 - 1.70		2	111	L_1 = 1 x Ø L_2 = 12 x Ø		✓	✓		
DIXI 7239-15D Ø 0.50 - 1.35		2	111	L_1 = 1 x Ø L_2 = 15 x Ø		✓	✓		
DIXI 7582 Ø 1.00 - 5.50		2	112	L_1 = 2 x Ø	D_1>2.8	✓	✓		
DIXI 7562 Ø 6.00 - 20.00		2	112	L_1 = 2 x Ø	0.20x45°	✓	✓		
DIXI 7572 Ø 3.00 - 20.00		2	113	L_1 = 3-5 x Ø		✓	✓		* ✓
DIXI 7232 Ø 2.00 - 10.00		2	113	L_1 = 1.5-3 x Ø DIN 6528		✓			

END MILLS Z=3

DIXI 7243 Ø 0.35 - 20.00		3	114	L_1 = 1.5-3 x Ø DIN 6527	D_1> 6	✓	✓		
DIXI 7203 Ø 2.00 - 20.00		3	116	L_1 = 2-4 x Ø		✓	✓		
DIXI 7223 Ø 3.00 - 20.00		3	117	L_1 = 3-10 x Ø		✓	✓		* ✓
DIXI 7333 Ø 0.30 - 10.00		3	118	L_1 = 1 x Ø		✓		✓	
DIXI 7333-3D Ø 0.30 - 4.00		3	119	L_1 = 1 x Ø L_2 = 3 x Ø		✓		✓	
DIXI 7333-5D Ø 0.30 - 3.00		3	119	L_1 = 1 x Ø L_2 = 5 x Ø		✓		✓	

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
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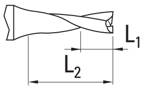
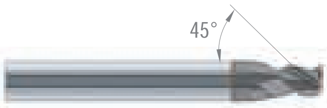
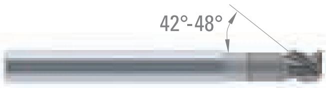
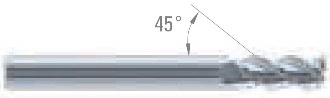
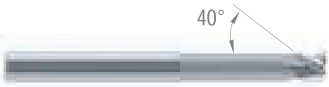
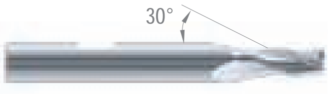
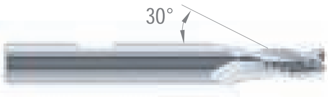
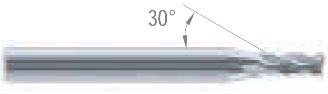
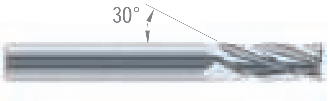
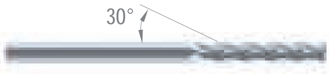
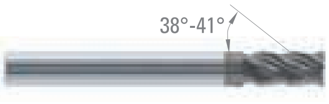
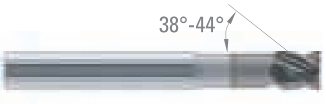
SELECTION OF END MILLS

✓ = item from stock

END MILLS Z=3

		Z	Page			☐ CARBIDE	🟦 TiAIN	🟨 CUTINOX	🟪 XIDUR	🟩 DLC	⬛ DIAMANT
DIXI 7333-8D Ø 0.30 - 3.00		3	119	$L_1 = 1 \times Ø$ $L_2 = 8 \times Ø$		✓		✓			
DIXI 7543 Ø 1.00 - 12.00		3	120	$L_1 = 1 \times 2 \times Ø$					✓		
DIXI 7583 Ø 0.30 - 6.00		3	121	$L_1 = 2 \times Ø$		✓	✓			✓	
DIXI 7253 Ø 3.00 - 20.00		3	122	$L_1 = 1\text{-}1.5 \times Ø$	$D_1 \geq 10$ λ2 λ1			✓			
DIXI 7273 Ø 3.00 - 20.00		3	122	$L_1 = 1.5\text{-}3.5 \times Ø$	$D_1 \geq 12$	✓	✓				
DIXI 7593 Ø 6.00 - 20.00		3	123	$L_1 = 1 \times Ø$ $L_2 = 4\text{-}5.5 \times Ø$		✓					
DIXI 7210 Ø 3.00 - 12.00		3	123	$L_1 = 2 \times Ø$		✓		✓			
DIXI 7213 Ø 4.00 - 20.00		3	124	$L_1 = 1.5\text{-}2.5 \times Ø$		✓	✓				

END MILLS Z=4

		Z	Page			CARBIDE	TiAIN	CUTINOX	XIDUR	DLC	DIAMANT
DIXI 7244 Ø 0.40 - 20.00		4	125	$L_1 = 2\text{-}3.5 \times Ø$ DIN 6527		✓	✓				* ✓
DIXI 7204 0Ø 2.00 - 6.00		4	126	$L_1 = 2.5\text{-}4 \times Ø$	$D_1 \geq 6$	✓	✓				
DIXI 7224 Ø 3.00 - 20.00		4	127	$L_1 = 3\text{-}10 \times Ø$	$D_1 \geq 6$	✓	✓				* ✓
DIXI 7264 Ø 1.50 - 20.00		4	127	$L_1 = 2\text{-}3 \times Ø$ DIN 6527	$D_1 \geq 10$ λ2 λ1			✓			
DIXI 7254 Ø 3.00 - 20.00		4	128	$L_1 = 1\text{-}1.5 \times Ø$ $L_2 = 3 \times Ø$	$D_1 \geq 10$ λ2 λ1			✓			

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
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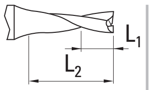
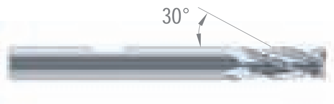
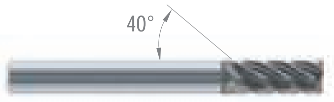
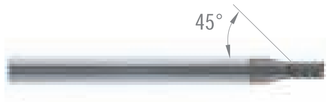
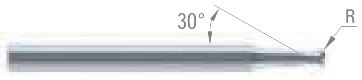
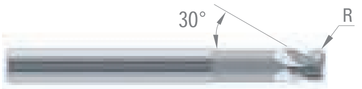
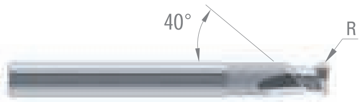
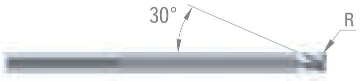
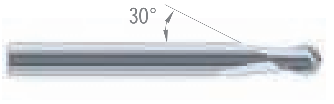
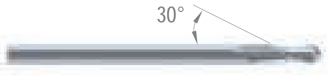
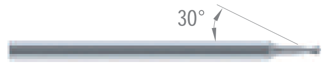
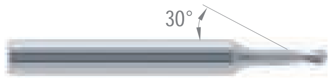
SELECTION OF END MILLS

✓ = item from stock

END MILLS Z=4		Z	Page			☐ CARBIDE	🟦 TiAIN	🟥 DICUT	🟪 XIDUR	🟩 DLC	■ DIAMANT
DIXI 7214 Ø 6.00 - 20.00		4	128	L_1 = 2-2.5 x Ø		✓	✓				
MULTI-TOOTH END MILLS											
DIXI 7560 Ø 0.35 - 20.00		3-8	129	L_1 = 2-4 x Ø	$D_1 \le 1.9$ $D_1 \ge 6$	✓	✓			✓	
DIXI 7520 Ø 0.40 - 20.00		3-12	130	L_1 = 2 x Ø	$D_1 \le 1.9$ $D_1 \ge 6$				✓		
END MILLS WITH CORNER RADIUS											
DIXI 7237-10 Ø 0.40 - 3.00		2	131	L_1 = 1 x Ø L_2 = 3 x Ø	± 0.02	✓	✓				
DIXI 7070 Ø 3.00 - 12.00		4-6	132	L_1 = 1-1.5 x Ø L_2 = 2.5-4 x Ø	± 0.02				✓		
DIXI 7554 Ø 2.00 - 12.00		4	133	L_1 = 1-1.5 x Ø L_2 = 3-5 x Ø	$D_1 \ge 6$ ± 0.02	✓	✓				
DIXI 7552 Ø 3.00 - 20.00		2	134	L_1 = 1-1.5 x Ø L_2 = 2.5-3.5 x Ø	± 0.02	✓		✓			
DIXI 7090 Ø 2.00 - 12.00		2-4	135	L_1 = 1-1.5 x Ø L_2 = 7.5-10 x Ø	± 0.02	✓	✓				* ✓
BALL-NOSE END MILLS											
DIXI 7032 Ø 0.06 - 20.00		2	136	L_1 = 1.5-2 x Ø	R = D_1/2	✓	✓	✓			* ✓
DIXI 7042 Ø 2.00 - 20.00		2	137	L_1 = 2-5 x Ø	R = D_1/2	✓	✓				* ✓
DIXI 7045 Ø 0.20 - 12.00		2	138	L_1 = 1-2.5 x Ø L_2 = 2.5-6 x Ø	R = D_1/2	✓	✓	✓			* ✓
DIXI 7046 Ø 0.20 - 12.00		2	138	L_1 = 1-2.5 x Ø L_2 = 2.5-6 x Ø	R = D_1/2	✓	✓	✓			* ✓

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
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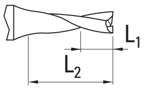
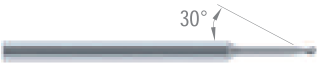
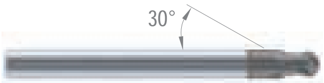
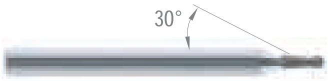
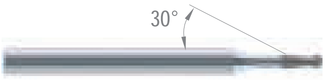
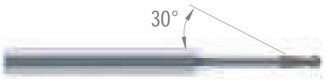
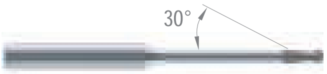
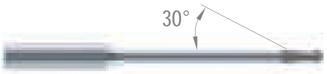
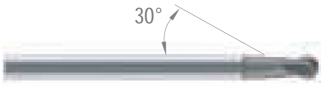
SELECTION OF END MILLS

✓ = item from stock

BALL-NOSE END MILLS

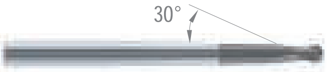
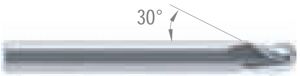
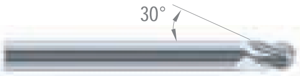
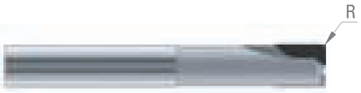
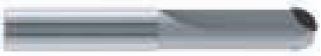
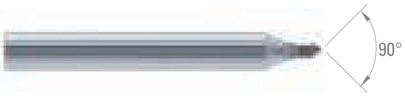
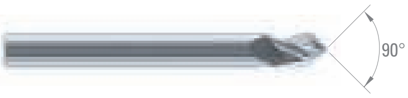
		Z	Page			☐ CARBIDE	TiAIN 🟦	DICUT 🟥	XIDUR 🟪	DIAMANT ⬛
DIXI 7047-8D Ø 0.20 - 12.00		2	138	L_1 = 1-2.5 x Ø L_2 = 8 x Ø		✓	✓	✓		* ✓
DIXI 7047-10D Ø 0.20 - 8.00		2	139	L_1 = 1-2.5 x Ø L_2 = 10 x Ø		✓	✓	✓		* ✓
DIXI 7047-12D Ø 0.20 - 5.00		2	139	L_1 = 1-2.5 x Ø L_2 = 12 x Ø		✓	✓	✓		* ✓
DIXI 7047-15D Ø 0.20 - 4.00		2	139	L_1 = 1-2.5 x Ø L_2 = 15 x Ø		✓	✓	✓		* ✓
DIXI 7047-18D Ø 0.20 - 3.00		2	139	L_1 = 1-2.5 x Ø L_2 = 18 x Ø		✓	✓	✓		* ✓
DIXI 7532 Ø 0.20 - 12.00		2	140	L_1 = 1 x Ø					✓	
DIXI 7532-3D Ø 0.20 - 12.00		2	141	L_1 = 1 x Ø L_2 = 3 x Ø					✓	
DIXI 7532-5D Ø 0.20 - 12.00		2	141	L_1 = 1 x Ø L_2 = 5 x Ø					✓	
DIXI 7532-8D Ø 0.20 - 4.00		2	141	L_1 = 1 x Ø L_2 = 8 x Ø					✓	
DIXI 7532-10D Ø 0.40 - 3.00		2	141	L_1 = 1 x Ø L_2 = 10 x Ø					✓	
DIXI 7532-12D Ø 0.50 - 2.00		2	141	L_1 = 1 x Ø L_2 = 12 x Ø					✓	
DIXI 7532-15D Ø 0.60 - 2.00		2	141	L_1 = 1 x Ø L_2 = 15 x Ø					✓	
DIXI 7542 Ø 1.00 - 12.00		2	142	L_1 = 1.5-2 x Ø L_2 = 3 x Ø					✓	

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
○	◎	◎	◎		○	○	◎	○	◎	○	◎	○
○	◎	◎	◎		○	○	◎	○	◎	○	◎	○
○	◎	◎	◎		○	○	◎	○	◎	○	◎	○
○	◎	◎	◎		○	○	◎	○	◎	○	◎	○
○	◎	◎	◎		○	○	◎	○	◎	○	◎	○
		○		◎		○						
		○		◎		○						
		○		◎		○						
		○		◎		○						
		○		◎		○						
		○		◎		○						
		○		◎		○						
		○		◎		○						

SELECTION OF END MILLS

✓ = item from stock

		Z	Pag.	L_1 L_2		☐ CARBIDE	■ TiAlN	● PCD	◆ ND	
BALL-NOSE END MILLS										
DIXI 7050 Ø 2.00 - 12.00		2-3	142	L_1 = 1.5 x Ø	$R = D_1/2$		✓			
DIXI 7033 Ø 1.00 - 20.00		3	143	L_1 = 1.5-2 x Ø	$R = D_1/2$	✓	✓			
DIXI 7034 Ø 6.00 - 20.00		4	143	L_1 = 1.5 x Ø	$R = D_1/2$	✓	✓			
DIAMOND & PCD MILLING CUTTERS										
DIXI 72420 PCD Ø 2.00 - 20.00		1-2	144	L_1 = 1-1.5 x Ø L_2 = 1.5-6 x Ø				✓		
DIXI 70520 PCD Ø 2.00 - 20.00		2	145	L_1 = 1-1.5 x Ø L_2 = 1.5-6 x Ø				✓		
DIXI 70320 PCD Ø 2.00 - 12.00		1-2	146	L_1 = 0.5-1 x Ø L_2 = 1.5-6 x Ø	$R = D_1/2$			✓		
DIXI 72310 ND Ø 0.20 - 6.00		1	147	L_1 = 1-2.5 x Ø					✓	
DIXI 76230 ND Ø 0.10		1	148						✓	
CHAMFERING TOOLS										
DIXI 7623 Ø 0.80 - 12.00		3	148			✓	✓			
DIXI 7656 R 0.10 - 1.00		2	149			✓	✓			
ROUTERS FOR COMPOSITES / KEVLAR®										
DIXI 7112 Ø 5.00 - 12.70		2	150	L_1 = 2-4 x Ø		✓				
DIXI 7113 Ø 4.76 - 12.70		2	150	L_1 = 2-5 x Ø		✓				

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
○	◎	◎	◎		○	○	○					
◎	◎	◎	○		◎	○	○	◎		◎		◎
◎	◎	◎	○		◎	○	○	○	○	○		○

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
								◎	◎	◎	◎	◎
								◎	◎	◎	◎	◎
								◎	◎	◎	◎	◎
								◎	○	◎		◎
								◎	○	◎		◎

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
◎	○	○	○		◎	○	◎	◎	◎	◎		◎
◎	○	○	○		◎	○	◎	◎	◎	◎		◎

												Kevlar®
												◎
												◎

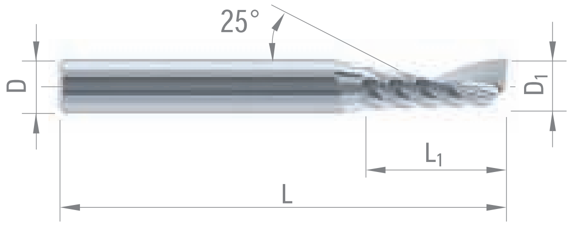
DIXI 7561

SINGLE TOOTH END MILLS FOR ALUMINIUM

Z = 1

P. 192

Cu alloy
Silver
Gold | Al | Plastic



$D_{1\ e8}$		L_1	D_{h6}	L	CARBIDE
2.00	0.10 x 45°	4.0	3	38	☐
3.00	0.15 x 45°	6.0	3	38	☐
4.00	0.15 x 45°	12.0	4	50	☐
5.00	0.15 x 45°	14.0	5	50	☐
6.00	0.20 x 45°	16.0	6	50	☐
8.00	0.20 x 45°	20.0	8	60	☐
10.00	0.20 x 45°	22.0	10	70	☐
12.00	0.20 x 45°	25.0	12	70	☐

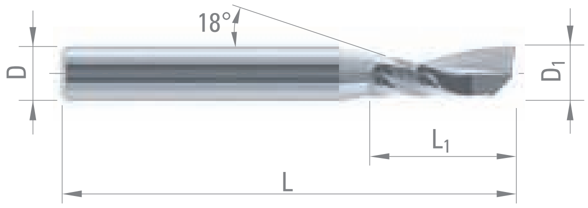
DIXI 7301

SINGLE TOOTH END MILLS, SHORT SERIES

Z = 1

P. 188

Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE
2.00	6.0	3	38	☐
3.00	12.0	3	50	☐
4.00	16.0	4	50	☐
5.00	16.0	5	50	☐
6.00	16.0	6	50	☐
8.00	23.0	8	50	☐

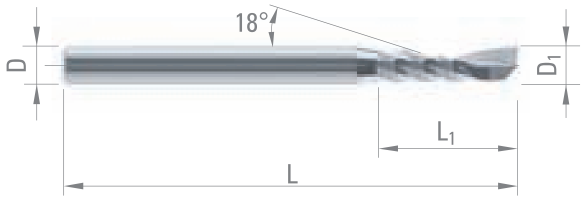
DIXI 7302

SINGLE TOOTH END MILLS, LONG SERIES

Z = 1

P. 188

Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE
3.00	17.0	3	61	☐
4.00	23.0	4	61	☐
5.00	23.0	5	61	☐
6.00	23.0	6	75	☐
8.00	32.0	8	75	☐
10.00	33.0	10	75	☐
12.00	33.0	12	100	☐

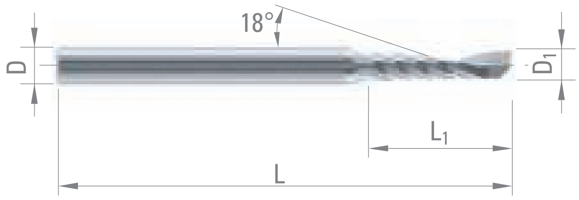
DIXI 7303

SINGLE TOOTH END MILLS, LONG SERIES
REINFORCED SHANK

Z = 1

P. 188

Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE
2.00	8.0	6	50	☐
3.00	18.0	6	75	☐
4.00	23.0	6	75	☐
5.00	23.0	6	75	☐

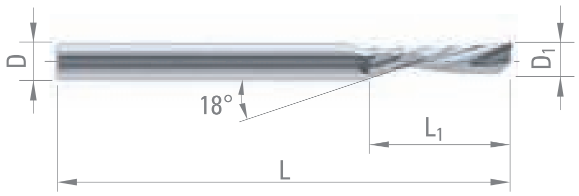
DIXI 7304

SINGLE TOOTH END MILLS, LONG SERIES
LEFT HAND SPIRAL, RIGHT HAND CUTTING

Z = 1

P. 188

Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE
3.00	17.0	6	61	☐
4.00	23.0	6	75	☐
5.00	23.0	6	75	☐
6.00	23.0	6	75	☐
8.00	32.0	8	75	☐
10.00	33.0	10	75	☐

DIXI 7060

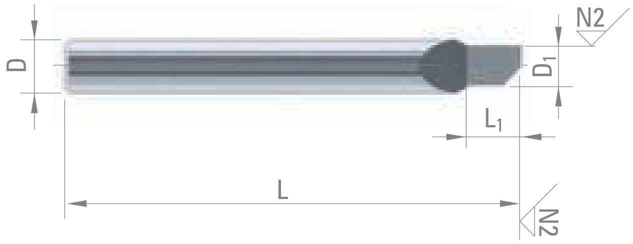
STRAIGHT FLUTE SLOT DRILLS

Z = 1

Vc f Ap

P. 186

Cast iron	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastique



$D_{1 \pm 0.01}$	L_1	D_{h6}	L	CARBIDE
0.50	1.0	4	35	☐
0.60	1.2	4	35	☐
0.70	1.5	4	35	☐
0.80	1.5	4	35	☐
0.90	1.5	4	35	☐
1.00	1.5	4	35	☐
1.00 >	2.5	4	35	☐
1.10	2.0	4	35	☐
1.20	2.0	4	35	☐
1.30	2.0	4	35	☐
1.40	2.0	4	35	☐
1.50	2.0	4	35	☐
1.60	2.0	4	35	☐
1.70	2.5	4	35	☐
1.80	2.5	4	35	☐
1.90	2.5	4	35	☐
2.00	2.5	4	35	☐
2.50	3.0	4	35	☐
2.50 >	4.0	3	38	☐
3.00	3.5	4	42	☐
3.50	4.0	4	42	☐
3.50 >	5.5	4	42	☐
4.00	5.0	4	42	☐
4.50	6.0	6	50	☐
5.00	7.0	6	50	☐
6.00	7.0	8	50	☐

DIXI 7242

SLOT DRILLS
REINFORCED SHANK

Z = 2

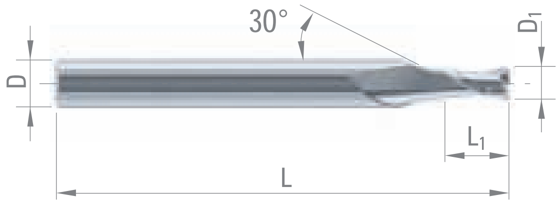
P. 162

0.20x45°

$D_1 > 6$

DIN 6527

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



D_1 Ø < 2.00 - 0/- 0.01 Ø <3.00 - 0/- 0.02 Ø ≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN
0.15	0.3	3	38	☐	🟦
0.20	0.4	3	38	☐	🟦
0.25	0.6	3	38	☐	🟦
0.30	0.6	3	38	☐	🟦
0.30 >	1.0	3	38	☐	🟦
0.35	0.8	3	38	☐	🟦
0.40	0.8	3	38	☐	🟦
0.40 >	2.0	3	38	☐	🟦
0.45	1.0	3	38	☐	🟦
0.50	1.0	3	38	☐	🟦
0.50 >	2.5	3	38	☐	🟦
0.55	1.2	3	38	☐	🟦
0.60	1.2	3	38	☐	🟦
0.60 >	3.0	3	38	☐	🟦
0.65	1.4	3	38	☐	🟦
0.70	1.4	3	38	☐	🟦
0.70 >	3.5	3	38	☐	🟦
0.75	1.6	3	38	☐	🟦
0.80	1.6	3	38	☐	🟦
0.80 >	4.0	3	38	☐	🟦
0.85	1.8	3	38	☐	🟦
0.90	1.8	3	38	☐	🟦
0.90 >	4.5	3	38	☐	🟦
0.95	2.0	3	38	☐	🟦
1.00	2.0	3	38	☐	🟦
1.00 >	5.0	3	38	☐	🟦
1.05	2.2	3	38	☐	🟦
1.10	2.2	3	38	☐	🟦
1.15	2.4	3	38	☐	🟦
1.20	2.4	3	38	☐	🟦
1.20 >	6.0	3	38	☐	🟦
1.25	2.6	3	38	☐	🟦
1.30	2.6	3	38	☐	🟦
1.35	2.8	3	38	☐	🟦
1.40	2.8	3	38	☐	🟦
1.45	3.0	3	38	☐	🟦
1.50	3.0	3	38	☐	🟦
1.50 >	7.0	3	38	☐	🟦

DIXI 7242

P. 162

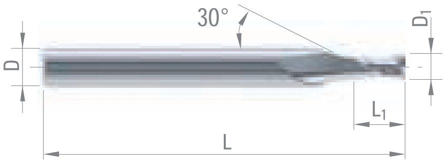
0.20x45°

$D_1 > 6$

DIN 6527

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

D_1 Ø < 2.00 - 0/- 0.01 Ø < 3.00 - 0/- 0.02 Ø ≥ 3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN
1.60	3.2	3	38	☐	■
1.70	3.4	3	38	☐	■
1.80	3.6	3	38	☐	■
1.90	4.0	3	38	☐	■
2.00	6.0	3	38	☐	■
2.10	7.0	3	38	☐	■
2.20	7.0	3	38	☐	■
2.30	7.0	3	38	☐	■
2.40	7.0	3	38	☐	■
2.50	7.0	3	38	☐	■
3.00	7.0	6	57	☐	■
3.50	7.0	6	57	☐	■
4.00	8.0	6	57	☐	■
4.50	8.0	6	57	☐	■
5.00	10.0	6	57	☐	■
5.50	10.0	6	57	☐	■
6.00	10.0	6	57	☐	■
6.50	13.0	8	63	☐	■
7.00	13.0	8	63	☐	■
7.50	16.0	8	63	☐	■
8.00	16.0	8	63	☐	■
8.50	16.0	10	72	☐	■
9.00	16.0	10	72	☐	■
9.50	19.0	10	72	☐	■
10.00	19.0	10	72	☐	■
12.00	22.0	12	83	☐	■
14.00	22.0	14	83	☐	■
16.00	26.0	16	92	☐	■
18.00	26.0	18	92	☐	■
20.00	32.0	20	104	☐	■



DIXI 7202

SLOT DRILLS

Z = 2

P. 162

Steel < 600MPa

Steel > 600MPa

DUPLEX stainless steel

Titanium, titanium alloy

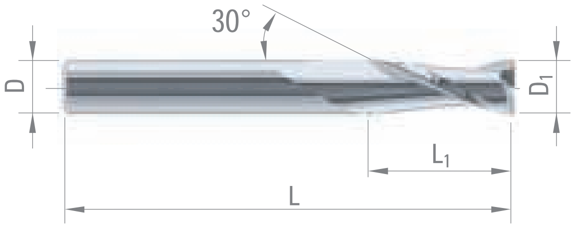
Cu alloy Silver Gold

Cu alloy difficult to machine

Al

Graphite

Plastic



$D_{1\ e8}$ Ø < 2.00 - 0/-0.01 Ø ≥ 2.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN	DIAMANT
1.50	6	2.0	32	☐	🟦	
2.00	8	2.0	32	☐	🟦	■
2.50	8	2.5	32	☐	🟦	
3.00	10	3.0	38	☐	🟦	■
3.50	12	3.5	38	☐	🟦	
4.00	12	4.0	50	☐	🟦	■
4.50	12	4.5	50	☐	🟦	
5.00	14	5.0	50	☐	🟦	
6.00	16	6.0	50	☐	🟦	■
7.00	18	7.0	60	☐	🟦	
8.00	20	8.0	63	☐	🟦	■
9.00	20	9.0	67	☐	🟦	
10.00	22	10.0	72	☐	🟦	■
11.00	22	11.0	73	☐	🟦	
12.00	22	12.0	73	☐	🟦	
13.00	25	13.0	75	☐	🟦	
14.00	25	14.0	75	☐	🟦	
15.00	25	15.0	75	☐	🟦	
16.00	27	16.0	82	☐	🟦	

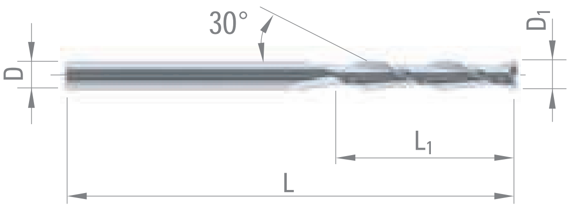
DIXI 7222

SLOT DRILLS
LONG SERIES

Z = 2

P. 180

Steel < 600MPa
Steel > 600MPa
DUPLEX stainless steel
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Graphite
Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAlN	DIAMANT
3.00	30.0	3	60	☐	🟦	■
4.00	30.0	4	60	☐	🟦	■
5.00	35.0	5	75	☐	🟦	■
6.00	40.0	6	100	☐	🟦	■
8.00	40.0	8	100	☐	🟦	■
10.00	40.0	10	100	☐	🟦	■
12.00	45.0	12	100	☐	🟦	■
14.00	65.0	14	150	☐	🟦	
16.00	65.0	16	150	☐	🟦	
20.00	65.0	20	150	☐	🟦	

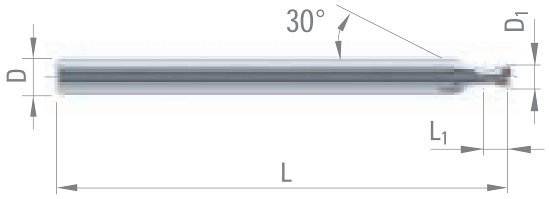
DIXI 7240

SLOT DRILLS, EXTRA SHORT REINFORCED SHANK

Z = 2

P. 162

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				



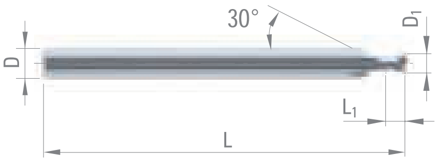
D_1 Ø < 2.00 - 0/-0.01 Ø <3.00 - 0/-0.02 Ø ≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN
0.04	0.04	3	38	☐	
0.05	0.05	3	38	☐	
0.06	0.06	3	38	☐	
0.07	0.07	3	38	☐	
0.08	0.08	3	38	☐	
0.09	0.09	3	38	☐	
0.10	0.10	3	38	☐	■
0.12	0.12	3	38	☐	■
0.15	0.15	3	38	☐	■
0.20	0.20	3	38	☐	■
0.25	0.25	3	38	☐	■
0.30	0.30	3	38	☐	■
0.35	0.35	3	38	☐	■
0.40	0.40	3	38	☐	■
0.45	0.45	3	38	☐	■
0.50	0.50	3	38	☐	■
0.55	0.55	3	38	☐	■
0.60	0.60	3	38	☐	■
0.65	0.65	3	38	☐	■
0.70	0.70	3	38	☐	■
0.75	0.75	3	38	☐	■
0.80	0.80	3	38	☐	■
0.85	0.85	3	38	☐	■
0.90	0.90	3	38	☐	■
0.95	0.95	3	38	☐	■
1.00	1.00	3	38	☐	■
1.05	1.05	3	38	☐	■
1.10	1.10	3	38	☐	■
1.15	1.15	3	38	☐	■
1.20	1.20	3	38	☐	■
1.25	1.25	3	38	☐	■
1.30	1.30	3	38	☐	■
1.35	1.35	3	38	☐	■
1.40	1.40	3	38	☐	■
1.45	1.45	3	38	☐	■
1.50	1.50	3	38	☐	■
1.55	1.55	3	38	☐	■
1.60	1.60	3	38	☐	■
1.65	1.65	3	38	☐	■
1.70	1.70	3	38	☐	■
1.75	1.75	3	38	☐	■

DIXI 7240

P. 162

D_1 Ø < 2.00 - 0/- 0.01 Ø <3.00 - 0/- 0.02 Ø ≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN
1.80	1.80	3	38	☐	🟦
1.85	1.85	3	38	☐	🟦
1.90	1.90	3	38	☐	🟦
1.95	1.95	3	38	☐	🟦
2.00	2.00	6	50	☐	🟦
2.10	2.10	6	50	☐	🟦
2.20	2.20	6	50	☐	🟦
2.30	2.30	6	50	☐	🟦
2.40	2.40	6	50	☐	🟦
2.50	2.50	6	50	☐	🟦
3.00	3.00	6	50	☐	🟦
3.50	3.50	6	50	☐	🟦
4.00	4.00	6	50	☐	🟦
4.50	4.50	6	50	☐	🟦
5.00	5.00	6	50	☐	🟦
5.50	5.50	6	50	☐	🟦

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Plastic

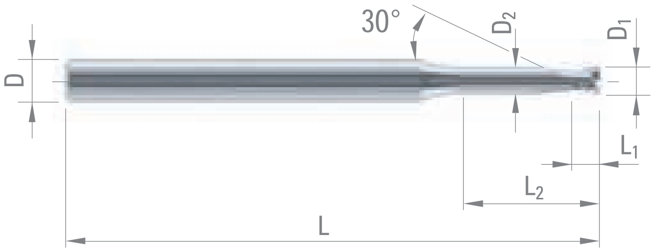


DIXI 7237 - 7238 - 7239

SLOT DRILLS, EXTRA SHORT NECKED DOWN

Z = 2

P. 162
P. 164



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

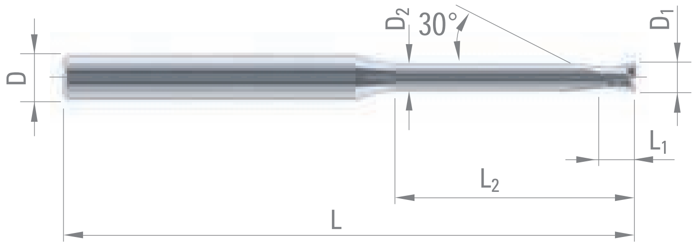
D₁ Ø<2.00 - 0/-0.01 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L₁	D₂	Dh6	L	7237 3 x D₁ L₂	7238 5 x D₁ L₂	7239 8 x D₁ L₂	CARBIDE	TiAIN
0.15	0.15	0.13	3	38	0.45			☐	■
0.20	0.20	0.17	3	38	0.60			☐	■
0.25	0.25	0.22	3	38	0.75			☐	■
0.30	0.30	0.27	3	38	0.90	1.50		☐	■
0.35	0.35	0.32	3	38	1.05	1.75		☐	■
0.40	0.40	0.37	3	38	1.20	2.00	3.20	☐	■
0.45	0.45	0.42	3	38	1.35	2.25	3.60	☐	■
0.50	0.50	0.45	3	38	1.50	2.50	4.00	☐	■
0.55	0.55	0.50	3	38	1.65	2.75	4.40	☐	■
0.60	0.60	0.55	3	38	1.80	3.00	4.80	☐	■
0.65	0.65	0.60	3	38	1.95	3.25	5.20	☐	■
0.70	0.70	0.65	3	38	2.10	3.50	5.60	☐	■
0.75	0.75	0.70	3	38	2.25	3.75	6.00	☐	■
0.80	0.80	0.75	3	38	2.40	4.00	6.40	☐	■
0.85	0.85	0.80	3	38	2.55	4.25	6.80	☐	■
0.90	0.90	0.85	3	38	2.70	4.50	7.20	☐	■
0.95	0.95	0.90	3	38	2.85	4.75	7.60	☐	■
1.00	1.00	0.95	3	38	3.00	5.00	8.00	☐	■
1.05	1.05	1.00	3	38	3.15	5.25	8.40	☐	■
1.10	1.10	1.05	3	38	3.30	5.50	8.80	☐	■
1.15	1.15	1.10	3	38	3.45	5.75	9.20	☐	■
1.20	1.20	1.15	3	38	3.60	6.00	9.60	☐	■
1.25	1.25	1.20	3	38	3.75	6.25	10.00	☐	■
1.30	1.30	1.25	3	38	3.90	6.50	10.40	☐	■
1.35	1.35	1.30	3	38	4.05	6.75	10.80	☐	■
1.40	1.40	1.35	3	38	4.20	7.00	11.20	☐	■
1.45	1.45	1.40	3	38	4.35	7.25	11.60	☐	■
1.50	1.50	1.45	3	38	4.50	7.50	12.00	☐	■
1.55	1.55	1.50	3	38	4.65	7.75	12.40	☐	■
1.60	1.60	1.55	3	38	4.80	8.00	12.80	☐	■
1.65	1.65	1.60	3	38	4.95	8.25	13.20	☐	■
1.70	1.70	1.65	3	38	5.10	8.50	13.60	☐	■
1.75	1.75	1.70	3	38	5.25	8.75	14.00	☐	■
1.80	1.80	1.75	3	38	5.40	9.00	14.40	☐	■
1.85	1.85	1.80	3	38	5.55	9.25	14.80	☐	■
1.90	1.90	1.85	3	38	5.70	9.50	15.20	☐	■
1.95	1.95	1.90	3	38	5.85	9.75	15.60	☐	■
2.00	2.00	1.90	6	50	6.00	10.00	16.00	☐	■
2.10	2.10	2.00	6	50	6.30	10.50	16.80	☐	■
2.20	2.20	2.10	6	50	6.60	11.00	17.60	☐	■
2.30	2.30	2.20	6	50	6.90	11.50	18.40	☐	■
2.40	2.40	2.30	6	50	7.20	12.00	19.20	☐	■
2.50	2.50	2.40	6	50	7.50	12.50	20.00	☐	■
3.00	3.00	2.90	6	50	9.00	15.00	24.00	☐	■

DIXI 7239-D

SLOT DRILLS, EXTRA SHORT NECKED DOWN

Z = 2

f Vc Ap P. 164



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_1 Ø<2.00 - 0/-0.01 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_2	D_{h6}	L	**7239-10D** 10 x D_1 L_2	**7239-12D** 12 x D_1 L_2	**7239-15D** 15 x D_1 L_2	CARBIDE	TiAIN
0.50	0.50	0.45	3	38	5.00	6.00	7.50	☐	■
0.55	0.55	0.50	3	38	5.50	6.60	8.25	☐	■
0.60	0.60	0.55	3	38	6.00	7.20	9.00	☐	■
0.65	0.65	0.60	3	38	6.50	7.80	9.75	☐	■
0.70	0.70	0.65	3	38	7.00	8.40	10.50	☐	■
0.75	0.75	0.70	3	38	7.50	9.00	11.25	☐	■
0.80	0.80	0.75	3	38	8.00	9.60	12.00	☐	■
0.85	0.85	0.80	3	38	8.50	10.20	12.75	☐	■
0.90	0.90	0.85	3	38	9.00	10.80	13.50	☐	■
0.95	0.95	0.90	3	38	9.50	11.40	14.25	☐	■
1.00	1.00	0.95	3	38	10.00	12.00	15.00	☐	■
1.05	1.05	1.00	3	38	10.50	12.60	15.75	☐	■
1.10	1.10	1.05	3	38	11.00	13.20	16.50	☐	■
1.15	1.15	1.10	3	38	11.50	13.80	17.25	☐	■
1.20	1.20	1.15	3	38	12.00	14.40	18.00	☐	■
1.25	1.25	1.20	3	38	12.50	15.00	18.75	☐	■
1.30	1.30	1.25	3	38	13.00	15.60	19.50	☐	■
1.35	1.35	1.30	3	38	13.50	16.20	20.25	☐	■
1.40	1.40	1.35	3	38	14.00	16.80		☐	■
1.45	1.45	1.40	3	38	14.50	17.40		☐	■
1.50	1.50	1.45	3	38	15.00	18.00		☐	■
1.55	1.55	1.50	3	38	15.50	18.60		☐	■
1.60	1.60	1.55	3	38	16.00	19.20		☐	■
1.65	1.65	1.60	3	38	16.50	19.80		☐	■
1.70	1.70	1.65	3	38	17.00	20.40		☐	■
1.75	1.75	1.70	3	38	17.50			☐	■
1.80	1.80	1.75	3	38	18.00			☐	■
1.85	1.85	1.80	3	38	18.50			☐	■
1.90	1.90	1.85	3	38	19.00			☐	■
1.95	1.95	1.90	3	38	19.50			☐	■
2.00	2.00	1.90	6	50	20.00			☐	■
2.10	2.10	2.00	6	50	21.00			☐	■
2.20	2.20	2.10	6	50	22.00			☐	■
2.30	2.30	2.20	6	50	23.00			☐	■
2.40	2.40	2.30	6	50	24.00			☐	■
2.50	2.50	2.40	6	50	25.00			☐	■
3.00	3.00	2.90	6	50	30.00			☐	■

DIXI 7582

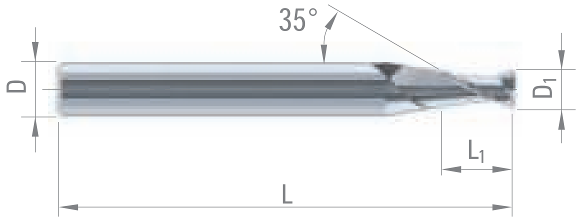
SLOT DRILLS
REINFORCED SHANK

Z = 2

f Vc Ap
P. 192

0.10 - 0.20 x 45°
$D_1 \geq 2.8$

Steel < 600MPa
Cast iron
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Plastic



D_1 Ø < 2.00 - 0/-0.01 Ø <3.00 - 0/-0.02 Ø ≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN
1.00	2.0	3	38	☐	■
1.50	3.0	3	38	☐	■
2.00	4.0	4	50	☐	■
2.50	5.0	4	50	☐	■
2.80	6.0	6	50	☐	■
3.00	6.0	6	50	☐	■
3.80	8.0	6	50	☐	■
4.00	8.0	6	50	☐	■
4.50	10.0	6	50	☐	■
5.00	10.0	6	50	☐	■
5.50	10.0	6	50	☐	■

DIXI 7562

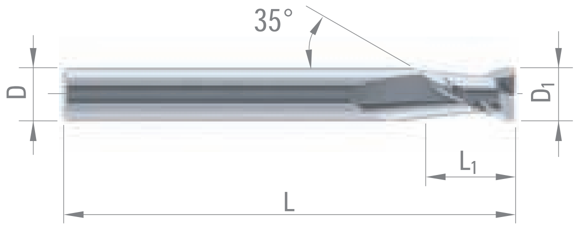
SLOT DRILLS

Z = 2

f Vc Ap
P. 192

0.20 x 45°

Steel < 600MPa
Cast iron
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAlN
6.00	10.0	6	50	☐	■
8.00	15.0	8	60	☐	■
10.00	18.0	10	66	☐	■
12.00	20.0	12	73	☐	■
14.00	22.0	14	75	☐	■
16.00	25.0	16	82	☐	■
20.00	35.0	20	104	☐	■

DIXI 7572

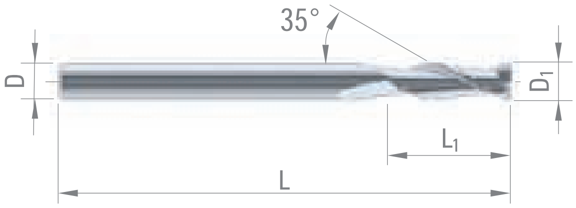
SLOT DRILLS, LONG SERIES

Z = 2

P. 192

0.15 - 0.20 x 45°

- Steel < 600MPa
- Cu alloy Silver Gold
- Cu alloy difficult to machine
- Al
- Graphite
- Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAlN	DIAMANT
3.00	14.0	3	50	☐	🟦	■
4.00	16.0	4	50	☐	🟦	■
5.00	18.0	5	60	☐	🟦	■
6.00	20.0	6	75	☐	🟦	■
7.00	22.0	7	75	☐	🟦	■
8.00	25.0	8	75	☐	🟦	■
9.00	27.0	9	90	☐	🟦	■
10.00	30.0	10	90	☐	🟦	■
12.00	36.0	12	100	☐	🟦	■
14.00	42.0	14	100	☐	🟦	
16.00	50.0	16	120	☐	🟦	
20.00	60.0	20	130	☐	🟦	

DIXI 7232

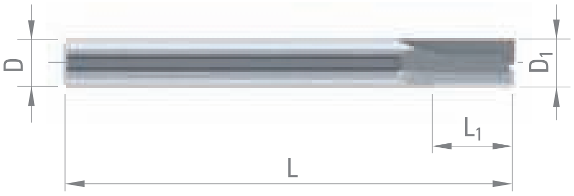
STRAIGHT FLUTE SLOT DRILLS

Z = 2

P. 186

DIN 6528

- Steel < 600MPa
- Cast iron
- Cu alloy Silver Gold
- Al



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE
2.00	6.0	2	38	☐
3.00	7.0	3	38	☐
4.00	8.0	4	50	☐
5.00	10.0	5	50	☐
6.00	10.0	6	57	☐
8.00	16.0	8	63	☐
10.00	19.0	10	72	☐

DIXI 7243

END MILLS
REINFORCED SHANK

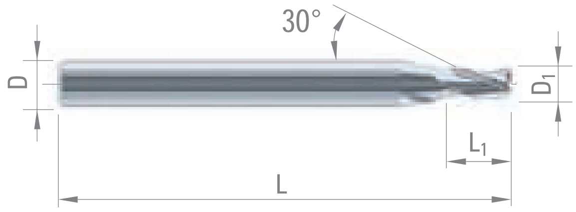
Z = 3

f Vc Ap
P. 166

0.20x45°
$D_1 > 6$

DIN 6527

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



D_1 Ø < 2.00 - 0/- 0.01 Ø <3.00 - 0/- 0.02 Ø ≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN
0.35	1.0	3	38	☐	🟦
0.40	1.2	3	38	☐	🟦
0.50	1.5	3	38	☐	🟦
0.60	1.8	3	38	☐	🟦
0.70	2.1	3	38	☐	🟦
0.75	2.4	3	38	☐	🟦
0.80	2.4	3	38	☐	🟦
0.90	2.7	3	38	☐	🟦
1.00	3.0	3	38	☐	🟦
1.10	3.3	3	38	☐	🟦
1.20	3.6	3	38	☐	🟦
1.25	3.9	3	38	☐	🟦
1.30	3.9	3	38	☐	🟦
1.40	4.2	3	38	☐	🟦
1.50	4.5	3	38	☐	🟦
1.60	4.8	3	38	☐	🟦
1.70	5.1	3	38	☐	🟦
1.75	5.4	3	38	☐	🟦
1.80	5.4	3	38	☐	🟦
1.90	5.7	3	38	☐	🟦
2.00	6.0	3	38	☐	🟦
2.10	7.0	3	38	☐	🟦
2.20	7.0	3	38	☐	🟦
2.30	7.0	3	38	☐	🟦
2.40	7.0	3	38	☐	🟦
2.50	7.0	3	38	☐	🟦
3.00	7.0	6	57	☐	🟦
3.50	7.0	6	57	☐	🟦
4.00	8.0	6	57	☐	🟦
4.50	8.0	6	57	☐	🟦
5.00	10.0	6	57	☐	🟦
5.50	10.0	6	57	☐	🟦
6.00	10.0	6	57	☐	🟦
6.00 >	12.0	8	63	☐	🟦

DIXI 7243

P. 166

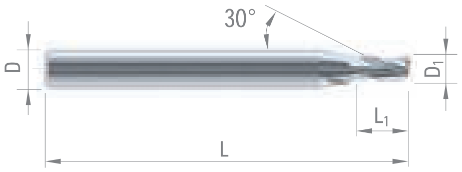
0.20x45°

$D_1 > 6$

DIN 6527

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

D_1 Ø<2.00 - 0/-0.01 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN
6.50	13.0	8	63	☐	🟦
7.00	13.0	8	63	☐	🟦
7.50	16.0	8	63	☐	🟦
8.00	16.0	8	63	☐	🟦
8.00 >	15.0	10	63	☐	🟦
8.50	16.0	10	72	☐	🟦
9.00	16.0	10	72	☐	🟦
9.50	19.0	10	72	☐	🟦
10.00	19.0	10	72	☐	🟦
12.00	22.0	12	83	☐	🟦
14.00	22.0	14	83	☐	🟦
16.00	26.0	16	92	☐	🟦
18.00	26.0	18	92	☐	🟦
20.00	32.0	20	104	☐	🟦

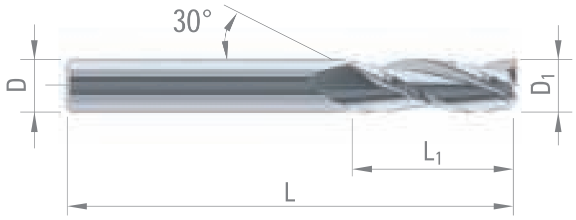


END MILLS

Z = 3

P. 166

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAlN
2.00	8.0	2.0	32	☐	🟦
2.50	8.0	2.5	32	☐	🟦
3.00	10.0	3.0	38	☐	🟦
3.50	12.0	3.5	38	☐	🟦
4.00	12.0	4.0	50	☐	🟦
5.00	15.0	5.0	50	☐	🟦
6.00	18.0	6.0	50	☐	🟦
7.00	20.0	7.0	60	☐	🟦
8.00	25.0	8.0	63	☐	🟦
9.00	25.0	9.0	67	☐	🟦
10.00	30.0	10.0	72	☐	🟦
11.00	30.0	11.0	73	☐	🟦
12.00	30.0	12.0	73	☐	🟦
13.00	30.0	13.0	75	☐	🟦
14.00	30.0	14.0	75	☐	🟦
15.00	30.0	15.0	75	☐	🟦
16.00	30.0	16.0	92	☐	🟦
18.00	40.0	18.0	125	☐	🟦
20.00	40.0	20.0	130	☐	🟦

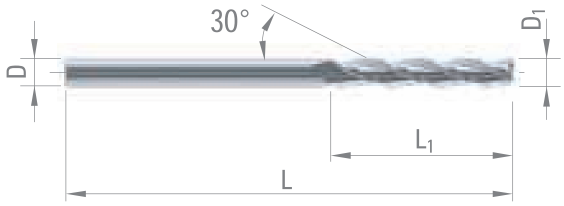
DIXI 7223

END MILLS, LONG SERIES

Z = 3

P. 182

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



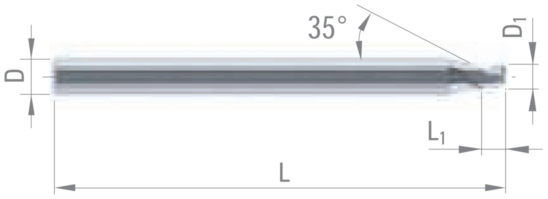
$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAIN	DIAMANT
3.00	30.0	3	60	☐	🟦	■
4.00	30.0	4	60	☐	🟦	■
5.00	35.0	5	75	☐	🟦	■
6.00	40.0	6	100	☐	🟦	■
8.00	40.0	8	100	☐	🟦	■
10.00	40.0	10	100	☐	🟦	■
12.00	45.0	12	100	☐	🟦	■
14.00	65.0	14	150	☐	🟦	
16.00	65.0	16	150	☐	🟦	
18.00	65.0	18	150	☐	🟦	
20.00	65.0	20	150	☐	🟦	

DIXI 7333

SLOT DRILLS, EXTRA SHORT

Z = 3

P. 182



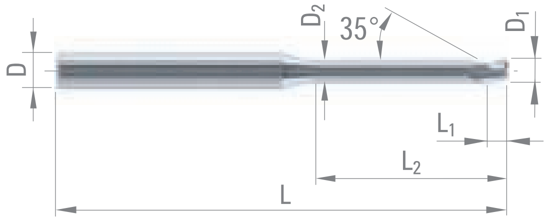
Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_1 Ø<2.00 - 0/-0.01 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	CUTINOX
0.30	0.3	3	38	☐	🟧
0.40	0.4	3	38	☐	🟧
0.50	0.5	3	38	☐	🟧
0.60	0.6	3	38	☐	🟧
0.70	0.7	3	38	☐	🟧
0.80	0.8	3	38	☐	🟧
0.90	0.9	3	38	☐	🟧
1.00	1.0	3	38	☐	🟧
1.10	1.1	3	38	☐	🟧
1.20	1.2	3	38	☐	🟧
1.30	1.3	3	38	☐	🟧
1.40	1.4	3	38	☐	🟧
1.50	1.5	3	38	☐	🟧
1.60	1.6	3	38	☐	🟧
1.70	1.7	3	38	☐	🟧
1.80	1.8	3	38	☐	🟧
1.90	1.9	3	38	☐	🟧
2.00	2.0	3	38	☐	🟧
2.50	2.5	3	38	☐	🟧
3.00	3.0	3	38	☐	🟧
4.00	4.0	4	42	☐	🟧
5.00	5.0	5	50	☐	🟧
6.00	6.0	6	50	☐	🟧
8.00	8.0	8	63	☐	🟧
10.00	10.0	10	72	☐	🟧

DIXI 7333-D

SLOT DRILLS, EXTRA SHORT NECKED DOWN

P. 182
P. 184



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_1 Ø < 2.00 - 0/-0.01 Ø < 3.00 - 0/-0.02 Ø ≥ 3.00 - e8	L_1	D_2	D_{h6}	L	**7333-3D** 3 x D_1 L_2	**7333-5D** 5 x D_1 L_2	**7333-8D** 8 x D_1 L_2	CARBIDE	CUTINOX
0.30	0.3	0.27	3	38	0.9	1.5	2.4	☐	■
0.40	0.4	0.37	3	38	1.2	2.0	3.2	☐	■
0.50	0.5	0.45	3	38	1.5	2.5	4.0	☐	■
0.60	0.6	0.55	3	38	1.8	3.0	4.8	☐	■
0.70	0.7	0.65	3	38	2.1	3.5	5.6	☐	■
0.80	0.8	0.75	3	38	2.4	4.0	6.4	☐	■
0.90	0.9	0.85	3	38	2.7	4.5	7.2	☐	■
1.00	1.0	0.95	3	38	3.0	5.0	8.0	☐	■
1.10	1.1	1.05	3	38	3.3	5.5	8.8	☐	■
1.20	1.2	1.15	3	38	3.6	6.0	9.6	☐	■
1.30	1.3	1.25	3	38	3.9	6.5	10.4	☐	■
1.40	1.4	1.35	3	38	4.2	7.0	11.2	☐	■
1.50	1.5	1.45	3	38	4.5	7.5	12.0	☐	■
1.60	1.6	1.55	3	38	4.8	8.0	12.8	☐	■
1.70	1.7	1.65	3	38	5.1	8.5	13.6	☐	■
1.80	1.8	1.75	3	38	5.4	9.0	14.4	☐	■
1.90	1.9	1.85	3	38	5.7	9.5	15.2	☐	■
2.00	2.0	1.90	3	38	6.0	10.0	16.0	☐	■
2.50	2.5	2.40	3	38	7.5	12.5	20.0	☐	■
3.00	3.0	2.90	3	38	9.0	15.0	24.0	☐	■
4.00	4.0	3.80	4	42	12.0			☐	■

DIXI 7543 XIDUR

END MILLS

Z = 3

Vc f Ap

P. 166

0.05 - 0.15 x45°

Steel < 600MPa

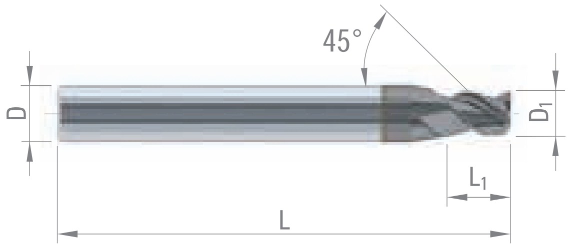
Steel > 600MPa

High alloyed steel

DUPLEX stainless steel

Cast iron

Titanium, titanium alloy



D_1 Ø < 2.00 - 0/- 0.01 Ø < 3.00 - 0/- 0.02 Ø ≥ 3.00 - e8	L_1	D_{h6}	L	XIDUR
1.00	2.0	4	50	■
1.50	3.0	4	50	■
2.00	3.0	4	50	■
2.50	3.0	4	50	■
3.00	4.5	6	57	■
4.00	6.0	6	57	■
5.00	7.0	6	57	■
6.00	8.0	8	63	■
8.00	10.0	10	72	■
10.00	12.0	10	72	■
12.00	15.0	12	83	■

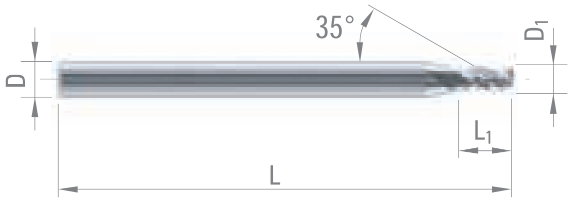
DIXI 7583

END MILLS
REINFORCED SHANK

Z = 3

P. 166

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



D_1 Ø<2.00 - 0/-0.01 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN	DLC
0.30	0.6	3	38	☐	🟦	🟩
0.40	0.8	3	38	☐	🟦	🟩
0.50	1.0	3	38	☐	🟦	🟩
0.60	1.2	3	38	☐	🟦	🟩
0.70	1.4	3	38	☐	🟦	🟩
0.80	1.6	3	38	☐	🟦	🟩
0.90	1.8	3	38	☐	🟦	🟩
1.00	2.0	3	38	☐	🟦	🟩
1.10	2.2	3	38	☐	🟦	🟩
1.20	2.4	3	38	☐	🟦	🟩
1.30	2.6	3	38	☐	🟦	🟩
1.40	2.8	3	38	☐	🟦	🟩
1.50	3.0	3	38	☐	🟦	🟩
1.60	3.2	3	38	☐	🟦	🟩
1.70	3.4	3	38	☐	🟦	🟩
1.80	3.6	3	38	☐	🟦	🟩
1.90	3.8	3	38	☐	🟦	🟩
2.00	4.0	3	38	☐	🟦	🟩
2.50	5.0	3	38	☐	🟦	🟩
3.00	6.0	6	50	☐	🟦	🟩
4.00	8.0	6	50	☐	🟦	🟩
5.00	10.0	6	50	☐	🟦	🟩
6.00	12.0	6	50	☐	🟦	🟩

DIXI 7253 CUTINOX

END MILLS WITH UNEQUAL HELIX ANGLES

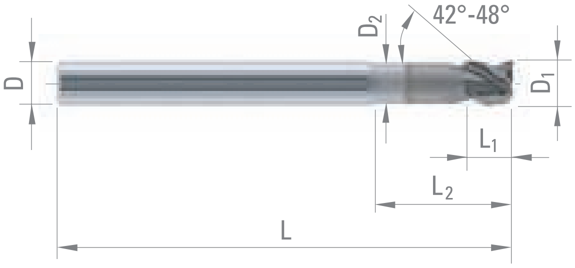
Z = 3

P. 168
P. 170

0.10 - 0.20 x45°

$D_1 \geq 10$

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy



$D_{1\ e8}$	L_1	D_2	L_2	D_{h6}	L	CUTINOX
3.00	4.0	2.80	9	6	57	🟧
4.00	5.0	3.70	12	6	57	🟧
5.00	6.0	4.60	15	6	57	🟧
6.00	7.0	5.50	18	8	63	🟧
8.00	9.0	7.50	24	10	72	🟧
10.00	11.0	9.30	30	10	72	🟧
12.00	13.0	11.20	36	12	83	🟧
16.00	17.0	15.20	48	16	92	🟧
20.00	21.0	19.00	60	20	104	🟧

DIXI 7273

FINISHING END MILLS

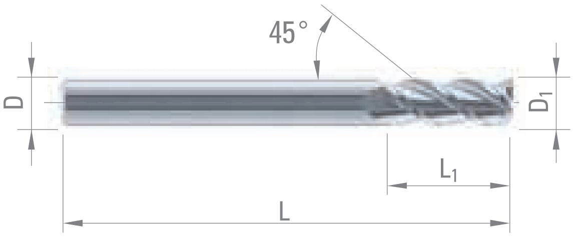
Z = 3

P. 166

0.20x45°

$D_1 \geq 12$

Steel < 600MPa
Cast iron
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAIN
3.00	10.0	3	38	☐	🟦
4.00	12.0	4	50	☐	🟦
5.00	14.0	5	50	☐	🟦
6.00	16.0	6	57	☐	🟦
8.00	20.0	8	63	☐	🟦
10.00	22.0	10	72	☐	🟦
12.00	22.0	12	73	☐	🟦
14.00	25.0	14	75	☐	🟦
16.00	27.0	16	82	☐	🟦
20.00	35.0	20	104	☐	🟦

DIXI 7593

END MILLS
NECKED DOWN

Z = 3-4

P. 164

Steel
< 600MPa

Cast iron

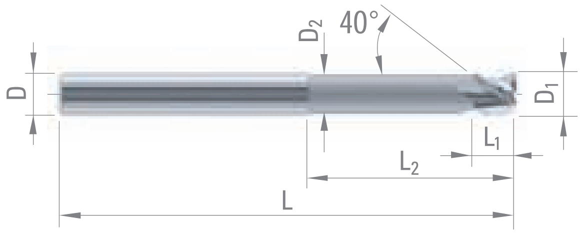
Titanium,
titanium
alloy

Cu alloy
Silver
Gold

Cu alloy
difficult
to machine

Al

Plastic



$D_{1\ h6}$	L_1	D_2	L_2	D_{h6}	L	Z	CARBIDE
6.00	6.0	5.6	30	6	66	3	☐
8.00	8.0	7.6	45	8	81	3	☐
10.00	10.0	9.6	50	10	90	3	☐
12.00	12.0	11.6	55	12	100	3	☐
16.00	16.0	15.6	72	16	120	3	☐
20.00	20.0	19.6	80	20	130	4	☐

DIXI 7210 W

ROUGHING END MILLS

Z = 3

0.20x45°

P. 188

Acier
< 600MPa

Acier
> 600MPa

Aciers
fort. allié

Acier
inox
aust.

Fontes

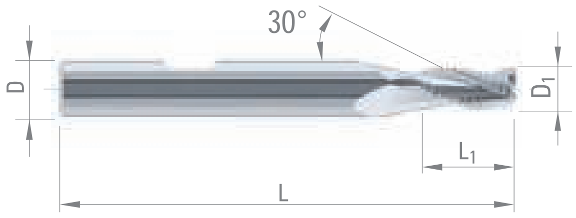
Titanium,
titanium
alloy

Cu alloy
Silver
Gold

Cu alloy
difficult
to machine

Al

Plastic



$D_{1\ d12}$	L_1	D_{h6}	L	CARBIDE	CUTINOX
3.00	8.0	6	57	☐	🟧
4.00	10.0	6	57	☐	🟧
5.00	13.0	6	57	☐	🟧
6.00	13.0	8	63	☐	🟧
7.00	16.0	8	63	☐	🟧
8.00	16.0	8	63	☐	🟧
10.00	22.0	10	72	☐	🟧
12.00	25.0	12	83	☐	🟧

DIXI 7213 W

"PIRANHA" ROUGHING END MILLS

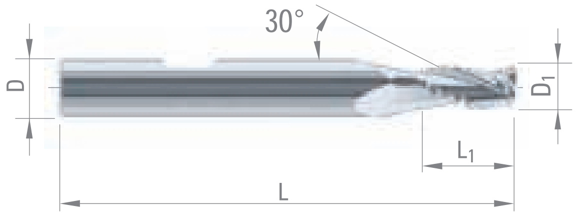
Z = 3

f Vc Ap

P. 190

0.20x45°

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



$D_{1\ d12}$	L_1	D_{h6}	L	CARBIDE	TiAlN
4.00	10.0	6	57	☐	■
5.00	13.0	6	57	☐	■
6.00	13.0	8	63	☐	■
7.00	16.0	8	63	☐	■
8.00	16.0	10	72	☐	■
10.00	22.0	10	72	☐	■
11.00	22.0	12	83	☐	■
12.00	25.0	12	83	☐	■
14.00	27.0	14	83	☐	■
16.00	36.0	16	100	☐	■
20.00	40.0	20	104	☐	■

DIXI 7244

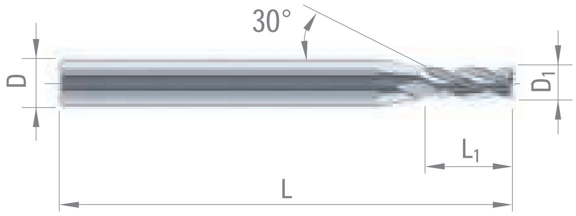
SLOT DRILLS
REINFORCED SHANK

Z = 4

P. 176

DIN 6527

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite
Plastic				



D_1 Ø < 2.00 - 0/-0.01 Ø <3.00 - 0/-0.02 Ø ≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAIN	DIAMANT
0.40	1.2	3	38	☐	🟦	
0.50	1.5	3	38	☐	🟦	
1.00	3.0	3	38	☐	🟦	■
1.50	4.0	3	38	☐	🟦	■
2.00	7.0	3	38	☐	🟦	■
3.00	8.0	6	57	☐	🟦	■
4.00	11.0	6	57	☐	🟦	■
4.50	11.0	6	57	☐	🟦	
5.00	13.0	6	57	☐	🟦	■
6.00	13.0	6	57	☐	🟦	■
7.00	16.0	8	63	☐	🟦	
8.00	19.0	8	63	☐	🟦	■
9.00	19.0	10	72	☐	🟦	
10.00	22.0	10	72	☐	🟦	■
12.00	26.0	12	83	☐	🟦	
14.00	26.0	14	83	☐	🟦	
16.00	32.0	16	92	☐	🟦	
18.00	32.0	18	92	☐	🟦	
20.00	38.0	20	104	☐	🟦	

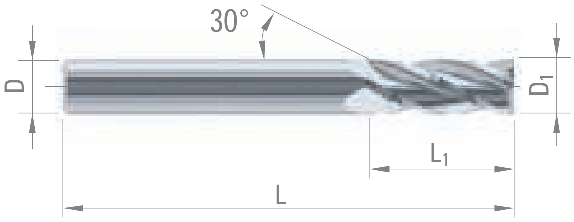
DIXI 7204

END MIILLS

Z = 4

P. 176

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Titane, alliage de titane
Alliage Cu Argent Or
Alliage Cu difficile
Al
Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAIN
2.00	8	2.0	32	☐	🟦
2.50	8	2.5	32	☐	🟦
3.00	10	3.0	38	☐	🟦
4.00	12	4.0	50	☐	🟦
5.00	14	5.0	50	☐	🟦
6.00	16	6.0	50	☐	🟦

DIXI 7224

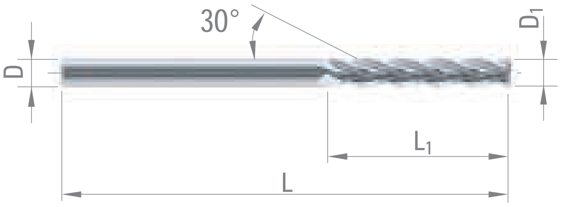
END MILLS, LONG SERIES

Z = 4

P. 180

$D_1 \geq 6$

Steel < 600MPa
Cast iron
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Graphite
Plastic



$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAIN	DIAMANT
3.00	30.0	3	60	☐	🟦	■
4.00	30.0	4	60	☐	🟦	■
5.00	35.0	5	75	☐	🟦	■
6.00	40.0	6	100	☐	🟦	■
8.00	40.0	8	100	☐	🟦	■
10.00	40.0	10	100	☐	🟦	■
12.00	45.0	12	100	☐	🟦	■
14.00	65.0	14	150	☐	🟦	
16.00	65.0	16	150	☐	🟦	
20.00	65.0	20	150	☐	🟦	

DIXI 7264 CUTINOX

END MILLS WITH UNEQUAL HELIX ANGLES AND IRREGULAR TEETH

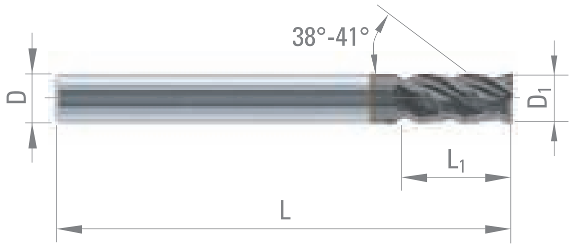
Z = 4

P. 172
P. 174

0.10-0.20 x 45°

$D_1 \geq 10$

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Acier inox aust.	Cast iron
Refractory alloy	Titanium, titanium alloy			



D_1 Ø <3.00 - 0/-0.02 Ø ≥3.00 - e8	L_1	D_{h6}	L	CUTINOX
1.50	3.0	3	38	🟧
2.00	4.0	3	38	🟧
3.00	8.0	6	57	🟧
4.00	11.0	6	57	🟧
5.00	13.0	6	57	🟧
6.00	13.0	6	57	🟧
8.00	19.0	8	63	🟧
10.00	22.0	10	72	🟧
12.00	26.0	12	83	🟧
16.00	32.0	16	92	🟧
20.00	38.0	20	104	🟧

DIXI 7254 CUTINOX

END MILLS WITH UNEQUAL HELIX ANGLES

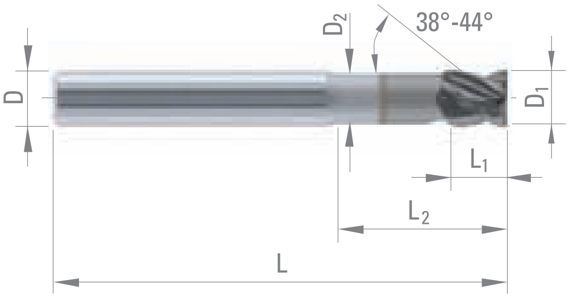
Z = 4

0.10-0.20 x 45°

P. 168
P. 170

$D_1 \geq 10$

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy



$D_{1\ e8}$	L_1	D_2	L_2	D_{h6}	L	CUTINOX
3.00	4.0	2.80	9	6	57	🟧
4.00	5.0	3.70	12	6	57	🟧
5.00	6.0	4.60	15	6	57	🟧
6.00	7.0	5.50	18	8	63	🟧
8.00	9.0	7.50	24	10	72	🟧
10.00	11.0	9.30	30	10	72	🟧
12.00	13.0	11.20	36	12	83	🟧
16.00	17.0	15.20	48	16	92	🟧
20.00	21.0	19.00	60	20	104	🟧

DIXI 7214 W

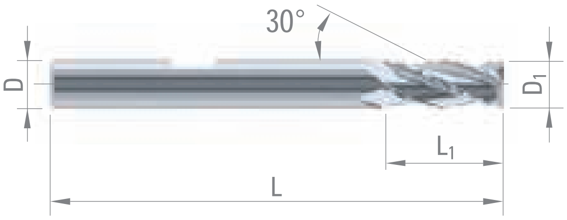
"PIRANHA" ROUGHING END MILLS

Z = 4

0.20x45°

P. 190

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Plastic



$D_{1\ d12}$	L_1	D_{h6}	L	CARBIDE	TiAIN
6.00	15.0	6	57	☐	🟦
8.00	16.0	10	72	☐	🟦
10.00	22.0	10	72	☐	🟦
12.00	25.0	12	83	☐	🟦
14.00	30.0	14	83	☐	🟦
16.00	36.0	16	100	☐	🟦
20.00	40.0	20	104	☐	🟦

DIXI 7560

MULTI-TOOTH END MILLS

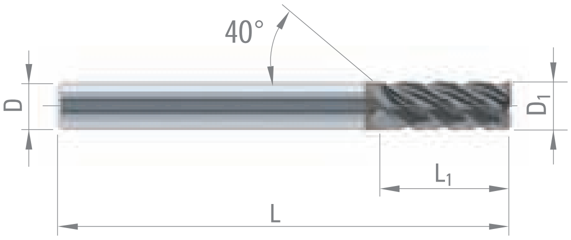
Z = 3-8

f Vc Ap
P. 186

0.10 - 0.20 x45°
$D_1 \geq 6$

$D_1 \leq 1.90$

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	



D_1 Ø < 2.00 - 0/-0.01 Ø ≥ 2.00 - e8	L_1	D_{h6}	L	Z	CARBIDE	TiAlN ($D_1 \geq 6$)	DLC
0.35	0.90	3.0	38	3	☐	🟦	🟩
0.40	1.00	3.0	38	3	☐	🟦	🟩
0.45	1.10	3.0	38	3	☐	🟦	🟩
0.50	1.25	3.0	38	3	☐	🟦	🟩
0.55	1.40	3.0	38	3	☐	🟦	🟩
0.60	1.50	3.0	38	3	☐	🟦	🟩
0.65	1.70	3.0	38	3	☐	🟦	🟩
0.70	1.75	3.0	38	3	☐	🟦	🟩
0.75	1.90	3.0	38	3	☐	🟦	🟩
0.80	2.00	3.0	38	3	☐	🟦	🟩
0.85	2.15	3.0	38	3	☐	🟦	🟩
0.90	2.25	3.0	38	3	☐	🟦	🟩
0.95	2.40	3.0	38	3	☐	🟦	🟩
1.00	2.50	3.0	38	3	☐	🟦	🟩
1.10	2.75	3.0	38	3	☐	🟦	🟩
1.20	3.00	3.0	38	3	☐	🟦	🟩
1.30	3.25	3.0	38	3	☐	🟦	🟩
1.40	3.50	3.0	38	3	☐	🟦	🟩
1.50	3.75	3.0	38	3	☐	🟦	🟩
1.60	4.00	3.0	38	3	☐	🟦	🟩
1.70	4.25	3.0	38	3	☐	🟦	🟩
1.80	4.50	3.0	38	3	☐	🟦	🟩
1.90	4.75	3.0	38	3	☐	🟦	🟩
2.00	8.00	3.0	38	5	☐	🟦	🟩
2.10	5.25	3.0	38	5	☐	🟦	🟩
2.20	5.50	3.0	38	5	☐	🟦	🟩
2.30	5.75	3.0	38	5	☐	🟦	🟩
2.40	6.00	3.0	38	5	☐	🟦	🟩
2.50	8.00	3.0	38	5	☐	🟦	🟩
2.60	6.50	3.0	38	5	☐	🟦	🟩
2.70	6.75	3.0	38	5	☐	🟦	🟩
2.80	7.00	3.0	38	5	☐	🟦	🟩
2.90	7.00	3.0	38	5	☐	🟦	🟩
3.00	10.00	3.0	38	5	☐	🟦	🟩
4.00	12.00	4.0	50	5	☐	🟦	🟩
5.00	14.00	5.0	50	5	☐	🟦	🟩
6.00	16.00	6.0	57	5	☐	🟦	🟩
8.00	19.00	8.0	63	5	☐	🟦	
9.00	22.00	9.0	67	5	☐	🟦	
10.00	22.00	10.0	72	6	☐	🟦	
12.00	26.00	12.0	83	6	☐	🟦	
14.00	26.00	14.0	83	6	☐	🟦	
16.00	32.00	16.0	92	6	☐	🟦	
20.00	38.00	20.0	104	8	☐	🟦	

DIXI 7520 XIDUR

MULTI-TOOTH END MILLS

Z = 3-12

P. 198

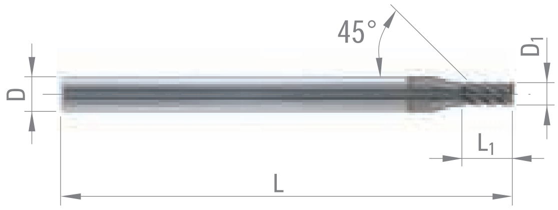
0.10x45°

$D_1 \geq 6$ **$D_1 \leq 1.50$**

High alloyed steel

Steel Cast iron > 45 HRC

Refractory alloy



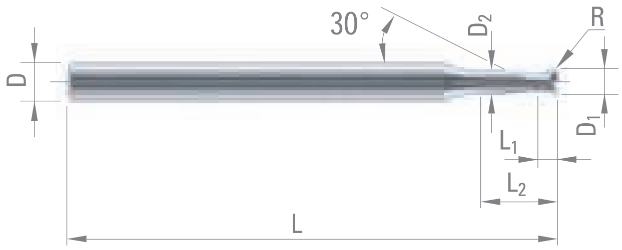
D_1 Ø < 2.00 - 0/-0.01 Ø <3.00 - 0/-0.02 Ø ≥3.00 - e8	L_1	D_{h6}	L	Z	XIDUR
0.40	0.8	3	38	3	🟪
0.50	1.0	3	38	3	🟪
0.60	1.2	3	38	3	🟪
0.70	1.4	3	38	3	🟪
0.80	1.6	3	38	3	🟪
0.90	1.8	3	38	3	🟪
1.00	2.0	3	38	4	🟪
1.50	3.0	3	38	4	🟪
2.00	4.0	3	38	5	🟪
2.50	5.0	3	38	5	🟪
3.00	6.0	3	38	5	🟪
4.00	8.0	4	50	5	🟪
6.00	12.0	6	57	6	🟪
8.00	16.0	8	63	6	🟪
10.00	20.0	10	72	6	🟪
12.00	24.0	12	83	8	🟪
16.00	32.0	16	92	10	🟪
20.00	38.0	20	104	12	🟪

DIXI 7237-10

SLOT DRILLS EXTRA SHORT WITH CORNER RADIUS NECKED DOWN, $L_2 = 3 \times D_1$

Z = 2

P. 162



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Alliage Cu difficile	Al
Plastic				

D_1 Ø<2.00 - 0/-0.01 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_2	L_2	D_{h6}	L	R	CARBIDE	TiAIN
0.40	0.40	0.37	1.20	3	38	0.05	☐	■
0.45	0.45	0.42	1.35	3	38	0.05	☐	■
0.50	0.50	0.45	1.50	3	38	0.05	☐	■
0.55	0.55	0.50	1.65	3	38	0.05	☐	■
0.60	0.60	0.55	1.80	3	38	0.05	☐	■
0.65	0.65	0.60	1.95	3	38	0.05	☐	■
0.70	0.70	0.65	2.10	3	38	0.05	☐	■
0.75	0.75	0.70	2.25	3	38	0.05	☐	■
0.80	0.80	0.75	2.40	3	38	0.05	☐	■
0.85	0.85	0.80	2.55	3	38	0.05	☐	■
0.90	0.90	0.85	2.70	3	38	0.10	☐	■
0.95	0.95	0.90	2.85	3	38	0.10	☐	■
1.00	1.00	0.95	3.00	3	38	0.10	☐	■
1.05	1.05	1.00	3.15	3	38	0.10	☐	■
1.10	1.10	1.05	3.30	3	38	0.10	☐	■
1.15	1.15	1.10	3.45	3	38	0.10	☐	■
1.20	1.20	1.15	3.60	3	38	0.10	☐	■
1.25	1.25	1.20	3.75	3	38	0.10	☐	■
1.30	1.30	1.25	3.90	3	38	0.10	☐	■
1.35	1.35	1.30	4.05	3	38	0.10	☐	■
1.40	1.40	1.35	4.20	3	38	0.10	☐	■
1.45	1.45	1.40	4.35	3	38	0.10	☐	■
1.50	1.50	1.45	4.50	3	38	0.20	☐	■
1.55	1.55	1.50	4.65	3	38	0.20	☐	■
1.60	1.60	1.55	4.80	3	38	0.20	☐	■
1.65	1.65	1.60	4.95	3	38	0.20	☐	■
1.70	1.70	1.65	5.10	3	38	0.20	☐	■
1.75	1.75	1.70	5.25	3	38	0.20	☐	■
1.80	1.80	1.75	5.40	3	38	0.20	☐	■
1.85	1.85	1.80	5.55	3	38	0.20	☐	■
1.90	1.90	1.85	5.70	3	38	0.20	☐	■
1.95	1.95	1.90	5.85	3	38	0.20	☐	■
2.00	2.00	1.90	6.00	6	50	0.20	☐	■
2.10	2.10	2.00	6.30	6	50	0.20	☐	■
2.20	2.20	2.10	6.60	6	50	0.20	☐	■
2.30	2.30	2.20	6.90	6	50	0.20	☐	■
2.40	2.40	2.30	7.20	6	50	0.20	☐	■
2.50	2.50	2.40	7.50	6	50	0.20	☐	■
3.00	3.00	2.90	9.00	6	50	0.20	☐	■

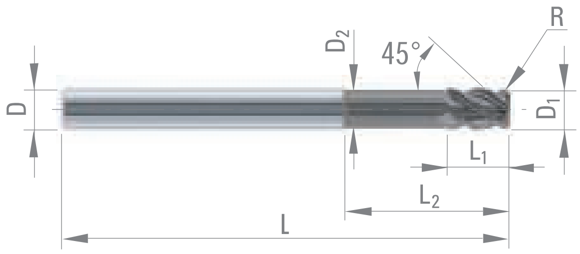
DIXI 7070 XIDUR

MULTI-TOOTH END MILLS WITH CORNER RADIUS NECKED DOWN

Z = 4-6

P. 199

High alloyed steel	Steel Cast iron > 45 HRC	Refractory alloy



$D_{1\ e8}$	L_1	D_2	L_2	D_{h6}	L	R	Z	XIDUR
3.00	4.5	2.75	12.0	6	57	0.5	4	■
4.00	6.0	3.70	13.5	6	57	0.5	4	■
5.00	7.5	4.60	17.5	6	57	0.5	4	■
6.00	9.0	5.50	24.0	6	66	0.5	4	■
6.00	9.0	5.50	24.0	6	66	0.8	4	■
6.00	9.0	5.50	24.0	6	66	1.0	4	■
6.00	9.0	5.50	24.0	6	66	1.5	4	■
8.00	10.0	7.50	28.0	8	75	0.5	6	■
8.00	10.0	7.50	28.0	8	75	1.0	6	■
8.00	10.0	7.50	28.0	8	75	1.5	6	■
8.00	10.0	7.50	28.0	8	75	2.0	6	■
10.00	12.0	9.25	30.0	10	75	0.5	6	■
10.00	12.0	9.25	30.0	10	75	1.0	6	■
10.00	12.0	9.25	30.0	10	75	1.5	6	■
10.00	12.0	9.25	30.0	10	75	2.0	6	■
10.00	12.0	9.25	30.0	10	75	2.5	6	■
12.00	12.0	11.00	32.0	12	83	1.0	6	■
12.00	12.0	11.00	32.0	12	83	1.5	6	■
12.00	12.0	11.00	32.0	12	83	2.0	6	■
12.00	12.0	11.00	32.0	12	83	3.0	6	■

END MILLS
WITH CORNER RADIUS
NECKED DOWN

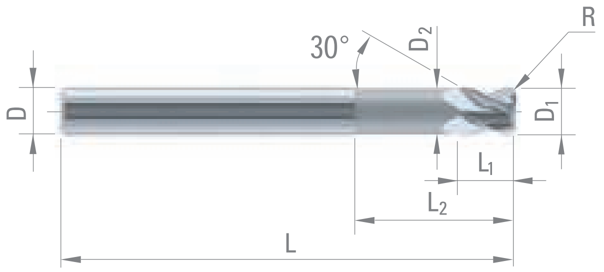
Z = 4

P. 176

± 0.02

$D_1 \geq 6$

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



D_1 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_2	L_2	D_{h6}	L	R	CARBIDE	TiAlN
2.00	3.0	1.90	10	4	42	0.2	☐	🟦
3.00	4.0	2.80	15	6	57	0.2	☐	🟦
4.00	5.0	3.80	18	6	57	0.3	☐	🟦
6.00	7.0	5.70	20	6	57	0.5	☐	🟦
6.00	7.0	5.70	20	6	57	1.0	☐	🟦
8.00	10.0	7.70	30	8	63	0.5	☐	🟦
8.00	10.0	7.70	30	8	63	1.0	☐	🟦
10.00	12.0	9.60	35	10	72	0.5	☐	🟦
10.00	12.0	9.60	35	10	72	1.0	☐	🟦
10.00	12.0	9.60	35	10	72	1.5	☐	🟦
12.00	14.0	11.50	40	12	83	0.5	☐	🟦
12.00	14.0	11.50	40	12	83	1.0	☐	🟦
12.00	14.0	11.50	40	12	83	1.5	☐	🟦

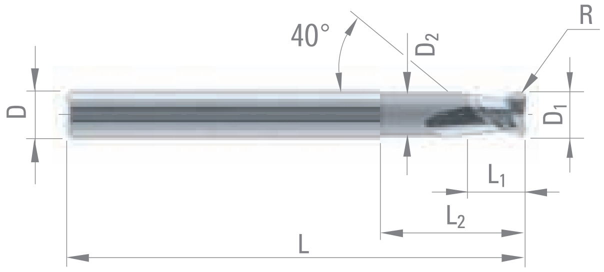
DIXI 7552

END MILLS
WITH CORNER RADIUS
NECKED DOWN

Z = 2

P. 192

± 0.02



Steel < 600MPa	Cast iron	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Alu	Plastic			

D_1 e8	L_1	D_2	L_2	D_{h6}	L	R	CARBIDE	DICUT
3.00	4.0	2.75	10	6	57	0.5	☐	■
4.00	5.0	3.70	12	6	57	0.5	☐	■
5.00	6.0	4.60	15	6	57	0.5	☐	■
6.00	7.0	5.50	18	6	57	1.0	☐	■
8.00	9.0	7.50	23	8	63	1.0	☐	■
10.00	11.0	9.25	30	10	75	1.5	☐	■
12.00	13.0	11.00	35	12	83	1.5	☐	■
12.00	13.0	11.00	35	12	83	2.0	☐	■
12.00	13.0	11.00	35	12	83	2.5	☐	■
16.00	17.0	15.00	44	16	92	2.0	☐	■
16.00	17.0	15.00	44	16	92	2.5	☐	■
16.00	17.0	15.00	44	16	92	4.0	☐	■
20.00	21.0	19.00	54	20	104	2.0	☐	■
20.00	21.0	19.00	54	20	104	2.5	☐	■
20.00	21.0	19.00	54	20	104	4.0	☐	■

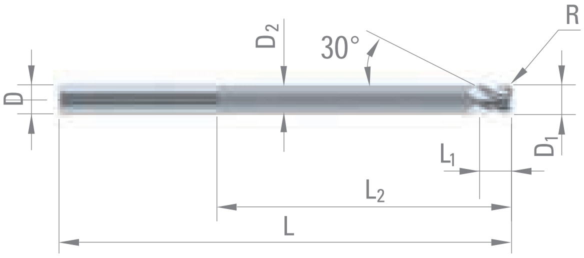
DIXI 7090

MULTI-TOOTH END MILLS WITH CORNER RADIUS NECKED DOWN

Z = 2-4

P. 178

± 0.02



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite
Plastic				

D_1 Ø < 2.00 - 0/- 0.01 Ø <3.00 - 0/- 0.02 Ø ≥3.00 - e8	L_1	D_2	L_2	D_{h6}	L	R	Z	CARBIDE	TiAIN	DIAMANT
2.00	3	1.90	15	4	55	0.10	2	☐	🟦	■
3.00	4	2.90	29	4	62	0.15	2	☐	🟦	■
4.00	5	3.80	40	4	75	0.30	4	☐	🟦	■
6.00	7	5.70	60	6	93	0.50	4	☐	🟦	■
6.00	7	5.70	60	6	93	1.00	4	☐	🟦	■
8.00	10	7.70	80	8	117	0.50	4	☐	🟦	■
8.00	10	7.70	80	8	117	1.00	4	☐	🟦	■
10.00	12	9.60	90	10	133	0.50	4	☐	🟦	■
10.00	12	9.60	90	10	133	1.00	4	☐	🟦	■
12.00	14	11.50	110	12	151	0.50	4	☐	🟦	■
12.00	14	11.50	110	12	151	1.00	4	☐	🟦	■

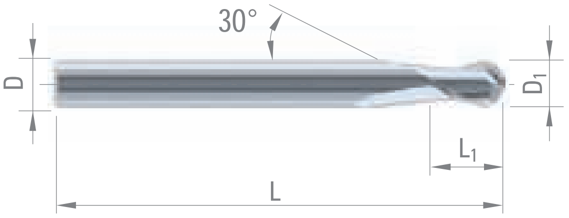
DIXI 7032

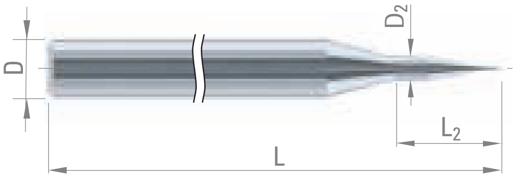
BALL-NOSE END MILLS

Z = 2

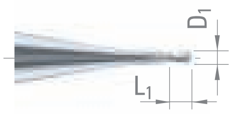
P. 154

Steel < 600MPa
Steel > 600MPa
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





For **$D_1 \le 0.15$**:
$D_2 = 1.20$
$L_2 = 5.30$



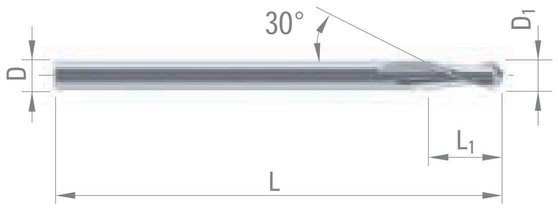
D_1 Ø<0.30 - 0/-0.01 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN	DICUT	DIAMANT
0.06	0.12	3	38	☐			
0.08	0.16	3	38	☐			
0.10	0.20	3	38	☐			
0.15	0.30	3	38	☐			
0.20	0.30	3	38	☐	🟦	🟪	■
0.25	0.40	3	38	☐	🟦	🟪	■
0.30	0.50	3	38	☐	🟦	🟪	■
0.40	0.60	3	38	☐	🟦	🟪	■
0.50	0.80	3	38	☐	🟦	🟪	■
0.60	0.90	3	38	☐	🟦	🟪	■
0.70	1.10	3	38	☐	🟦	🟪	■
0.80	1.20	3	38	☐	🟦	🟪	■
0.90	1.40	3	38	☐	🟦	🟪	■
1.00	1.50	3	38	☐	🟦	🟪	■
1.10	1.70	3	38	☐	🟦	🟪	■
1.20	1.80	3	38	☐	🟦	🟪	■
1.30	1.90	3	38	☐	🟦	🟪	■
1.40	2.10	3	38	☐	🟦	🟪	■
1.50	2.30	3	38	☐	🟦	🟪	■
1.60	2.50	3	38	☐	🟦	🟪	■
1.70	2.50	3	38	☐	🟦	🟪	■
1.80	2.75	3	38	☐	🟦	🟪	■
1.90	2.75	3	38	☐	🟦	🟪	■
2.00	3.00	3	38	☐	🟦	🟪	■
2.10	3.00	3	38	☐	🟦	🟪	■
2.20	3.50	3	38	☐	🟦	🟪	■
2.30	3.50	3	38	☐	🟦	🟪	■
2.40	3.50	3	38	☐	🟦	🟪	■
2.50	4.00	3	38	☐	🟦	🟪	■
3.00	5.00	3	38	☐	🟦	🟪	■
3.50	6.00	4	50	☐	🟦	🟪	■
4.00	6.00	4	50	☐	🟦	🟪	■
4.50	7.00	5	50	☐	🟦	🟪	■
5.00	8.00	5	50	☐	🟦	🟪	■
5.50	9.00	6	57	☐	🟦	🟪	■
6.00	9.00	6	57	☐	🟦	🟪	■
7.00	11.00	7	60	☐	🟦	🟪	■
8.00	12.00	8	63	☐	🟦	🟪	■
10.00	15.00	10	72	☐	🟦	🟪	■
12.00	18.00	12	73	☐	🟦	🟪	■
14.00	21.00	14	75	☐	🟦		
16.00	24.00	16	82	☐	🟦		
20.00	30.00	20	104	☐	🟦		

DIXI 7042

BALL-NOSE END MILLS

Z = 2

P. 160



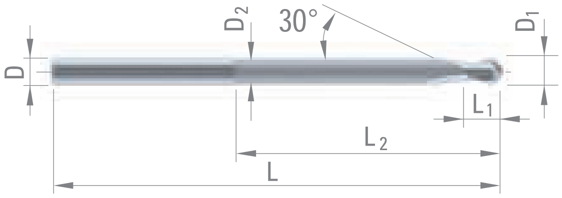
Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			

$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAIN	DIAMANT
2.00	10	2	61	☐	🟦	■
3.00	10	3	61	☐	🟦	■
4.00	12	4	75	☐	🟦	■
5.00	14	5	86	☐	🟦	■
6.00	16	6	93	☐	🟦	■
8.00	20	8	100	☐	🟦	■
10.00	24	10	100	☐	🟦	■
12.00	28	12	110	☐	🟦	■
14.00	32	14	120	☐	🟦	
16.00	36	16	120	☐	🟦	
20.00	45	20	150	☐	🟦	

DIXI 7045 - 7046 - 7047

BALL-NOSE END MILLS
NECKED DOWN

Z = 2

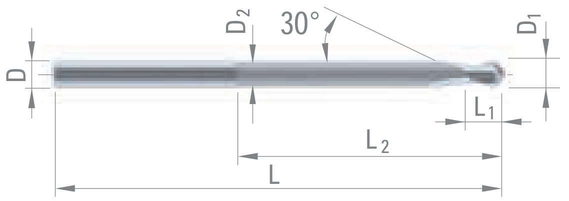


⌒ 0.006

D_1	L_1	D_2	D_{h6}	**DIXI 7046**		**DIXI 7045**		**DIXI 7047-8D**	
Ø < 3.00 - 0/- 0.02 Ø ≥ 3.00 - e8								$L_2 = 8 \times D_1$	
				L_2	L	L_2	L	L_2	L
0.20	0.5	0.18	4	1.0	55	1.0	62	1.6	62
0.30	0.6	0.27	4	1.5	55	1.5	62	2.4	62
0.40	0.8	0.37	4	2.0	55	2.0	62	3.2	62
0.50	1.0	0.45	4	3.0	55	3.0	62	4.0	62
0.60	1.6	0.55	4	4.0	55	4.0	62	4.8	62
0.80	1.8	0.75	4	5.0	55	5.0	62	6.4	62
1.00	2.0	0.95	4	6.0	55	6.0	75	8.0	75
1.50	2.5	1.45	4	9.0	55	9.0	75	12.0	75
2.00	3.0	1.90	4	12.0	55	12.0	75	16.0	75
2.50	4.0	2.40	4	12.0	55	12.0	75	20.0	75
3.00	5.0	2.80	6	12.0	57	12.0	102	24.0	102
4.00	6.0	3.80	6	15.0	57	15.0	102	32.0	102
5.00	7.0	4.80	6	15.0	57	15.0	102	40.0	102
6.00	8.0	5.70	6	15.0	57	15.0	102	48.0	102
8.00	10.0	7.70	8	25.0	63	25.0	117	64.0	117
10.00	12.0	9.60	10	30.0	72	30.0	133	80.0	133
12.00	14.0	11.60	12	40.0	83	40.0	151	96.0	151

DIXI 7047-D

P. 158



⌒ 0.006

Steel < 600MPa	Steel > 600MPa	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			

DIXI 7047-10D — $L_2 = 10 \times D_1$

DIXI 7047-12D — $L_2 = 12 \times D_1$

DIXI 7047-15D — $L_2 = 15 \times D_1$

DIXI 7047-18D — $L_2 = 18 \times D_1$

DIXI 7047-10D L_2	DIXI 7047-10D L	DIXI 7047-12D L_2	DIXI 7047-12D L	DIXI 7047-15D L_2	DIXI 7047-15D L	DIXI 7047-18D L_2	DIXI 7047-18D L	CARBIDE	TiAlN	DICUT	DIAMANT
2.0	62	2.4	62	3.0	62	3.6	62	☐	🟦	🟪	■
3.0	62	3.6	62	4.5	62	5.4	62	☐	🟦	🟪	■
4.0	62	4.8	62	6.0	62	7.2	62	☐	🟦	🟪	■
5.0	62	6.0	62	7.5	62	9.0	62	☐	🟦	🟪	■
6.0	62	7.2	62	9.0	62	10.8	62	☐	🟦	🟪	■
8.0	62	9.6	62	12.0	62	14.4	62	☐	🟦	🟪	■
10.0	75	12.0	75	15.0	75	18.0	75	☐	🟦	🟪	■
15.0	75	18.0	75	22.5	75	27.0	75	☐	🟦	🟪	■
20.0	75	24.0	75	30.0	75	36.0	75	☐	🟦	🟪	■
25.0	75	30.0	75	37.5	75	45.0	75	☐	🟦	🟪	■
30.0	102	36.0	102	45.0	102	54.0	102	☐	🟦	🟪	■
40.0	102	48.0	102	60.0	102			☐	🟦	🟪	■
50.0	102	60.0	102					☐	🟦	🟪	■
60.0	102							☐	🟦	🟪	■
80.0	117							☐	🟦	🟪	■
								☐	🟦	🟪	■
								☐	🟦	🟪	■

DIXI 7532 XIDUR

BALL-NOSE END MILLS

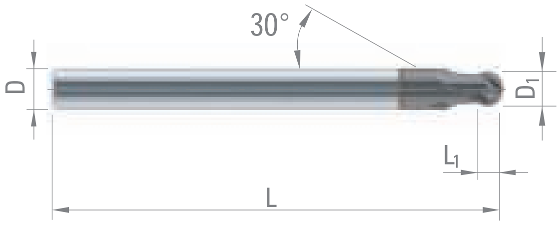
Z = 2

P. 196

High alloyed steel

Steel Cast iron > 45 HRC

Refractory alloy



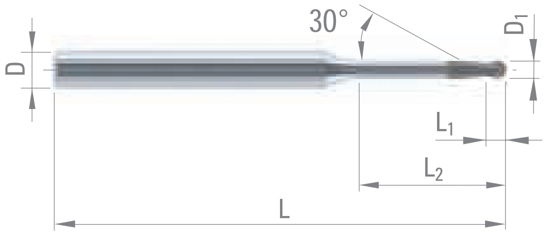
D_1 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_{h6}	L	XIDUR
0.20	0.2	4	50	■
0.30	0.3	4	50	■
0.40	0.4	4	50	■
0.50	0.5	4	50	■
0.60	0.6	4	50	■
0.70	0.7	4	50	■
0.80	0.8	4	50	■
0.90	0.8	4	50	■
1.00	0.8	4	50	■
1.50	1.2	4	50	■
2.00	1.6	4	50	■
3.00	2.4	6	57	■
4.00	3.2	6	66	■
5.00	4.0	6	66	■
6.00	4.8	6	66	■
8.00	6.4	8	75	■
10.00	8.0	10	90	■
12.00	9.6	12	100	■

DIXI 7532-D - XIDUR

BALL-NOSE END MILLS

Z = 2

P. 196



High alloyed steel	Steel Cast iron > 45 HRC	Refractory alloy

D_1 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_{h6}	L	7532-3D 3 x D_1 L_2	7532-5D 5 x D_1 L_2	7532-8D 8 x D_1 L_2	7532-10D 10 x D_1 L_2	7532-12D 12 x D_1 L_2	7532-15D 15 x D_1 L_2	XIDUR
0.20	0.2	4	50	0.6	1.0	1.6				■
0.30	0.3	4	50	0.9	1.5	2.4				■
0.40	0.4	4	50	1.2	2.0	3.2	4.0			■
0.50	0.5	4	50	1.5	2.5	4.0	5.0	6.0		■
0.60	0.6	4	50	1.8	3.0	4.8	6.0	7.2	9.0	■
0.70	0.7	4	50	2.1	3.5	5.6	7.0	8.4	10.5	■
0.80	0.8	4	50	2.4	4.0	6.4	8.0	9.6	12.0	■
0.90	0.8	4	50	2.7	4.5	7.2	9.0	10.8	13.5	■
1.00	0.8	4	50	3.0	5.0	8.0	10.0	12.0	15.0	■
1.50	1.2	4	50	4.5	7.5	12.0	15.0	18.0	22.5	■
2.00	1.6	4	50	6.0	10.0	16.0	20.0	24.0	30.0	■
3.00	2.4	6	57	9.0	15.0	24.0	30.0			■
4.00	3.2	6	66	12.0	20.0	32.0				■
5.00	4.0	6	66	15.0	25.0					■
6.00	4.8	6	66	18.0	30.0					■
8.00	6.4	8	75	24.0	40.0					■
10.00	8.0	10	90	30.0	50.0					■
12.00	9.6	12	100	36.0	60.0					■

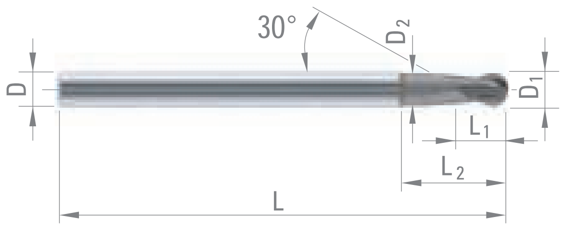
DIXI 7542 XIDUR

BALL-NOSE END MILLS NECKED DOWN

Z = 2

P. 197

High alloyed steel	Steel Cast iron > 45 HRC	Refractory alloy



D_1 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_2	L_2	D_{h6}	L	XIDUR
1.00	2.0	0.90	3.2	6	66	🟪
1.50	3.0	1.40	4.7	6	66	🟪
2.00	3.0	1.85	6.2	6	66	🟪
3.00	5.0	2.85	9.2	6	66	🟪
4.00	6.0	3.80	12.5	6	80	🟪
5.00	7.0	4.70	15.5	6	80	🟪
6.00	9.0	5.70	19.0	6	80	🟪
8.00	12.0	7.50	25.0	8	90	🟪
10.00	15.0	9.50	31.0	10	110	🟪
12.00	18.0	11.50	37.0	12	120	🟪

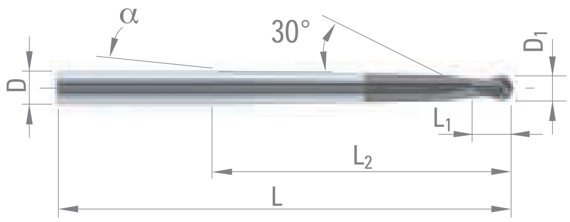
DIXI 7050 TiAIN

BALL-NOSE END MILLS

Z = 2-3

P. 160

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy			



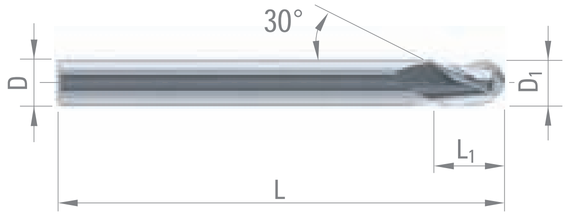
D_1 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	L_2	α	D_{h6}	L	Z	TiAIN
2.00	3.0	39	3°30′	6	75	2	🟦
3.00	4.5	39	3°	6	75	2	🟦
4.00	6.0	50	1°30′	6	86	2	🟦
5.00	7.5	64	1°30′	8	100	2	🟦
6.00	9.0	74	1°	8	110	2	🟦
8.00	12.0	80	1°	10	120	2	🟦
10.00	15.0	85	1°	12	130	3	🟦
12.00	18.0	102	1°30′	16	150	3	🟦

DIXI 7033

BALL-NOSE END MILLS

Z = 3

P. 156



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Al	Plastic

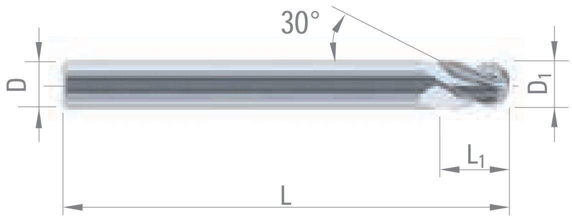
D_1 Ø<3.00 - 0/-0.02 Ø≥3.00 - e8	L_1	D_{h6}	L	CARBIDE	TiAlN
1.00	2.0	3	38	☐	■
1.50	2.5	3	38	☐	■
2.00	3.0	3	38	☐	■
2.50	4.0	3	38	☐	■
3.00	5.0	3	38	☐	■
4.00	6.0	4	50	☐	■
5.00	8.0	5	50	☐	■
6.00	9.0	6	57	☐	■
7.00	11.0	7	60	☐	■
8.00	12.0	8	63	☐	■
10.00	15.0	10	72	☐	■
12.00	18.0	12	73	☐	■
16.00	24.0	16	82	☐	■
20.00	30.0	20	104	☐	■

DIXI 7034

BALL-NOSE END MILLS

Z = 4

P. 156



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

$D_{1\ e8}$	L_1	D_{h6}	L	CARBIDE	TiAlN
6.00	9	6	57	☐	■
8.00	12	8	63	☐	■
10.00	15	10	72	☐	■
12.00	18	12	73	☐	■
14.00	21	14	75	☐	■
16.00	24	16	82	☐	■
20.00	30	20	104	☐	■

DIXI 72420 PCD

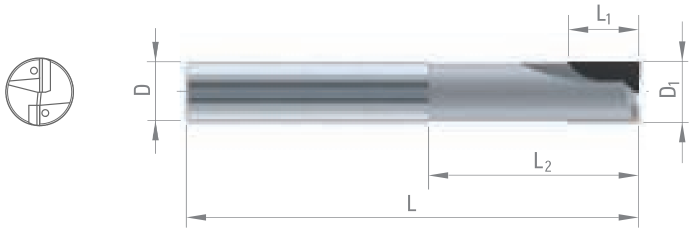
PCD END MILLS, CENTRE CUTTING WITH COOLANT THROUGH

Z = 1-2

P. 312

≥ **Ø 6**

Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



$D_{1\ h10}$	L_1	L_2	D	L	Z	PCD
2.00	3.0	6	6	42	1	●
2.00 >	3.0	20	6	75	1	●
3.00	4.0	6	6	42	1	●
3.00 >	4.0	15	6	75	2	●
3.00 >	4.0	20	6	75	2	●
4.00	4.0	8	6	50	1	●
4.00 >	6.5	10	6	50	1	●
4.00 >	6.5	15	6	75	2	●
4.00 >	6.5	25	6	75	2	●
5.00	5.0	10	6	50	2	●
5.00 >	6.5	10	6	50	2	●
5.00 >	6.5	35	6	75	2	●
6.00	6.0	12	6	57	2	●
6.00 >	8.0	34	6	75	2	●
6.00 >	8.0	50	6	100	2	●
7.00	8.0	34	8	75	2	●
8.00	7.0	14	8	63	2	●
8.00 >	10.0	34	8	75	2	●
8.00 >	10.0	50	8	100	2	●
8.00 >	10.0	75	8	125	2	●
9.00	10.0	35	10	75	2	●
10.00	8.0	16	10	75	2	●
10.00 >	12.0	35	10	75	2	●
10.00 >	12.0	75	10	125	2	●
11.00	12.0	38	12	83	2	●
12.00	10.0	20	12	83	2	●
12.00 >	12.0	38	12	83	2	●
12.00 >	12.0	75	12	125	2	●
14.00	12.0	24	14	83	2	●
14.00 >	12.0	38	14	83	2	●
14.00 >	12.0	75	14	125	2	●
16.00	14.0	28	16	92	2	●
16.00 >	14.0	42	16	92	2	●
16.00 >	14.0	75	16	125	2	●
20.00	18.0	36	20	104	2	●
20.00 >	18.0	50	20	125	2	●

CBN ▲ **CVD ▮**

On request

On request

DIXI 70520 PCD

PCD END MILLS, CENTRE CUTTING WITH CORNER RADIUS AND COOLANT THROUGH

Z = 1-2

P. 312

≥ **Ø 6**

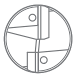
Cu alloy Silver Gold

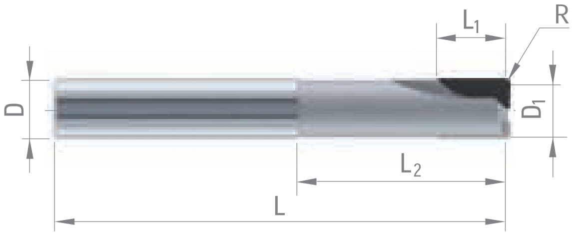
Cu alloy difficult to machine

Al

Graphite

Plastic





$D_{1\ h10}$	L_1	L_2	D	L	R	Z	PCD
2.00	3.0	6	6	42	0.1	1	●
2.00 >	3.0	20	6	75	0.1	1	●
3.00	4.0	6	6	42	0.1	1	●
3.00 >	4.0	15	6	75	0.1	2	●
3.00 >	4.0	20	6	75	0.1	2	●
4.00	4.0	8	6	50	0.1	1	●
4.00 >	6.5	10	6	50	0.1	1	●
4.00 >	6.5	15	6	75	0.1	2	●
4.00 >	6.5	25	6	75	0.1	2	●
5.00	5.0	10	6	50	0.1	2	●
5.00 >	6.5	10	6	50	0.1	2	●
5.00 >	6.5	35	6	75	0.1	2	●
6.00	6.0	12	6	57	0.1	2	●
6.00 >	8.0	34	6	75	0.1	2	●
6.00 >	8.0	50	6	100	0.1	2	●
7.00	8.0	34	8	75	0.1	2	●
8.00	7.0	14	8	63	0.1	2	●
8.00 >	10.0	34	8	75	0.1	2	●
8.00 >	10.0	50	8	100	0.1	2	●
8.00 >	10.0	75	8	125	0.1	2	●
9.00	10.0	35	10	75	0.1	2	●
10.00	8.0	16	10	75	0.1	2	●
10.00 >	12.0	35	10	75	0.1	2	●
10.00 >	12.0	75	10	125	0.1	2	●
11.00	12.0	38	12	80	0.1	2	●
12.00	10.0	20	12	80	0.1	2	●
12.00 >	12.0	38	12	80	0.1	2	●
12.00 >	12.0	75	12	125	0.1	2	●
14.00	12.0	24	14	80	0.1	2	●
14.00 >	12.0	38	14	80	0.1	2	●
14.00 >	12.0	75	14	125	0.1	2	●
16.00	14.0	28	16	92	0.1	2	●
16.00 >	14.0	42	16	92	0.1	2	●
16.00 >	14.0	75	16	125	0.1	2	●
20.00	18.0	36	20	104	0.1	2	●
20.00 >	18.0	50	20	125	0.1	2	●

CBN ▲ **CVD** ▮

On request

DIXI 70320 PCD

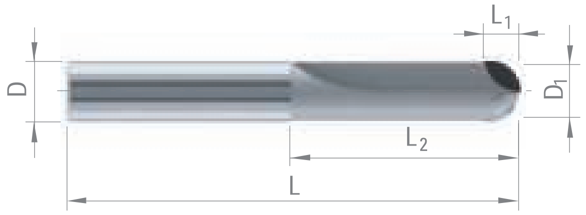
PCD BALL-NOSE END MILLS
WITH COOLANT THROUGH

Z = 1-2

P. 312

> Ø 6

Cu alloy Silver Gold | Cu alloy difficult to machine | Al | Graphite | Plastic



$D_{1\ h10}$	L_1	L_2	D	L	Z	PCD
2.00	2.0	6.0	6	42	1	●
2.00	2.0	25.0	6	75	1	●
3.00	2.5	6.0	6	42	1	●
3.00	2.5	25.0	6	75	1	●
3.00	2.5	25.0	6	75	2	●
4.00	3.0	8.0	6	50	1	●
4.00	3.0	10.0	6	50	1	●
4.00	3.0	10.0	6	50	2	●
4.00	3.0	25.0	6	75	2	●
5.00	4.0	10.0	6	50	2	●
5.00	4.0	25.0	6	75	2	●
6.00	4.0	12.0	6	57	2	●
6.00	4.0	34.0	6	75	2	●
6.00	4.0	50.0	6	100	2	●
8.00	5.0	14.0	8	63	2	●
8.00	5.0	34.0	8	75	2	●
8.00	5.0	75.0	8	125	2	●
10.00	6.0	16.0	10	72	2	●
10.00	6.0	35.0	10	75	2	●
10.00	6.0	75.0	10	125	2	●
12.00	7.0	20.0	12	83	2	●
12.00	7.0	38.0	12	83	2	●
12.00	7.0	75.0	12	125	2	●

CBN ▲ **CVD** ▮

On request

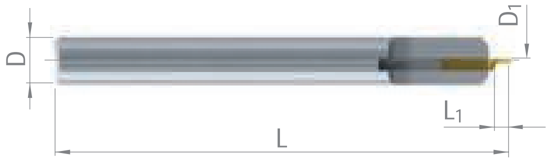
DIXI 72310 ND TOOLS ON REQUEST

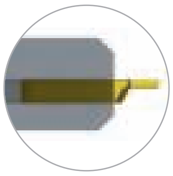
NATURAL DIAMOND MICRO END MILLS

Z = 1

P. 312

Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic





D_1	L_1	D_{h6}	L	Z	ND
0.20	0.4	3	30	1	◆
0.30	0.6	3	30	1	◆
0.40	0.8	3	30	1	◆
0.50	1.0	3	30	1	◆
0.60	1.2	3	30	1	◆
0.70	1.4	3	30	1	◆
0.80	1.6	3	30	1	◆
0.90	1.8	3	30	1	◆
1.00	2.5	3	30	1	◆
1.10	2.5	3	30	1	◆
1.20	2.5	3	30	1	◆
1.30	2.5	3	30	1	◆
1.40	2.5	3	30	1	◆
1.50	2.5	3	30	1	◆
1.60	2.5	3	30	1	◆
1.70	2.5	3	30	1	◆
1.80	2.5	3	30	1	◆
1.90	2.5	3	30	1	◆
2.00	2.5	6	30	1	◆
3.00	2.5	6	30	1	◆
4.00	2.5	6	30	1	◆
5.00	2.5	6	30	1	◆
6.00	2.5	6	30	1	◆

Steel shank

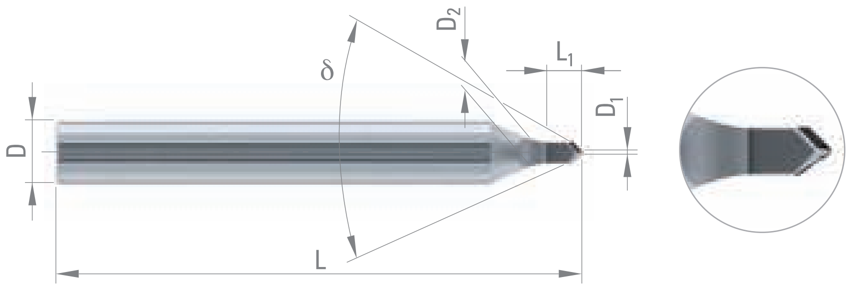
When ordering, please specify the material to be machined (non-ferrous).

DIXI 76230 ND

NATURAL DIAMOND CHAMFERING TOOLS

Z = 1

Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



D_1	L_1	D_2	δ	D_{h6}	L	ND
* 0.10	2.60	1.5	30°	6	50	◆
* 0.10	1.20	1.5	60°	6	50	◆
* 0.10	0.70	1.5	90°	6	50	◆

* not cutting

DIXI 7623

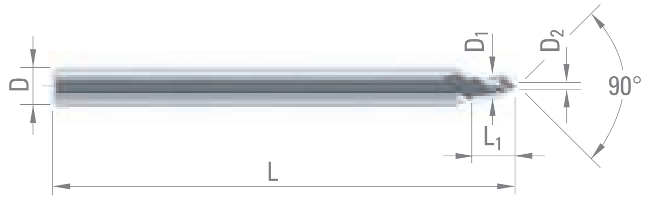
CHAMFERING TOOLS

Z = 3

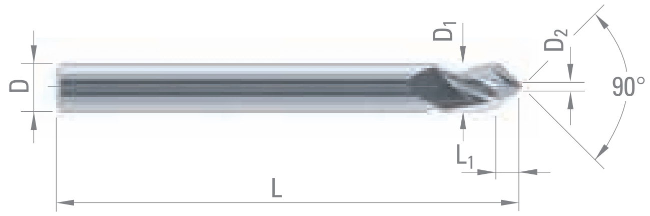
P. 166

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

Ø 0.80 > Ø 4.00



Ø 5.00 > Ø 12.00



$D_{1\ e8}$ Ø<2.00 - 0/-0.01 Ø<3.00 - 0/-0.02 Ø<5.00 - e8	L_1	$D_{2\ \pm\ 0.05}$	D_{h6}	L	CARBIDE	TiAlN
0.80	1.5	0.08	3	38	☐	🟦
1.00	2.0	0.10	3	38	☐	🟦
2.00	3.0	0.20	3	38	☐	🟦
3.00	5.0	0.30	3	38	☐	🟦
4.00	6.0	0.40	4	50	☐	🟦

$D_{1\ h6}$	L_1	$D_{2\ \pm\ 0.05}$	D_{h6}	L	CARBIDE	TiAlN
5.00	2.25	0.50	5	50	☐	🟦
6.00	2.7	0.60	6	57	☐	🟦
8.00	3.6	0.80	8	63	☐	🟦
10.00	4.5	1.00	10	72	☐	🟦
12.00	5.4	1.20	12	73	☐	🟦

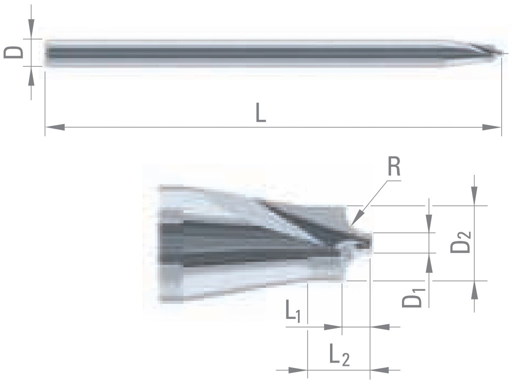
DIXI 7656

CORNER ROUNDING END MILLS

Z = 2

P. 166

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

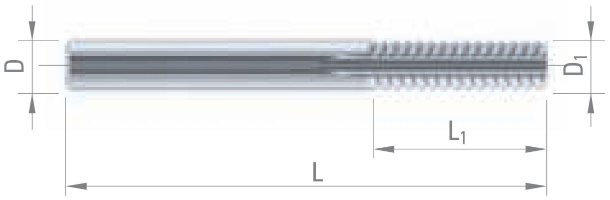


D_1	L_1	D_2	L_2	D_{h6}	L	R	CARBIDE	TiAlN
0.50	0.12	0.74	0.8	3	38	0.10	☐	■
0.50	0.18	0.86	0.8	3	38	0.15	☐	■
0.50	0.24	0.98	0.8	3	38	0.20	☐	■
0.50	0.30	1.10	1.0	3	38	0.25	☐	■
0.50	0.36	1.22	1.0	3	38	0.30	☐	■
0.50	0.48	1.46	1.0	3	38	0.40	☐	■
0.50	0.60	1.70	1.5	3	38	0.50	☐	■
0.50	0.70	1.90	1.5	3	38	0.60	☐	■
0.50	0.80	2.10	1.5	3	38	0.70	☐	■
0.80	0.90	2.60	2.0	3	38	0.80	☐	■
0.80	1.00	2.80	2.0	3	38	0.90	☐	■
0.80	1.10	-	-	3	38	1.00	☐	■

DIXI 7112

ROUTERS FOR COMPOSITES / KEVLAR®

Z = 2



Kevlar®

CUTTING CONDITIONS:

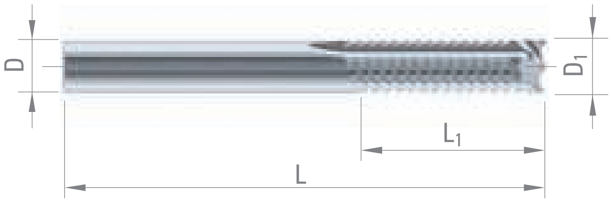
Routing	Vc	=	250 - 500 m/min
	Vf	=	500 - 2000 mm/min

D_1	inches	L_1	D_{h6}	L	CARBIDE
5.00		20	5.00	75	☐
6.00		25	6.00	75	☐
6.35	1/4"	25	6.35	75	☐
8.00		25	8.00	75	☐
10.00		25	10.00	75	☐
12.00		25	12.00	75	☐
12.70	1/2"	27	12.70	75	☐

DIXI 7113

BORING ROUTERS “COMBI” FOR COMPOSITES / KEVLAR®

Z = 2



Kevlar®

CUTTING CONDITIONS :

Drilling	Vc	=	100 - 150 m/min
	f	=	0.05 - 0.15 mm/rev
Routing	Vc	=	250 - 500 m/min
	Vf	=	500 - 2000 mm/min

D_1	inches	L_1	D_{h6}	L	CARBIDE
4.762	3/16"	25	4.762	75	☐
5.00		25	5.00	75	☐
6.00		30	6.00	75	☐
6.35	1/4"	30	6.35	75	☐
8.00		30	8.00	75	☐
9.525	3/8"	30	9.525	75	☐
10.00		30	10.00	75	☐
12.00		30	12.00	75	☐
12.70	1/2"	30	12.70	75	☐

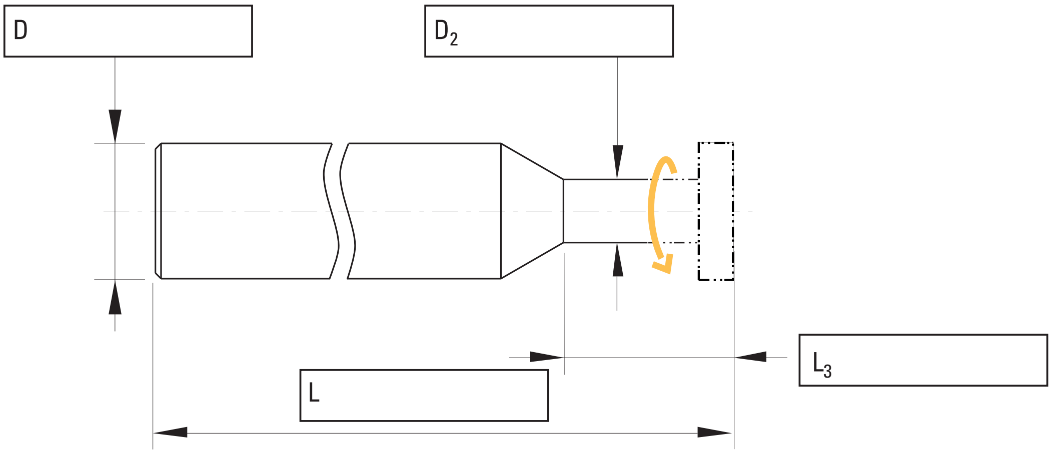
☎

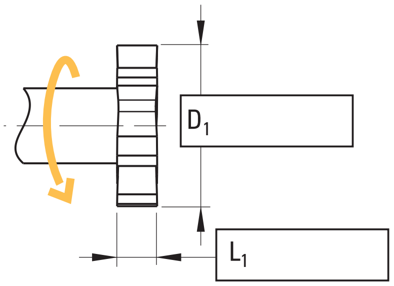
T-SLOT CUTTERS

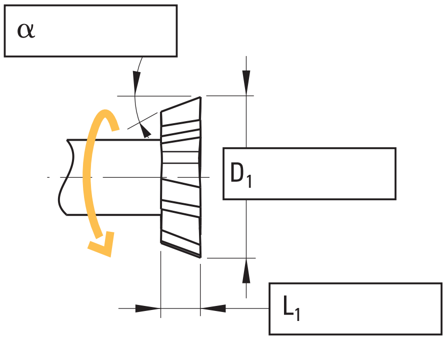
Z = ☐

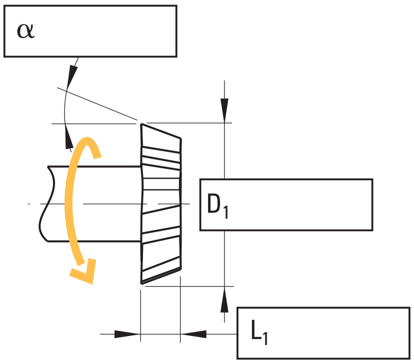
Quantity

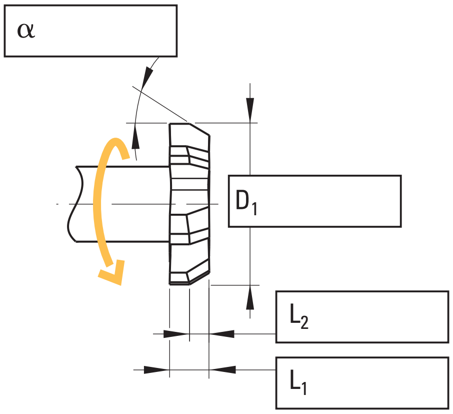
Material to be machined

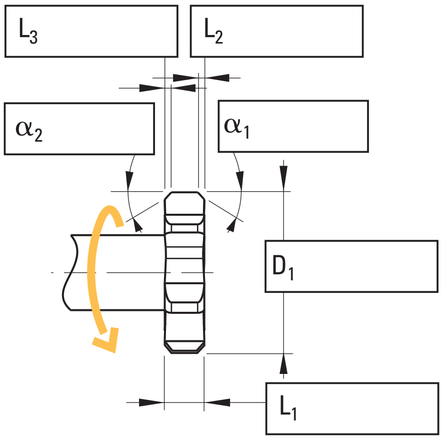


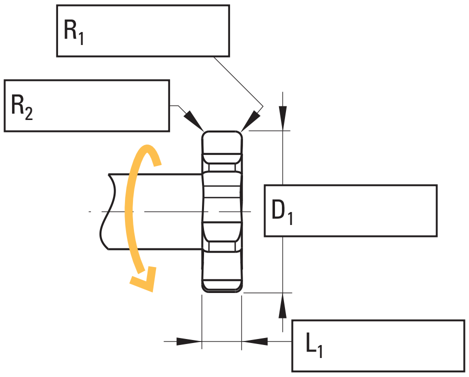


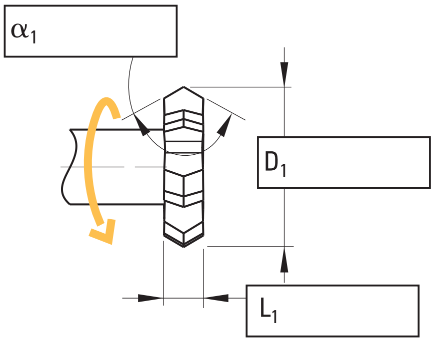


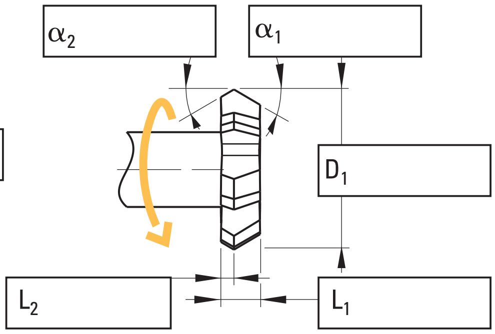


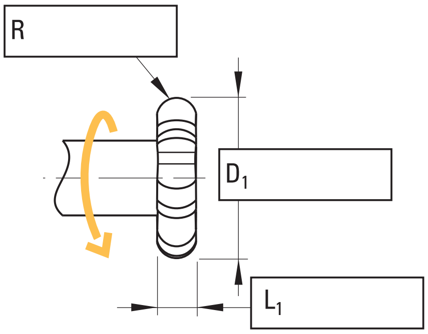








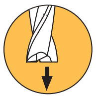


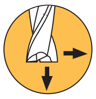


TOOLS ON REQUEST

DIXI 7631 SP **R** ☐ **L** ☐ **Z =** ☐

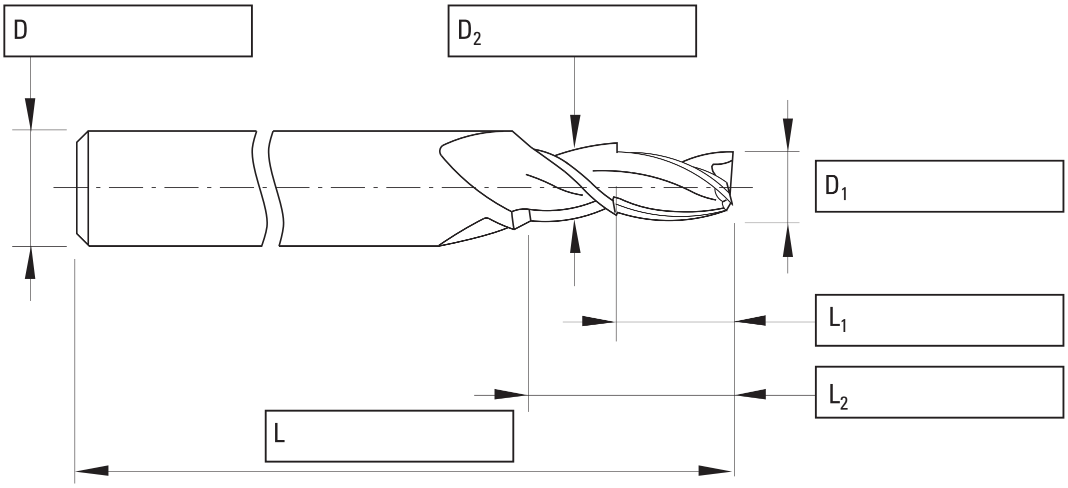
STEPPED END MILLS

 ☐

 ☐

Quantity

Material to be machined



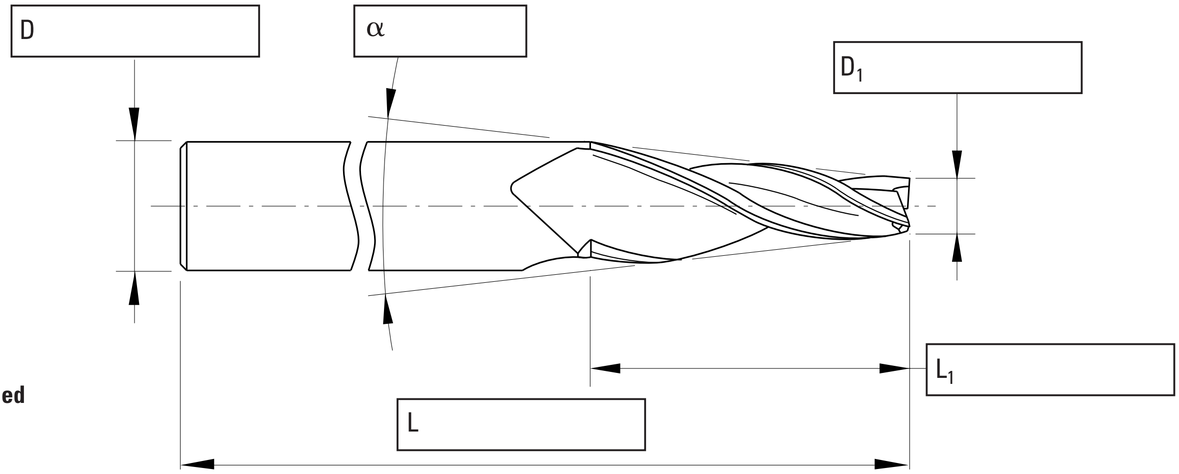
DIXI 7645 SP **R** ☐ **L** ☐

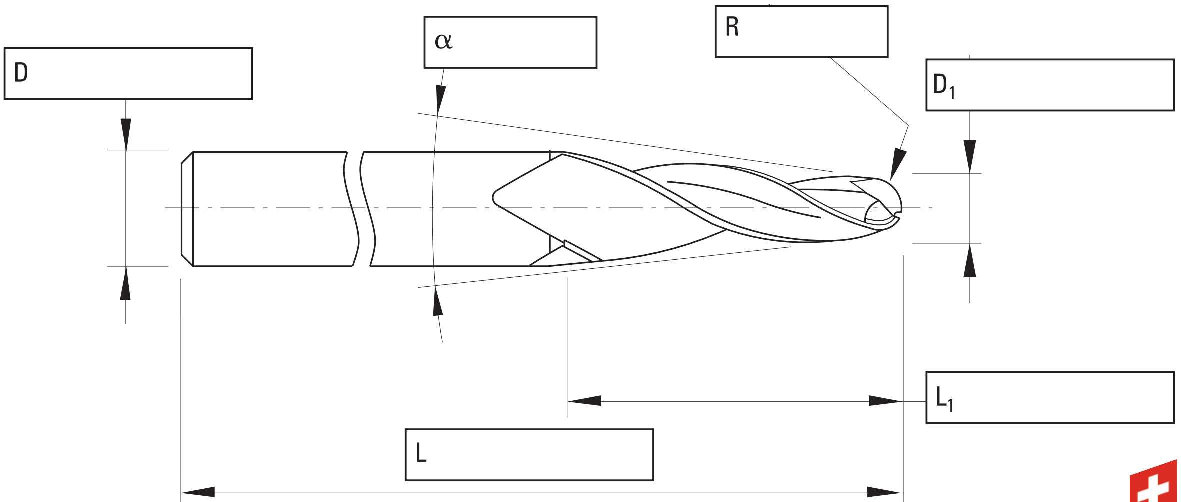
TAPERED END MILLS

Z = ☐

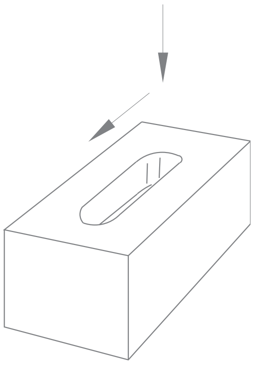
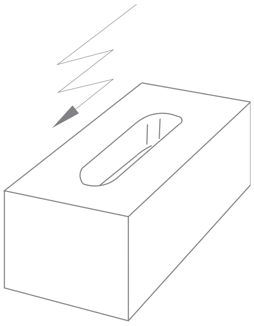
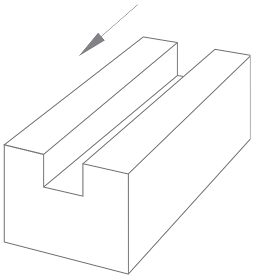
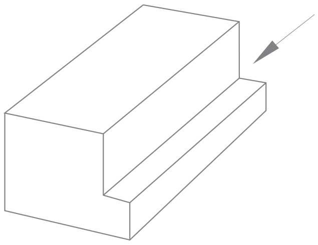
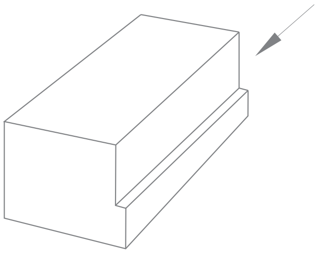
Quantity

Material to be machined

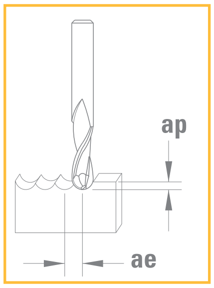




CHOOSING THE NUMBER OF TEETH

1 Key Slotting		**Z 2**	👍
2 Ramping		**Z 2 - Z 3**	👍
3 Slotting		**Z 2 - Z 3**	👍
Routing (roughing)		**Z 3 - Z 4**	👍
Routing (finishing)		Multi-tooth	👍

CUTTING CONDITIONS



	Materials to be machined		CARBIDE Vc [m/min]	DICUT Vc [m/min]	TiAlN Vc [m/min]	DIAMOND Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70** 100		**90** 110		<0.15 x ØD1	<0.5 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**70** 90		<0.15 x ØD1	<0.5 x ØD1
P	Lead alloyed cutting steel		**70** 100				<0.20 x ØD1	<0.5 x ØD1
P	High alloyed steel	700 – 1500 N/mm²			**40** 70		<0.15 x ØD1	<0.5 x ØD1
M	Stainless steel	400 – 700 N/mm²			**70** 90		<0.15 x ØD1	<0.5 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²			**40** 70		<0.1 x ØD1	<0.4 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70** 100		**90** 110		<0.10 x ØD1	<0.4 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40** 70		**70** 90		<0.15 x ØD1	<0.5 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70** 100		**90** 110		<0.10 x ØD1	<0.4 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy			**25** 35		<0.05 x ØD1	<0.25 x ØD1
S	Titanium, titanium alloys		**30** 45				<0.15 x ØD1	<0.5 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140** 160				<0.15 x ØD1	<0.5 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120** 140	**170** 190	**170** 190		<0.15 x ØD1	<0.5 x ØD1
N	Aluminium alloys	Si < 8%	**180** 260		**230** 340		<0.25 x ØD1	<0.5 x ØD1
N	Cast aluminium	Si > 8%	**140** 160		**210** 230		<0.25 x ØD1	<0.5 x ØD1
N	Graphite					**200** 300	<0.30 x ØD1	<0.6 x ØD1
N	Plastic		**240** 260		**300** 340		<0.30 x ØD1	<0.6 x ØD1
N	Gold, silver		**140** 160		**200** 220		<0.15 x ØD1	<0.5 x ØD1

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

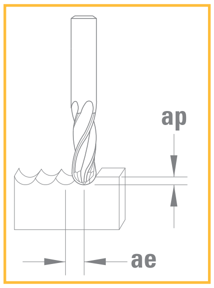
$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

Feed per tooth **fz [mm]**

Ø D_1 0.06 - 0.60	Ø D_1 0.60 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.0016 - 0.005	**0.003** - 0.009	**0.005** - 0.01	**0.008** - 0.02	**0.016** - 0.05	**0.026** - 0.06	**0.036** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.08** - 0.18
0.0012 - 0.004	**0.002** - 0.007	**0.004** - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13
0.0020 - 0.008	**0.004** - 0.013	**0.007** - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26
0.0012 - 0.004	**0.002** - 0.007	**0.004** - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13
0.0012 - 0.004	**0.002** - 0.007	**0.004** - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13
0.0012 - 0.004	**0.002** - 0.007	**0.004** - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13
0.0016 - 0.005	**0.003** - 0.009	**0.005** - 0.01	**0.008** - 0.02	**0.016** - 0.05	**0.026** - 0.06	**0.036** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.08** - 0.18
0.0012 - 0.004	**0.002** - 0.007	**0.004** - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13
0.0016 - 0.005	**0.003** - 0.009	**0.005** - 0.01	**0.008** - 0.02	**0.016** - 0.05	**0.026** - 0.06	**0.036** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.08** - 0.18
		0.004 - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13
0.0012 - 0.004	**0.002** - 0.007	**0.004** - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13
0.0020 - 0.008	**0.004** - 0.013	**0.007** - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26
0.0012 - 0.004	**0.002** - 0.007	**0.004** - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13
0.0020 - 0.008	**0.004** - 0.013	**0.007** - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26
0.0020 - 0.008	**0.004** - 0.013	**0.007** - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26
0.0027 - 0.012	**0.005** - 0.020	**0.009** - 0.03	**0.014** - 0.05	**0.027** - 0.10	**0.046** - 0.14	**0.064** - 0.20	**0.09** - 0.27	**0.13** - 0.31	**0.15** - 0.39
0.0027 - 0.012	**0.005** - 0.020	**0.009** - 0.03	**0.014** - 0.05	**0.027** - 0.10	**0.046** - 0.14	**0.064** - 0.20	**0.09** - 0.27	**0.13** - 0.31	**0.15** - 0.39
0.0020 - 0.008	**0.004** - 0.013	**0.007** - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26

DIXI 7033 - 7034

CUTTING CONDITIONS



Materials to be machined			CARBIDE		TiAlN				ap	ae
			Vc [m/min]		Vc [m/min]				[mm]	[mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70**	100	**90**	110			<0.15 x ØD1	<0.3 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**70**	90			<0.15 x ØD1	<0.3 x ØD1
P	Lead alloyed cutting steel		**70**	100					<0.20 x ØD1	<0.3 x ØD1
P	High alloyed steel	700 – 1500 N/mm²			**40**	70			<0.10 x ØD1	<0.2 x ØD1
M	Stainless steel	400 – 700 N/mm²			**70**	90			<0.15 x ØD1	<0.3 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²			**40**	70			<0.10 x ØD1	<0.2 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70**	100	**90**	110			<0.15 x ØD1	<0.3 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40**	70	**70**	90			<0.10 x ØD1	<0.2 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70**	100	**90**	110			<0.15 x ØD1	<0.3 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy			**25**	35			<0.10 x ØD1	<0.2 x ØD1
S	Titanium, titanium alloys		**30**	45					<0.10 x ØD1	<0.2 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140**	160					<0.15 x ØD1	<0.3 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120**	140	**170**	190			<0.15 x ØD1	<0.3 x ØD1
N	Aluminium alloys	Si < 8%	**180**	260	**230**	340			<0.25 x ØD1	<0.3 x ØD1
N	Cast aluminium	Si > 8%	**140**	160	**210**	230			<0.25 x ØD1	<0.3 x ØD1
N	Plastic		**240**	260	**300**	340			<0.30 x ØD1	<0.4 x ØD1
N	Gold, silver		**140**	160	**200**	220			<0.15 x ØD1	<0.3 x ØD1

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

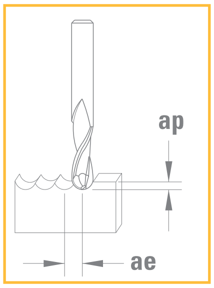
$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

Feed per tooth **fz [mm]**

Ø D_1 0.20 - 0.60	Ø D_1 0.60 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 20.00
0.005 - 0.01	**0.008** - 0.02	**0.016** - 0.05	**0.026** - 0.06	**0.036** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.08** - 0.18	**0.11** - 0.22
0.004 - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13	**0.09** - 0.17
0.007 - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26	**0.13** - 0.29
0.004 - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13	**0.09** - 0.17
0.004 - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13	**0.09** - 0.17
0.004 - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13	**0.09** - 0.17
0.005 - 0.01	**0.008** - 0.02	**0.016** - 0.05	**0.026** - 0.06	**0.036** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.08** - 0.18	**0.11** - 0.21
0.004 - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13	**0.09** - 0.17
0.005 - 0.01	**0.008** - 0.02	**0.016** - 0.05	**0.026** - 0.06	**0.036** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.08** - 0.18	**0.11** - 0.21
0.004 - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13	**0.09** - 0.17
0.004 - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13	**0.09** - 0.17
0.007 - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26	**0.13** - 0.29
0.004 - 0.01	**0.006** - 0.02	**0.012** - 0.03	**0.020** - 0.05	**0.027** - 0.07	**0.04** - 0.09	**0.05** - 0.10	**0.06** - 0.13	**0.09** - 0.17
0.007 - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26	**0.13** - 0.29
0.007 - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26	**0.13** - 0.29
0.009 - 0.03	**0.014** - 0.05	**0.027** - 0.10	**0.046** - 0.14	**0.064** - 0.20	**0.09** - 0.27	**0.13** - 0.31	**0.15** - 0.39	**0.18** - 0.42
0.007 - 0.02	**0.010** - 0.03	**0.020** - 0.07	**0.033** - 0.09	**0.046** - 0.13	**0.07** - 0.18	**0.09** - 0.21	**0.10** - 0.26	**0.13** - 0.29

DIXI 7045 - 7046 - 7047-D

CUTTING CONDITIONS



	Materials to be machined		CARBIDE	DICUT	TiAlN	DIAMOND	ap [mm]	ae [mm]
			Vc [m/min]	Vc [m/min]	Vc [m/min]	Vc [m/min]		
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70** 100		**90** 110		<0.15 x ØD1	<0.5 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**70** 90		<0.15 x ØD1	<0.5 x ØD1
P	Lead alloyed cutting steel		**70** 100				<0.20 x ØD1	<0.5 x ØD1
P	High alloyed steel	700 – 1500 N/mm²			**40** 70		<0.10 x ØD1	<0.4 x ØD1
M	Stainless steel	400 – 700 N/mm²			**70** 90		<0.15 x ØD1	<0.5 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²			**40** 70		<0.10 x ØD1	<0.4 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70** 100		**90** 110		<0.15 x ØD1	<0.5 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40** 70		**70** 90		<0.10 x ØD1	<0.4 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70** 100		**90** 110		<0.15 x ØD1	<0.5 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy			**25** 35		< 0.10 x ØD1	.<0.10 x ØD1
S	Titanium, titanium alloys		**30** 45				<0.10 x ØD1	<0.4 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140** 160				<0.15 x ØD1	<0.5 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120** 140	**170** 190	**170** 190		<0.15 x ØD1	<0.5 x ØD1
N	Aluminium alloys	Si < 8%	**180** 240		**230** 340		<0.25 x ØD1	<0.5 x ØD1
N	Cast aluminium	Si > 8%	**140** 160			**200** 300	<0.25 x ØD1	<0.5 x ØD1
N	Graphite					**200** 300	<0.30 x ØD1	<0.6 x ØD1
N	Plastic		**240** 260		**300** 340		<0.30 x ØD1	<0.6 x ØD1
N	Gold, silver		**140** 160		**200** 220		<0.15 x ØD1	<0.5 x ØD1

n and Vf are indicative and shall be ajusted according to L_2

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

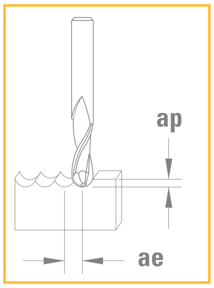
$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times Z$$

Feed per tooth **fz [mm]**

Ø D_1 0.20 - 0.60	Ø D_1 0.60 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 12.00
0.0014 - 0.005	**0.003** - 0.008	**0.005** - 0.01	**0.007** - 0.02	**0.014** - 0.04	**0.023** - 0.06	**0.032** - 0.08	**0.05** - 0.11
0.0010 - 0.003	**0.002** - 0.006	**0.003** - 0.01	**0.005** - 0.015	**0.010** - 0.03	**0.017** - 0.04	**0.024** - 0.06	**0.03** - 0.08
0.0017 - 0.007	**0.003** - 0.012	**0.006** - 0.02	**0.009** - 0.03	**0.017** - 0.06	**0.029** - 0.08	**0.040** - 0.12	**0.06** - 0.16
0.0010 - 0.003	**0.002** - 0.006	**0.003** - 0.01	**0.005** - 0.015	**0.010** - 0.03	**0.017** - 0.04	**0.024** - 0.06	**0.03** - 0.08
0.0010 - 0.003	**0.002** - 0.006	**0.003** - 0.01	**0.005** - 0.015	**0.010** - 0.03	**0.017** - 0.04	**0.024** - 0.06	**0.03** - 0.08
0.0010 - 0.003	**0.002** - 0.006	**0.003** - 0.01	**0.005** - 0.015	**0.010** - 0.03	**0.017** - 0.04	**0.024** - 0.06	**0.03** - 0.08
0.0014 - 0.005	**0.003** - 0.008	**0.005** - 0.01	**0.007** - 0.02	**0.014** - 0.04	**0.023** - 0.06	**0.032** - 0.08	**0.05** - 0.11
0.0010 - 0.003	**0.002** - 0.006	**0.003** - 0.01	**0.005** - 0.015	**0.010** - 0.03	**0.017** - 0.04	**0.024** - 0.06	**0.03** - 0.08
0.0014 - 0.005	**0.003** - 0.008	**0.005** - 0.01	**0.007** - 0.02	**0.014** - 0.04	**0.023** - 0.06	**0.032** - 0.08	**0.05** - 0.11
		0.003 - 0.01	**0.005** - 0.015	**0.010** - 0.03	**0.017** - 0.04	**0.024** - 0.06	**0.03** - 0.08
0.0010 - 0.003	**0.002** - 0.006	**0.003** - 0.01	**0.005** - 0.015	**0.010** - 0.03	**0.017** - 0.04	**0.024** - 0.06	**0.03** - 0.08
0.0017 - 0.007	**0.003** - 0.012	**0.006** - 0.02	**0.009** - 0.03	**0.017** - 0.06	**0.029** - 0.08	**0.040** - 0.12	**0.06** - 0.16
0.0010 - 0.003	**0.002** - 0.006	**0.003** - 0.01	**0.005** - 0.015	**0.010** - 0.03	**0.017** - 0.04	**0.024** - 0.06	**0.03** - 0.08
0.0017 - 0.007	**0.003** - 0.012	**0.006** - 0.02	**0.009** - 0.03	**0.017** - 0.06	**0.029** - 0.08	**0.040** - 0.12	**0.06** - 0.16
0.0017 - 0.007	**0.003** - 0.012	**0.006** - 0.02	**0.009** - 0.03	**0.017** - 0.06	**0.029** - 0.08	**0.040** - 0.12	**0.06** - 0.16
0.0024 - 0.010	**0.005** - 0.017	**0.008** - 0.03	**0.012** - 0.04	**0.024** - 0.09	**0.040** - 0.12	**0.056** - 0.17	**0.08** - 0.24
0.0024 - 0.010	**0.005** - 0.017	**0.008** - 0.03	**0.012** - 0.04	**0.024** - 0.09	**0.040** - 0.12	**0.056** - 0.17	**0.08** - 0.24
0.0017 - 0.007	**0.003** - 0.012	**0.006** - 0.02	**0.009** - 0.03	**0.017** - 0.06	**0.029** - 0.08	**0.040** - 0.12	**0.06** - 0.16

DIXI 7042 - 7050

CUTTING CONDITIONS



	Materials to be machined		CARBIDE		TiAlN		DIAMOND		ap [mm]	ae [mm]
			Vc [m/min]		Vc [m/min]		Vc [m/min]			
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**60**	90	**80**	100			<0.10 x ØD1	<0.3 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2			**60**	80			<0.10 x ØD1	<0.3 x ØD1
P	Lead alloyed cutting steel		**60**	90	**80**	100			<0.15 x ØD1	<0.3 x ØD1
P	High alloyed steel	700 – 1500 N/mm^2			**30**	60			<0.05 x ØD1	<0.2 x ØD1
M	Stainless steel	400 – 700 N/mm^2			**60**	80			<0.10 x ØD1	<0.3 x ØD1
M	DUPLEX stainless steel	> 800 N/mm^2			**30**	60			<0.05 x ØD1	<0.2 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**60**	90	**80**	100			<0.10 x ØD1	<0.3 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**30**	50	**60**	80			<0.05 x ØD1	<0.2 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**60**	90	**80**	100			<0.10 x ØD1	<0.3 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy			**20**	30			<0.05 x ØD1	<0.2 x ØD1
S	Titanium, titanium alloys		**25**	35	**30**	50			<0.05 x ØD1	<0.2 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**100**	130	**140**	180			<0.10 x ØD1	<0.3 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**90**	110	**130**	160			<0.10 x ØD1	<0.3 x ØD1
N	Aluminium alloys	Si < 8%	**130**	180	**150**	250			<0.20 x ØD1	<0.3 x ØD1
N	Cast aluminium	Si > 8%	**100**	130			**200**	300	<0.20 x ØD1	<0.3 x ØD1
N	Graphite						**200**	300	<0.25 x ØD1	<0.4 x ØD1
N	Plastic		**180**	220	**200**	250			<0.25 x ØD1	<0.4 x ØD1
N	Gold, silver		**100**	130	**140**	180			<0.10 x ØD1	<0.3 x ØD1

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

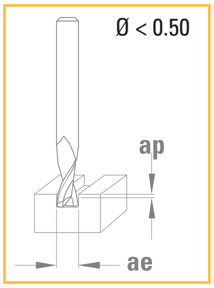
$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

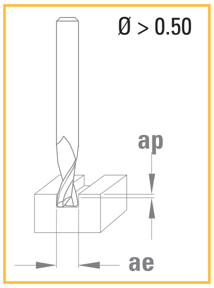
Feed per tooth **fz [mm]**

Ø D_1 2.00 - 2.50	Ø D_1 2.50 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.010 - 0.021	**0.012** - 0.03	**0.014** - 0.03	**0.019** - 0.04	**0.024** - 0.05	**0.029** - 0.07	**0.038** - 0.08	**0.05** - 0.12	**0.07** - 0.13	**0.08** - 0.17
0.007 - 0.015	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.022** - 0.05	**0.029** - 0.06	**0.04** - 0.08	**0.05** - 0.10	**0.06** - 0.12
0.012 - 0.030	**0.015** - 0.04	**0.018** - 0.05	**0.024** - 0.06	**0.030** - 0.07	**0.036** - 0.10	**0.048** - 0.12	**0.06** - 0.17	**0.08** - 0.19	**0.10** - 0.24
0.007 - 0.015	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.022** - 0.05	**0.029** - 0.06	**0.04** - 0.08	**0.05** - 0.10	**0.06** - 0.12
0.007 - 0.015	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.022** - 0.05	**0.029** - 0.06	**0.04** - 0.08	**0.05** - 0.10	**0.06** - 0.12
0.007 - 0.015	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.022** - 0.05	**0.029** - 0.06	**0.04** - 0.08	**0.05** - 0.10	**0.06** - 0.12
0.010 - 0.021	**0.012** - 0.03	**0.014** - 0.03	**0.019** - 0.04	**0.024** - 0.05	**0.029** - 0.07	**0.038** - 0.08	**0.05** - 0.12	**0.07** - 0.13	**0.08** - 0.17
0.007 - 0.015	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.022** - 0.05	**0.029** - 0.06	**0.04** - 0.08	**0.05** - 0.10	**0.06** - 0.12
0.010 - 0.021	**0.012** - 0.03	**0.014** - 0.03	**0.019** - 0.04	**0.024** - 0.05	**0.029** - 0.07	**0.038** - 0.08	**0.05** - 0.12	**0.07** - 0.13	**0.08** - 0.17
0.007 - 0.015	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.022** - 0.05	**0.029** - 0.06	**0.04** - 0.08	**0.05** - 0.10	**0.06** - 0.12
0.007 - 0.015	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.022** - 0.05	**0.029** - 0.06	**0.04** - 0.08	**0.05** - 0.10	**0.06** - 0.12
0.012 - 0.030	**0.015** - 0.04	**0.018** - 0.05	**0.024** - 0.06	**0.030** - 0.07	**0.036** - 0.10	**0.048** - 0.12	**0.06** -0.17	**0.08** - 0.19	**0.10** - 0.24
0.007 - 0.015	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.022** - 0.05	**0.029** - 0.06	**0.04** - 0.08	**0.05** - 0.10	**0.06** - 0.12
0.012 - 0.030	**0.015** - 0.04	**0.018** - 0.05	**0.024** - 0.06	**0.030** - 0.07	**0.036** - 0.10	**0.048** - 0.12	**0.06** - 0.17	**0.08** - 0.19	**0.10** - 0.24
0.012 - 0.030	**0.015** - 0.04	**0.018** - 0.05	**0.024** - 0.06	**0.030** - 0.07	**0.036** - 0.10	**0.048** - 0.12	**0.06** - 0.17	**0.08** - 0.19	**0.10** - 0.24
0.017 - 0.045	**0.021** - 0.05	**0.025** - 0.07	**0.034** - 0.09	**0.042** - 0.11	**0.050** - 0.14	**0.067** - 0.18	**0.08** - 0.25	**0.12** - 0.29	**0.13** - 0.36
0.017 - 0.045	**0.021** - 0.05	**0.025** - 0.07	**0.034** - 0.09	**0.042** - 0.11	**0.050** - 0.14	**0.067** - 0.18	**0.08** - 0.25	**0.12** - 0.29	**0.13** - 0.36
0.012 - 0.030	**0.015** - 0.04	**0.018** - 0.05	**0.024** - 0.06	**0.030** - 0.07	**0.036** - 0.10	**0.048** - 0.12	**0.06** - 0.17	**0.08** - 0.19	**0.10** - 0.24

DIXI 7202 - 7237 - 7237-10 - 7240 - 7242

CUTTING CONDITIONS





	Materials to be machined		CARBIDE	TiAlN				
			Vc [m/min]	Vc [m/min]	ap [mm]	ae [mm]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70** 100	**90** 110	< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²		**70** 90	< 0.3 x ØD1	1 x ØD1	< 0.6 x ØD1	1 x ØD1
P	Lead alloyed cutting steel		**70** 100		< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	1 x ØD1
P	High alloyed steel	700 – 1500 N/mm²		**40** 70	< 0.2 x ØD1	1 x ØD1	< 0.5 x ØD1	1 x ØD1
M	Stainless steel	400 – 700 N/mm²		**70** 90	< 0.5 x ØD1	1 x ØD1	< 0.8 x ØD1	1 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²		**40** 70	< 0.5 x ØD1	1 x ØD1	< 0.8 x ØD1	1 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70** 100	**90** 110	< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	1 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40** 70	**70** 90	< 0.3 x ØD1	1 x ØD1	< 0.6 x ØD1	1 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70** 100	**90** 110	< 0.3 x ØD1	1 x ØD1	< 0.6 x ØD1	1 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy		**25** 35			< 0.4 x ØD1	1 x ØD1
N	Titanium, titanium alloys		**30** 45		< 0.3 x ØD1	1 x ØD1	< 0.5 x ØD1	1 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140** 160		< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	1 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120** 140	**170** 190	< 0.3 x ØD1	1 x ØD1	< 0.7 x ØD1	1 x ØD1
N	Aluminium alloys	Si < 8%	**180** 260	**230** 340	< 0.6 x ØD1	1 x ØD1	< 1.2 x ØD1	1 x ØD1
N	Cast aluminium	Si > 8%	**140** 160	**210** 230	< 0.4 x ØD1	1 x ØD1	< 0.9 x ØD1	1 x ØD1
N	Plastic		**240** 260	**300** 340	< 0.6 x ØD1	1 x ØD1	< 1.2 x ØD1	1 x ØD1
N	Gold, silver		**140** 160	**200** 220	< 0.6 x ØD1	1 x ØD1	< 0.9 x ØD1	1 x ØD1

DIXI 7202 DIAMANT

CUTTING CONDITIONS

	Materials to be machined	DIAMOND		
		Vc [m/min]	ap [mm]	ae [mm]
N	Graphite	**200** 300	< 1 x ØD1	< 1 x ØD1

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times Z$$

Feed per tooth fz [mm]

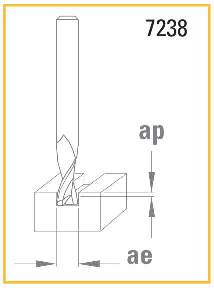
Ø D_1 0.04 - 0.50	Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 13.00	Ø D_1 13.00 - 16.00	Ø D_1 16.00 - 20.00
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.002 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.002 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.002 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
		0.012 - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.002 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.13	**0.07** - 0.14
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.21	**0.10** - 0.24	**0.11** - 0.30
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20

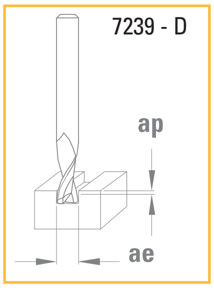
The plunging feed (Vfp) of an end mill Z = 2 (drilling) must be reduced by 40 to 80 % depending on the material to be machined

Feed per tooth

Ø D_1 0.04 - 0.50	Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 13.00	Ø D_1 13.00 - 16.00	Ø D_1 16.00 - 20.00
0.003 - 0.01	**0.006** - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20

CUTTING CONDITIONS





	Materials to be machined		CARBIDE Vc [m/min]	TiAlN Vc [m/min]	ap [mm]	ae [mm]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70** 100	**90** 110	< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²		**70** 90	< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
P	Lead alloyed cutting steel		**70** 100		< 0.12x ØD1	1 x ØD1	< 0.06 x ØD1	1 x ØD1
P	High alloyed steel	700 – 1500 N/mm²		**40** 70	< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
M	Stainless steel	400 – 700 N/mm²		**70** 90	< 0.10x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²		**40** 70	< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70** 100	**90** 110	< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40** 70	**70** 90	< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70** 100	**90** 110	< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy		**25** 35	< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
S	Titanium, titanium alloys		**30** 45		< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140** 160		< 0.12 x ØD1	1 x ØD1	< 0.06 x ØD1	1 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120** 140	**170** 190	< 0.10 x ØD1	1 x ØD1	< 0.04 x ØD1	1 x ØD1
N	Aluminium alloys	Si < 8%	**180** 260	**230** 340	< 0.12 x ØD1	1 x ØD1	< 0.06 x ØD1	1 x ØD1
N	Cast aluminium	Si > 8%	**140** 160	**210** 230	< 0.12 x ØD1	1 x ØD1	< 0.06 x ØD1	1 x ØD1
N	Plastic		**240** 260	**300** 340	< 0.15 x ØD1	1 x ØD1	< 0.10 x ØD1	1 x ØD1
N	Gold, silver		**140** 160	**200** 220	< 0.12 x ØD1	1 x ØD1	< 0.06 x ØD1	1 x ØD1

n and Vf are indicative and shall be ajusted according to L_2

The plunging feed (Vfp) of an end mill Z = 2 (drilling) must be reduced by 40 to 80 % depending on the material to be machined

$$n\,[\text{tr/min}] = \frac{Vc\,[\text{m/min}] \times 1000}{\pi \times D_1\,[\text{mm}]}$$

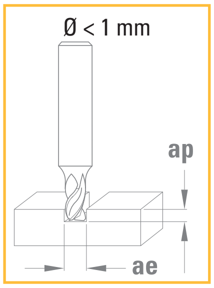
$$Vf\,[\text{mm/min}] = n\,[\text{tr/min}] \times fz\,[\text{mm}] \times Z$$

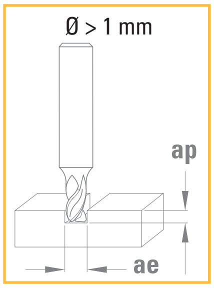
Feed per tooth fz [mm]

Ø D_1 0.15 - 0.30	Ø D_1 0.30 - 0.40	Ø D_1 0.40 - 0.60	Ø D_1 0.60 - 0.90	Ø D_1 0.90 - 1.20	Ø D_1 1.20 - 1.50	Ø D_1 1.50 - 1.80	Ø D_1 1.80 - 2.10	Ø D_1 2.10 - 2.50	Ø D_1 2.50 - 3.00
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.0003 - 0.0010	**0.002** - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.0003 - 0.0010	**0.002** - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
		0.003 - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04
0.002 - 0.003	**0.002** - 0.004	**0.003** - 0.01	**0.008** - 0.012	**0.010** - 0.015	**0.012** - 0.016	**0.013** - 0.02	**0.015** - 0.022	**0.02** - 0.025	**0.022** - 0.04

DIXI 7203 - 7243 - 7273 - 7583 - 7623 - 7656

CUTTING CONDITIONS





Materials to be machined			CARBIDE	TiAlN	Ø < 1 mm		Ø > 1 mm	
			Vc [m/min]	Vc [m/min]	ap [mm]	ae [mm]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70** 100	**90** 110	< 0.5 x ØD1	1 x ØD1	< 1.0 x ØD1	1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**50** 80	**70** 90	< 0.3 x ØD1	1 x ØD1	< 0.6 x ØD1	1 x ØD1
P	Lead alloyed cutting steel		**70** 100		< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	1 x ØD1
P	High alloyed steel	700 – 1500 N/mm²		**40** 70	< 0.2 x ØD1	1 x ØD1	< 0.5 x ØD1	1 x ØD1
M	Stainless steel	400 – 700 N/mm²	**40** 60	**70** 90	< 0.5 x ØD1	1 x ØD1	< 0.8 x ØD1	1 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²		**40** 70	< 0.2 x ØD1	1 x ØD1	< 0.5 x ØD1	1 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70** 100	**90** 110	< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	1 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40** 70	**70** 90	< 0.3 x ØD1	1 x ØD1	< 0.6 x ØD1	1 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70** 100	**90** 110	< 0.3 x ØD1	1 x ØD1	< 0.6 x ØD1	1 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy		**25** 35			< 0.4 x ØD1	1 x ØD1
S	Titanium, titanium alloys		**30** 45		< 0.30 x ØD1	1 x ØD1	< 0.5 x ØD1	1 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140** 160		< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	1 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120** 140	**170** 190	< 0.3 x ØD1	1 x ØD1	< 0.7 x ØD1	1 x ØD1
N	Aluminium alloys	Si < 8%	**180** 260	**230** 340	< 0.6 x ØD1	1 x ØD1	< 1.2 x ØD1	1 x ØD1
N	Cast aluminium	Si > 8%	**140** 160	**210** 230	< 0.4 x ØD1	1 x ØD1	< 0.9 x ØD1	1 x ØD1
N	Graphite		**140** 160	**200** 220	< 0.6 x ØD1	1 x ØD1	< 0.9 x ØD1	1 x ØD1
N	Plastic		**240** 260	**300** 340	< 0.6 x ØD1	1 x ØD1	< 1.2 x ØD1	1 x ØD1
N	Gold, silver		**140** 160	**200** 220	< 0.6 x ØD1	1 x ØD1	< 0.9 x ØD1	1 x ØD1

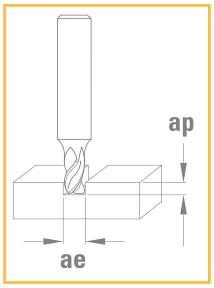
$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

Feed per tooth **fz [mm]**

Ø D_1 0.30 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.14
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
0.006 -0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
	0.012 - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11	**0.05** - 0.11	**0.06** - 0.12	**0.07** - 0.13
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.006 - 0.015	**0.005** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.21	**0.10** - 0.24	**0.11** - 0.30
0.006 - 0.015	**0.005** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20

CUTTING CONDITIONS - SLOTTING



	Materials to be machined		CUTINOX Vc [m/min]		ap [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**100**	170	< 1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2	**90**	150	< 1 x ØD1
P	Lead alloyed cutting steel		**120**	180	< 1 x ØD1
P	High alloyed steel	700 – 1500 N/mm^2	**50**	90	< 0.7 x ØD1
M	Stainless steel	400 – 700 N/mm^2	**60**	95	< 1 x ØD1
M	DUPLEX stainless steel	> 800 N/mm^2	**50**	90	< 0.7 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**140**	180	< 1 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**110**	150	< 1 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**100**	140	< 1 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**40**	70	< 1 x ØD1
S	Titanium, titanium alloys		**20**	40	< 0.3 x ØD1

Cutting conditions based on oil lubrication.

For high alloyed steels (> 12% Chrome), stainless steels, titanium alloys, cutting speed shall be reduced by 20% when emulsion is used.

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

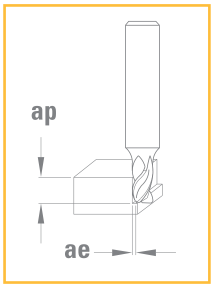
$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times Z$$

Feed per tooth **fz [mm]**

Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00	Ø D_1 16.00 - 20.00
0.010 - 0.017	**0.013** - 0.035	**0.020** - 0.055	**0.023** - 0.070	**0.029** - 0.080	**0.035** - 0.090	**0.046** - 0.100
0.009 - 0.015	**0.012** - 0.030	**0.017** - 0.045	**0.020** - 0.060	**0.025** - 0.070	**0.030** - 0.080	**0.040** - 0.090
0.013 - 0.023	**0.017** - 0.045	**0.026** - 0.068	**0.030** - 0.090	**0.038** - 0.105	**0.045** - 0.120	**0.040** - 0.135
0.007 - 0.013	**0.010** - 0.025	**0.015** - 0.040	**0.017** - 0.050	**0.021** - 0.060	**0.026** - 0.070	**0.034** - 0.075
0.009 - 0.015	**0.012** - 0.030	**0.017** - 0.045	**0.020** - 0.060	**0.025** - 0.070	**0.030** - 0.080	**0.040** - 0.090
0.007 - 0.013	**0.010** - 0.025	**0.015** - 0.040	**0.017** - 0.050	**0.021** - 0.060	**0.026** - 0.070	**0.034** - 0.075
0.013 - 0.023	**0.017** - 0.045	**0.026** - 0.068	**0.030** - 0.090	**0.038** - 0.105	**0.045** - 0.120	**0.040** - 0.135
0.012 - 0.020	**0.016** - 0.040	**0.023** - 0.060	**0.027** - 0.080	**0.034** - 0.095	**0.041** - 0.110	**0.036** - 0.120
0.012 - 0.020	**0.016** - 0.040	**0.023** - 0.060	**0.027** - 0.080	**0.034** - 0.095	**0.041** - 0.110	**0.036** - 0.120
0.010 - 0.017	**0.013** - 0.035	**0.020** - 0.055	**0.023** - 0.070	**0.029** - 0.080	**0.035** - 0.090	**0.046** - 0.100
0.004 - 0.010	**0.005** - 0.013	**0.007** - 0.020	**0.010** - 0.023	**0.013** - 0.026	**0.013** - 0.033	**0.020** - 0.039

DIXI 7253 - 7254

CUTTING CONDITIONS - ROUTING



Materials to be machined			CUTINOX			
			Vc [m/min]		ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**160**	200	< 1 x ØD1	< 0.6 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2	**130**	170	< 1 x ØD1	< 0.6 x ØD1
P	Lead alloyed cutting steel		**160**	200	< 1 x ØD1	< 0.6 x ØD1
P	High alloyed steel	700 – 1500 N/mm^2	**70**	100	< 1 x ØD1	< 0.5 x ØD1
M	Stainless steel	400 – 700 N/mm^2	**80**	110	< 1 x ØD1	< 0.5 x ØD1
M	DUPLEX stainless steel	> 800 N/mm^2	**70**	100	< 1 x ØD1	< 0.5 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**160**	200	< 1 x ØD1	< 0.6 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**130**	170	< 1 x ØD1	< 0.6 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**110**	150	< 1 x ØD1	< 0.6 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**40**	70	< 1 x ØD1	< 0.6 x ØD1
S	Titanium, titanium alloys		**20**	50	< 1 x ØD1	< 0.3 x ØD1

Cutting conditions based on oil lubrication.

For high alloyed steels (> 12% Chrome), stainless steels, titanium alloys, cutting speed shall be reduced by 20% when emulsion is used.

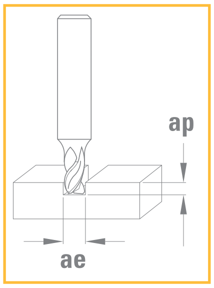
$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00	Ø D_1 16.00 - 20.00
0.019 - 0.045	**0.029** - 0.070	**0.040** - 0.100	**0.052** - 0.115	**0.057** - 0.130	**0.063** - 0.155	**0.086** - 0.185
0.017 - 0.040	**0.023** - 0.065	**0.035** - 0.085	**0.046** - 0.105	**0.052** - 0.115	**0.058** - 0.135	**0.075** - 0.165
0.029 - 0.065	**0.035** - 0.100	**0.052** - 0.130	**0.069** - 0.155	**0.081** - 0.175	**0.086** - 0.210	**0.115** - 0.250
0.014 - 0.035	**0.017** - 0.050	**0.029** - 0.070	**0.040** - 0.085	**0.046** - 0.090	**0.052** - 0.110	**0.063** - 0.130
0.017 - 0.040	**0.023** - 0.065	**0.035** - 0.085	**0.046** - 0.105	**0.052** - 0.115	**0.058** - 0.135	**0.075** - 0.165
0.014 - 0.035	**0.017** - 0.050	**0.029** - 0.070	**0.040** - 0.085	**0.046** - 0.090	**0.052** - 0.110	**0.063** - 0.130
0.029 - 0.065	**0.035** - 0.100	**0.052** - 0.130	**0.069** - 0.155	**0.081** - 0.175	**0.086** - 0.210	**0.115** - 0.250
0.024 - 0.055	**0.029** - 0.085	**0.044** - 0.111	**0.059** - 0.132	**0.068** - 0.149	**0.073** - 0.179	**0.098** - 0.213
0.024 - 0.055	**0.029** - 0.085	**0.044** - 0.111	**0.059** - 0.132	**0.068** - 0.149	**0.073** - 0.179	**0.098** - 0.213
0.019 - 0.045	**0.029** - 0.070	**0.040** - 0.100	**0.052** - 0.115	**0.057** - 0.130	**0.063** - 0.155	**0.086** - 0.185
0.007 - 0.017	**0.009** - 0.025	**0.012** - 0.035	**0.017** - 0.040	**0.023** - 0.050	**0.026** - 0.060	**0.032** - 0.070

CUTTING CONDITIONS - SLOTTING



	Materials to be machined		CUTINOX		ap [mm]
			Vc [m/min]		
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**100**	170	< 1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2	**90**	150	< 1 x ØD1
P	Lead alloyed cutting steel		**120**	180	< 1 x ØD1
P	High alloyed steel	700 – 1500 N/mm^2	**50**	90	< 0.7 x ØD1
M	Stainless steel	400 – 700 N/mm^2	**60**	95	< 1 x ØD1
M	DUPLEX stainless steel	> 800 N/mm^2	**50**	90	< 0.7 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**140**	180	< 1 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**110**	150	< 1 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**100**	140	< 1 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**30**	55	< 1 x ØD1
S	Titanium, titanium alloys		**20**	50	< 0.3 x ØD1

Cutting conditions based on oil lubrication.

For high alloyed steels (> 12% Chrome), stainless steels, titanium alloys, cutting speed shall be reduced by 20% when emulsion is used.

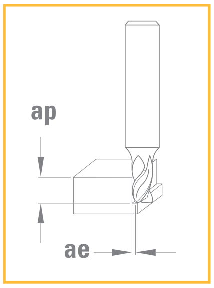
$$n\,[\text{tr/min}] = \frac{Vc\,[\text{m/min}] \times 1000}{\pi \times D_1\,[\text{mm}]}$$

$$Vf\,[\text{mm/min}] = n\,[\text{tr/min}] \times fz\,[\text{mm}] \times Z$$

Feed per tooth fz [mm]

Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00	Ø D_1 16.00 - 20.00
0.005 - 0.010	**0.008** - 0.020	**0.011** - 0.030	**0.017** - 0.040	**0.022** - 0.050	**0.025** - 0.055	**0.030** - 0.065	**0.040** - 0.085
0.005 - 0.010	**0.008** - 0.018	**0.010** - 0.025	**0.015** - 0.035	**0.020** - 0.045	**0.023** - 0.050	**0.025** - 0.060	**0.035** - 0.075
0.010 - 0.020	**0.013** - 0.030	**0.015** - 0.045	**0.023** - 0.050	**0.025** - 0.070	**0.030** - 0.075	**0.032** - 0.080	**0.035** - 0.110
0.004 - 0.010	**0.006** - 0.015	**0.008** - 0.020	**0.013** - 0.030	**0.018** - 0.035	**0.020** - 0.040	**0.025** - 0.050	**0.030** - 0.060
0.005 - 0.010	**0.008** - 0.018	**0.010** - 0.025	**0.015** - 0.035	**0.020** - 0.045	**0.023** - 0.050	**0.025** - 0.060	**0.035** - 0.075
0.004 - 0.010	**0.006** - 0.015	**0.008** - 0.020	**0.013** - 0.030	**0.018** - 0.035	**0.020** - 0.040	**0.025** - 0.050	**0.030** - 0.060
0.010 - 0.020	**0.013** - 0.030	**0.015** - 0.045	**0.023** - 0.050	**0.025** - 0.070	**0.030** - 0.075	**0.032** - 0.080	**0.035** - 0.110
0.008 - 0.015	**0.011** - 0.025	**0.013** - 0.040	**0.019** - 0.045	**0.021** - 0.060	**0.026** - 0.065	**0.027** - 0.070	**0.030** - 0.095
0.008 - 0.015	**0.011** - 0.025	**0.013** - 0.040	**0.019** - 0.045	**0.021** - 0.060	**0.026** - 0.065	**0.027** - 0.070	**0.030** - 0.095
0.005 - 0.010	**0.008** - 0.020	**0.011** - 0.030	**0.017** - 0.040	**0.022** - 0.050	**0.025** - 0.055	**0.030** - 0.065	**0.040** - 0.085
0.001 - 0.005	**0.003** - 0.008	**0.004** - 0.010	**0.005** - 0.015	**0.008** - 0.018	**0.010** - 0.020	**0.010** - 0.025	**0.015** - 0.030

CUTTING CONDITIONS - ROUTING



	Materials to be machined		CUTINOX Vc [m/min]		ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**160**	200	< 2 x ØD1	< 0.4 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**130**	170	< 2 x ØD1	< 03 x ØD1
P	Lead alloyed cutting steel		**160**	200	< 2 x ØD1	< 0.4 x ØD1
P	High alloyed steel	700 – 1500 N/mm²	**70**	100	< 2 x ØD1	< 0.3 x ØD1
M	Stainless steel	400 – 700 N/mm²	**80**	110	< 2 x ØD1	< 0.3 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²	**70**	100	< 2 x ØD1	< 0.3 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**160**	200	< 2 x ØD1	< 0.4 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**130**	170	< 2 x ØD1	< 0.4 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**110**	150	< 2 x ØD1	< 0.3 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**20**	50	< 2 x ØD1	< 0.2 x ØD1
S	Titanium, titanium alloys		**40**	70	< 2 x ØD1	< 0.3 x ØD1

Cutting conditions based on oil lubrication.

For high alloyed steels (> 12% Chrome), stainless steels, titanium alloys, cutting speed shall be reduced by 20% when emulsion is used.

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

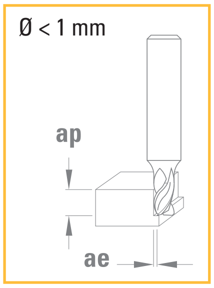
$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times Z$$

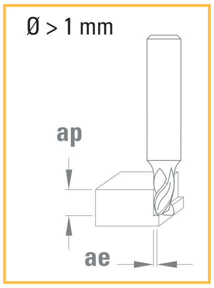
Feed per tooth **fz [mm]**

Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00	Ø D_1 16.00 - 20.00
0.015 - 0.030	**0.019** - 0.040	**0.025** -0.060	**0.035** - 0.085	**0.045** - 0.100	**0.050** - 0.110	**0.055** - 0.135	**0.075** - 0.160
0.011 - 0.025	**0.015** - 0.035	**0.020** - 0.055	**0.030** - 0.075	**0.040** - 0.090	**0.045** - 0.100	**0.050** - 0.120	**0.068** - 0.144
0.021 - 0.045	**0.025** - 0.055	**0.030** - 0.085	**0.045** - 0.115	**0.060** - 0.135	**0.070** - 0.150	**0.075** - 0.180	**0.100** - 0.220
0.008 - 0.020	**0.012** - 0.030	**0.015** -0.045	**0.025** - 0.060	**0.035** - 0.075	**0.040** - 0.080	**0.045** - 0.095	**0.055** - 0.115
0.011 - 0.025	**0.015** - 0.035	**0.020** - 0.055	**0.030** - 0.075	**0.040** - 0.090	**0.045** - 0.100	**0.050** - 0.120	**0.065** - 0.145
0.008 - 0.020	**0.012** - 0.030	**0.015** -0.045	**0.025** - 0.060	**0.035** - 0.075	**0.040** - 0.080	**0.045** - 0.095	**0.055** - 0.115
0.021 - 0.045	**0.025** - 0.055	**0.030** - 0.085	**0.045** - 0.115	**0.060** - 0.135	**0.070** - 0.150	**0.075** - 0.180	**0.100** - 0.220
0.017 - 0.037	**0.021** - 0.047	**0.026** - 0.072	**0.038** - 0.098	**0.051** - 0.115	**0.060** - 0.128	**0.064** - 0.153	**0.085** - 0.187
0.017 - 0.037	**0.021** - 0.047	**0.026** - 0.072	**0.038** - 0.098	**0.051** - 0.115	**0.060** - 0.128	**0.064** - 0.153	**0.085** - 0.187
0.003 - 0.007	**0.006** - 0.015	**0.008** - 0.020	**0.010** - 0.030	**0.015** - 0.035	**0.020** - 0.040	**0.023** - 0.050	**0.028** - 0.060
0.013 - 0.030	**0.017** - 0.040	**0.025** - 0.060	**0.035** - 0.085	**0.045** - 0.100	**0.050** - 0.110	**0.055** - 0.135	**0.075** - 0.160

DIXI 7204 - 7244 - 7554

CUTTING CONDITIONS





	Materials to be machined		CARBIDE Vc [m/min]	TiAlN Vc [m/min]	ap [mm]	ae [mm]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70** 100	**90** 110	< 1 x ØD1	< 0.2 x ØD1	< 1 x ØD1	< 0.3 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²		**70** 90	< 1 x ØD1	< 0.10 x ØD1	< 1 x ØD1	< 0.2 x ØD1
P	Lead alloyed cutting steel		**70** 100		< 1.5 x ØD1	< 0.2 x ØD1	< 1.5 x ØD1	< 0.3 x ØD1
P	High alloyed steel	700 – 1500 N/mm²		**40** 55	< 1 x ØD1	< 0.10 x ØD1	< 1 x ØD1	< 0.2 x ØD1
M	Stainless steel	400 – 700 N/mm²		**70** 90	< 1 x ØD1	< 0.1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²		**40** 55	< 1 x ØD1	< 0.10 x ØD1	< 1 x ØD1	< 0.2 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70** 100	**90** 110	< 1 x ØD1	< 0.1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40** 70	**70** 90	< 1 x ØD1	< 0.1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70** 100	**90** 110	< 1 x ØD1	< 0.1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
S	Titanium, titanium alloys		**30** 45		< 1 x ØD1	< 0.1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140** 160		< 1.5 x ØD1	< 0.2 x ØD1	< 1.5 x ØD1	< 0.3 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120** 140	**170** 190	< 1 x ØD1	< 0.1 x ØD1	< 1 x ØD1	< 0.2 x ØD1
N	Aluminium alloys	Si < 8%	**180** 220	**230** 270	< 1.5 x ØD1	< 0.2 x ØD1	< 1.5 x ØD1	< 0.3 x ØD1
N	Cast aluminium	Si > 8%	**140** 160	**210** 230	< 1.5 x ØD1	< 0.2 x ØD1	< 1.5 x ØD1	< 0.3 x ØD1
N	Plastic		**240** 260	**300** 340	< 1.5 x ØD1	< 0.2 x ØD1	< 1.5 x ØD1	< 0.3 x ØD1
N	Gold, silver		**140** 160	**200** 220	< 1.5 x ØD1	< 0.2 x ØD1	< 1.5 x ØD1	< 0.3 x ØD1

DIXI 7244 DIAMANT

CUTTING CONDITIONS

	Materials to be machined	DIAMOND Vc [m/min]	ap [mm]	ae [mm]
N	Graphite	**200** 300	< 1.5 x ØD1	< 0.2 x ØD1

$$n\,[\text{tr/min}] = \frac{Vc\,[\text{m/min}] \times 1000}{\pi \times D_1\,[\text{mm}]}$$

$$Vf\,[\text{mm/min}] = n\,[\text{tr/min}] \times fz\,[\text{mm}] \times Z$$

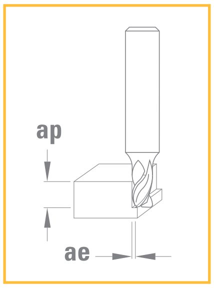
Feed per tooth fz [mm]

Ø D_1 0.40 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.10	**0.06** - 0.11	**0.07** - 0.14
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.10
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.13	**0.06** - 0.14	**0.07** - 0.15
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.13	**0.06** - 0.14	**0.07** - 0.15
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.13	**0.06** - 0.14	**0.07** - 0.15
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.13	**0.06** - 0.14	**0.07** - 0.15
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.13	**0.06** - 0.14	**0.07** - 0.15
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.13	**0.06** - 0.14	**0.07** - 0.15
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.10
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.10
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.2
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.006 - 0.015	**0.005** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20

Feed per tooth

Ø D_1 0.40 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.05** - 0.14	**0.07** - 0.16	**0.08** - 0.20

CUTTING CONDITIONS



Materials to be machined			CARBIDE	TiAlN	DIAMOND		
			Vc [m/min]	Vc [m/min]	Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70** 100	**90** 110		< 1 x ØD1	< 0.2 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²		**70** 90		< 1 x ØD1	< 0.2 x ØD1
P	Lead alloyed cutting steel		**70** 100			< 1.5 x ØD1	< 0.2 x ØD1
P	High alloyed steel	700 – 1500 N/mm²		**40** 55		< 1 x ØD1	< 0.1 x ØD1
M	Stainless steel	400 – 700 N/mm²		**70** 90		< 1 x ØD1	< 0.1 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²		**40** 55		< 1 x ØD1	< 0.1 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70** 100	**90** 110		< 1 x ØD1	< 0.2 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40** 70	**70** 90		< 1 x ØD1	< 0.2 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70** 100	**90** 110		< 1 x ØD1	< 0.2 x ØD1
S	Titanium, titanium alloys		**30** 45			< 1 x ØD1	< 0.2 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140** 160			< 1.5 x ØD1	< 0.2 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120** 140	**170** 190		< 1 x ØD1	< 0.15x ØD1
N	Aluminium alloys	Si < 8%	**180** 260	**230** 340		< 1.5 x ØD1	< 0.2 x ØD1
N	Cast aluminium	Si > 8%	**140** 160	**210** 230	**200** 300	< 1.5 x ØD1	< 0.2 x ØD1
N	Graphite				**200** 300	< 1.5 x ØD1	< 0.2 x ØD1
N	Plastic		**240** 260	**300** 340		< 1.5 x ØD1	< 0.2 x ØD1
N	Gold, silver		**140** 160	**200** 220		< 1.5 x ØD1	< 0.2 x ØD1

$$n\,[\mathrm{tr/min}] = \frac{Vc\,[\mathrm{m/min}] \times 1000}{\pi \times D_1\,[\mathrm{mm}]}$$

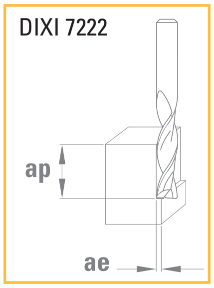
$$Vf\,[\mathrm{mm/min}] = n\,[\mathrm{tr/min}] \times fz\,[\mathrm{mm}] \times Z$$

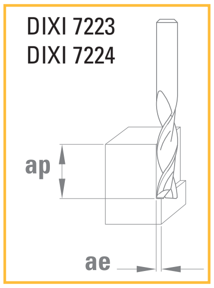
Feed per tooth fz [mm]

Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 12.00
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14
0.005 - 0.02	**0.011** - 0.04	**0.018** - 0.05	**0.025** - 0.08	**0.04** - 0.14
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.21
0.016 - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.12	**0.06** - 0.14

DIXI 7222 - 7223 - 7224

CUTTING CONDITIONS





	Materials to be machined		CARBIDE Vc [m/min]	TiAlN Vc [m/min]	DIXI 7222 ap [mm]	DIXI 7222 ae [mm]	DIXI 7223 / 7224 ap [mm]	DIXI 7223 / 7224 ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**45** 50	**50** 60	3 x ØD1	< 0.30 x ØD1	3 x ØD1	< 0.20 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²		**35** 45	3 x ØD1	< 0.20 x ØD1	3 x ØD1	< 0.10 x ØD1
P	Lead alloyed cutting steel		**45** 50		3 x ØD1	< 0.30 x ØD1	3 x ØD1	< 0.20 x ØD1
P	High alloyed steel	700 – 1500 N/mm²		**30** 45	3 x ØD1	< 0.15 x ØD1	3 x ØD1	< 0.07 x ØD1
M	Stainless steel	400 – 700 N/mm²		**35** 45	3 x ØD1	< 0.20 x ØD1	3 x ØD1	< 0.10 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²		**30** 45	3 x ØD1	< 0.30 x ØD1	3 x ØD1	< 0.07 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**25** 35	**35** 45	3 x ØD1	< 0.15 x ØD1	3 x ØD1	< 0.20 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**25** 35	**35** 45	3 x ØD1	< 0.30 x ØD1	3 x ØD1	< 0.07 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**25** 35	**35** 45	3 x ØD1	< 0.10 x ØD1	3 x ØD1	< 0.20 x ØD1
S	Titanium, titanium alloys		**15** 25		3 x ØD1	< 0.15 x ØD1	3 x ØD1	< 0.03 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**80** 100		3 x ØD1	< 0.30 x ØD1	3 x ØD1	< 0.20 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**60** 80	**80** 100	3 x ØD1	< 0.30 x ØD1	3 x ØD1	< 0.20 x ØD1
N	Aluminium alloys	Si < 8%	**80** 110	**100** 130	3 x ØD1	< 0.40 x ØD1	3 x ØD1	< 0.30 x ØD1
N	Cast aluminium	Si > 8%	**80** 100	**100** 120	3 x ØD1	< 0.40 x ØD1	3 x ØD1	< 0.30 x ØD1
N	Plastic		**90** 110	**110** 130	3 x ØD1	< 0.40 x ØD1	3 x ØD1	< 0.30 x ØD1
N	Gold, silver		**80** 100	**100** 120	3 x ØD1	< 0.40 x ØD1	3 x ØD1	< 0.30 x ØD1

DIXI 7222 - 7223 - 7224 DIAMANT

CUTTING CONDITIONS

	Materials to be machined	DIAMOND Vc [m/min]	ap [mm]	ae [mm]
N	Graphite	**200** 300	3 x ØD1	< 0.30 x ØD1

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.006 - 0.01	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.02** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.03** - 0.07
0.005 - 0.01	**0.006** - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.02** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.008 - 0.02	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.023** - 0.05	**0.03** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10
0.005 - 0.01	**0.006** - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.02** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.005 - 0.01	**0.006** - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.02** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.005 - 0.01	**0.006** - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.02** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.006 - 0.01	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.02** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.03** - 0.07
0.005 - 0.01	**0.006** - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.02** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.006 - 0.01	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.018** - 0.04	**0.02** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.03** - 0.07
0.005 - 0.01	**0.006** - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.02** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.008 - 0.02	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.023** - 0.05	**0.03** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10
0.005 - 0.01	**0.006** - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.014** - 0.03	**0.02** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.008 - 0.02	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.023** - 0.05	**0.03** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10
0.008 - 0.02	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.023** - 0.05	**0.03** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10
0.011 - 0.03	**0.014** - 0.04	**0.018** - 0.05	**0.021** - 0.05	**0.025** - 0.06	**0.032** - 0.08	**0.04** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.15
0.008 - 0.02	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.023** - 0.05	**0.03** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10

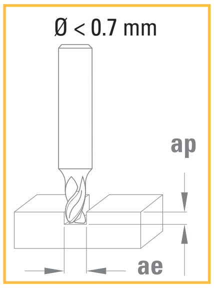
The plunging feed (Vfp) of an end mill Z = 2 (drilling) must be reduced bny 40 to 80 % depending on the material to be machined.

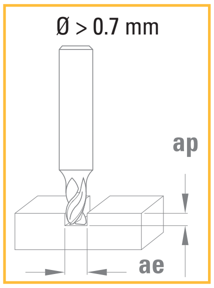
Feed per tooth

Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.011 - 0.03	**0.014** - 0.04	**0.018** - 0.05	**0.021** - 0.05	**0.025** - 0.06	**0.032** - 0.08	**0.04** - 0.09	**0.04** - 0.11	**0.05** - 0.12	**0.06** - 0.15

DIXI 7333 - 7333-3D

CUTTING CONDITIONS





	Materials to be machined		CARBIDE Vc [m/min]	CUTINOX Vc [m/min]	ap [mm]	ae [mm]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**50** 80	**80** 120	0.8 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**30** 60	**70** 100	0.6 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
P	Lead alloyed cutting steel		**80** 120	**100** 180	1 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
P	High alloyed steel	700 – 1500 N/mm²	**30** 50	**40** 70	0.5 x ØD1	< 1 x ØD1	0.8 x ØD1	< 1 x ØD1
M	Stainless steel	400 – 700 N/mm²	**40** 60	**60** 90	0.5 x ØD1	< 1 x ØD1	0.8 x ØD1	< 1 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²	**20** 40	**30** 60	0.4 x ØD1	< 1 x ØD1	0.7 x ØD1	< 1 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**100** 150	**150** 200	1 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**50** 80	**60** 100	0.8 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**50** 80	**60** 90	0.8 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**10** 20	**20** 40	0.2 x ØD1	< 1 x ØD1	0.4 x ØD1	< 1 x ØD1
S	Titanium, titanium alloys		**30** 60	**40** 70	0.8 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**150** 250	**100** 250	1 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**80** 150	**80** 150	0.8 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
N	Aluminium alloys	Si < 8%	**150** 300	**150** 300	1 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
N	Cast aluminium	Si > 8%	**100** 150	**150** 250	3 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
N	Plastic		**100** 150	**100** 150	3 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1
N	Gold, silver		**100** 150	**100** 150	1 x ØD1	< 1 x ØD1	1 x ØD1	< 1 x ØD1

n and Vf are indicative and shall be ajusted according to L_2

$$n\,[\text{tr/min}] = \frac{Vc\,[\text{m/min}] \times 1000}{\pi \times D_1\,[\text{mm}]}$$

$$Vf\,[\text{mm/min}] = n\,[\text{tr/min}] \times fz\,[\text{mm}] \times Z$$

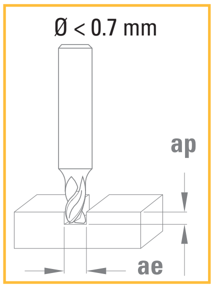
Feed per tooth **fz [mm]**

Ø D_1 0.30 - 0.50	Ø D_1 0.60 - 0.90	Ø D_1 1.00 - 2.00	Ø D_1 2.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 80.00 - 10.00
0.002 - 0.005	**0.003** - 0.012	**0.005** - 0.025	**0.01** - 0.06	**0.02** - 0.08	**0.03** - 0.12	**0.04** - 0.15
0.001 - 0.004	**0.003** - 0.01	**0.005** - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10
0.002 - 0.008	**0.004** - 0.016	**0.006** - 0.03	**0.015** - 0.07	**0.015** - 0.09	**0.04** - 0.15	**0.1** - 0.20
0.001 - 0.003	**0.002** - 0.01	**0.003** - 0.015	**0.008** - 0.03	**0.03** - 0.04	**0.03** - 0.06	**0.04** - 0.08
0.001 - 0.003	**0.002** - 0.01	**0.003** - 0.013	**0.008** - 0.03	**0.013** - 0.04	**0.03** - 0.06	**0.04** - 0.08
0.001 - 0.003	**0.002** - 0.008	**0.003** - 0.01	**0.004** - 0.02	**0.008** - 0.03	**0.01** - 0.04	**0.02** - 0.05
0.002 - 0.005	**0.003** - 0.012	**0.005** - 0.025	**0.01** - 0.06	**0.02** - 0.08	**0.03** - 0.12	**0.1** - 0.20
0.001 - 0.002	**0.003** - 0.015	**0.005** - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10
0.001 - 0.006	**0.003** - 0.01	**0.005** - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10
0.001 - 0.002	**0.0015** - 0.004	**0.002** - 0.008	**0.003** - 0.012	**0.008** - 0.02	**0.03** - 0.04	**0.015** - 0.05
0.001 - 0.005	**0.003** - 0.012	**0.005** - 0.025	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10
0.002 - 0.01	**0.004** - 0.02	**0.006** - 0.04	**0.015** - 0.08	**0.03** - 0.10	**0.04** - 0.15	**0.05** - 0.20
0.002 - 0.008	**0.003** - 0.015	**0.005** - 0.03	**0.01** - 0.06	**0.02** - 0.08	**0.03** - 0.10	**0.04** - 0.15
0.002 - 0.005	**0.003** - 0.012	**0.005** - 0.025	**0.01** - 0.08	**0.03** - 0.10	**0.04** - 0.15	**0.05** - 0.20
0.002 - 0.015	**0.004** - 0.025	**0.006** - 0.05	**0.015** - 0.06	**0.02** - 0.08	**0.03** - 0.12	**0.04** - 0.15
0.002 - 0.02	**0.005** - 0.03	**0.008** - 0.06	**0.02** - 0.10	**0.04** - 0.12	**0.05** - 0.20	**0.06** - 0.25
0.002 - 0.01	**0.003** - 0.02	**0.006** - 0.05	**0.015** - 0.06	**0.02** - 0.08	**0.03** - 0.10	**0.04** - 0.15

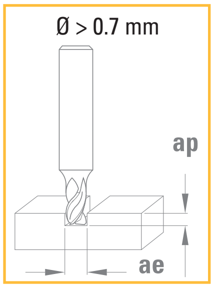
DIXI 7333-5D - 7333-8D

CUTTING CONDITIONS

Ø < 0.7 mm



Ø > 0.7 mm



	Materials to be machined		CARBIDE Vc [m/min]		CUTINOX Vc [m/min]		ap [mm]	ae [mm]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**50**	80	**80**	120	0.4 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**30**	60	**70**	100	0.3 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
P	Lead alloyed cutting steel		**80**	120	**100**	180	0.5 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
P	High alloyed steel	700 – 1500 N/mm²	**30**	50	**40**	70	0.25 x ØD1	< 1 x ØD1	0.4 x ØD1	< 1 x ØD1
M	Stainless steel	400 – 700 N/mm²	**40**	60	**60**	90	0.25 x ØD1	< 1 x ØD1	0.4 x ØD1	< 1 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²	**20**	40	**30**	60	0.2 x ØD1	< 1 x ØD1	0.35 x ØD1	< 1 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**100**	150	**150**	200	0.5 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**50**	80	**60**	100	0.4 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**50**	80	**60**	90	0.4 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**10**	20	**20**	40	0.1 x ØD1	< 1 x ØD1	0.2 x ØD1	< 1 x ØD1
S	Titanium, titanium alloys		**30**	60	**40**	70	0.4 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**150**	250	**100**	250	0.5 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**80**	150	**80**	150	0.4 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
N	Aluminium alloys	Si < 8%	**150**	300	**150**	300	0.5 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
N	Cast aluminium	Si > 8%	**100**	150	**150**	250	1.5 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
N	Plastic		**100**	150	**100**	150	1.5 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1
N	Gold, silver		**100**	150	**100**	150	0.5 x ØD1	< 1 x ØD1	0.5 x ØD1	< 1 x ØD1

n and Vf are indicative and shall be ajusted according to L_2

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

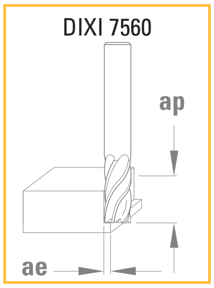
$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

Feed per tooth **fz [mm]**

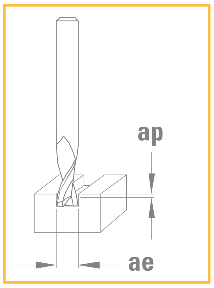
Ø D_1 0.30 - 0.50	Ø D_1 0.60 - 0.90	Ø D_1 1.00 - 2.00	Ø D_1 2.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 80.00 - 10.00
0.002 - 0.005	**0.003** - 0.012	**0.005** - 0.025	**0.01** - 0.06	**0.02** - 0.08	**0.03** - 0.12	**0.04** - 0.15
0.001 - 0.004	**0.003** - 0.01	**0.005** - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10
0.002 - 0.008	**0.004** - 0.016	**0.006** - 0.03	**0.015** - 0.07	**0.015** - 0.09	**0.04** - 0.15	**0.1** - 0.20
0.001 - 0.003	**0.002** - 0.01	**0.003** - 0.015	**0.008** - 0.03	**0.03** - 0.04	**0.03** - 0.06	**0.04** - 0.08
0.001 - 0.003	**0.002** - 0.01	**0.003** - 0.013	**0.008** - 0.03	**0.013** - 0.04	**0.03** - 0.06	**0.04** - 0.08
0.001 - 0.003	**0.002** - 0.008	**0.003** - 0.01	**0.004** - 0.02	**0.008** - 0.03	**0.01** - 0.04	**0.02** - 0.05
0.002 - 0.005	**0.003** - 0.012	**0.005** - 0.025	**0.01** - 0.06	**0.02** - 0.08	**0.03** - 0.12	**0.1** - 0.20
0.001 - 0.002	**0.003** - 0.015	**0.005** - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10
0.001 - 0.006	**0.003** - 0.01	**0.005** - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10
0.001 - 0.002	**0.0015** - 0.004	**0.002** - 0.008	**0.003** - 0.012	**0.008** - 0.02	**0.03** - 0.04	**0.015** - 0.05
0.001 - 0.005	**0.003** - 0.012	**0.005** - 0.025	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10
0.002 - 0.01	**0.004** - 0.02	**0.006** - 0.04	**0.015** - 0.08	**0.03** - 0.10	**0.04** - 0.15	**0.05** - 0.20
0.002 - 0.008	**0.003** - 0.015	**0.005** - 0.03	**0.01** - 0.06	**0.02** - 0.08	**0.03** - 0.10	**0.04** - 0.15
0.002 - 0.005	**0.003** - 0.012	**0.005** - 0.025	**0.01** - 0.08	**0.03** - 0.10	**0.04** - 0.15	**0.05** - 0.20
0.002 - 0.015	**0.004** - 0.025	**0.006** - 0.05	**0.015** - 0.06	**0.02** - 0.08	**0.03** - 0.12	**0.04** - 0.15
0.002 - 0.02	**0.005** - 0.03	**0.008** - 0.06	**0.02** - 0.10	**0.04** - 0.12	**0.05** - 0.20	**0.06** - 0.25
0.002 - 0.01	**0.003** - 0.02	**0.006** - 0.05	**0.015** - 0.06	**0.02** - 0.08	**0.03** - 0.10	**0.04** - 0.15

DIXI 7560

CUTTING CONDITIONS



Materials to be machined			CARBIDE Vc [m/min]	TiAlN Vc [m/min]	DLC Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**90** 110	**110** 130		1.50 x ØD1	< 0.10 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²		**80** 100		1.50 x ØD1	< 0.10 x ØD1
P	Lead alloyed cutting steel		**80** 110			1.50 x ØD1	< 0.30 x ØD1
P	High alloyed steel	700 – 1500 N/mm²		**60** 80		1.50 x ØD1	< 0.05 x ØD1
M	Stainless steel	400 – 700 N/mm²		**80** 100		1.50 x ØD1	< 0.05 x ØD1
M	DUPLEX stainless steel	> 800 N/mm²		**60** 80		1.50 x ØD1	< 0.05 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**80** 110	**110** 140		1.50 x ØD1	< 0.20 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**50** 70	**80** 100		1.50 x ØD1	< 0.05 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**80** 110	**110** 130		1.50 x ØD1	< 0.10 x ØD1
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy		**35** 50		1.50 x ØD1	< 0.05 x ØD1
S	Titanium, titanium alloys		**40** 55		**50** 80	1.50 x ØD1	< 0.10 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**160** 200		**200** 300	1.50 x ØD1	< 0.30 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**140** 160	**170** 220	**200** 270	1.50 x ØD1	< 0.10 x ØD1



DIXI 7060 - 7232

Materials to be machined			CARBIDE Vc [m/min]	ap [mm]	ae [mm]
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**100** 150	< 1 x ØD1	1 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140** 160	< 1 x ØD1	1 x ØD1
N	Gold, silver		**140** 160	< 0.9 x ØD1	1 x ØD1
N	Plastic		**240** 260	< 1.2 x ØD1	1 x ØD1
N			**240** 300	< 1.2 x ØD1	1 x ØD1

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

Feed per tooth **fz [mm]**

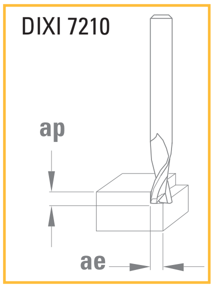
Ø D_1 0.35 - 1.90 (Z = 3)	Ø D_1 2.00 - 3.00 (Z = 5)	Ø D_1 3.00 - 5.00 (Z = 5)	Ø D_1 5.00 - 8.00 (Z = 5)	Ø D_1 8.00 - 10.00 (Z = 6)	Ø D_1 10.00 - 14.00 (Z = 6)	Ø D_1 14.00 - 16.00 (Z = 6)	Ø D_1 16.00 - 20.00 (Z = 6)
0.004 - 0.02	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.004 - 0.02	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.004 - 0.02	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.07** - 0.10	**0.08** - 0.11
0.002 - 0.015	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.002 - 0.015	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.002 - 0.015	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.004 - 0.02	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.004 - 0.02	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.004 - 0.02	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.002 - 0.01	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.002 - 0.01	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11
0.004 - 0.02	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.07** - 0.10	**0.08** - 0.11
0.004 - 0.02	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.09	**0.06** - 0.10	**0.07** - 0.11

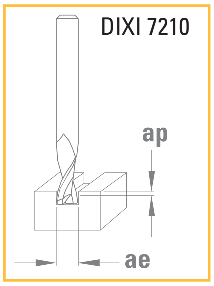
Feed per tooth **fz [mm]**

Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11
0.006 - 0.015	**0.012** - 0.020	**0.016** - 0.04	**0.02** - 0.06	**0.03** - 0.09	**0.04** - 0.11

DIXI 7210

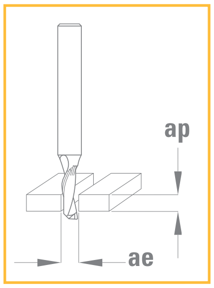
CUTTING CONDITIONS





	Materials to be machined		CARBIDE		CUTINOX					
			Vc [m/min]		Vc [m/min]		ap [mm]	ae [mm]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70**	100	**100**	120	1.5 x ØD1	0.5 x ØD1	< 1.3 x ØD1	1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**80**	100	1.5 x ØD1	0.5 x ØD1	< 1.0 x ØD1	1 x ØD1
P	Lead alloyed cutting steel		**70**	100			1.5 x ØD1	0.5 x ØD1	< 1.0 x ØD1	1 x ØD1
P	High alloyed steel	700 – 1500 N/mm²			**50**	70	1.5 x ØD1	0.5 x ØD1	< 1.0 x ØD1	1 x ØD1
M	Stainless steel	400 – 700 N/mm²			**80**	100	1.5 x ØD1	0.5 x ØD1	< 1.0 x ØD1	1 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70**	100	**100**	120	1.5 x ØD1	0.5 x ØD1	< 1.0 x ØD1	1 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40**	70	**80**	100	1.5 x ØD1	0.5 x ØD1	< 1.0 x ØD1	1 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70**	100	**100**	120	1.5 x ØD1	0.5 x ØD1	< 1.0 x ØD1	1 x ØD1
S	Titanium, titanium alloys		**30**	45			1.5 x ØD1	0.5 x ØD1	< 1.0 x ØD1	1 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**160**	180	**220**	240	1.0 x ØD1	1.0 x ØD1	< 1.5 x ØD1	0.5 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**100**	130	**120**	150	1.0 x ØD1	1.0 x ØD1	< 1.5 x ØD1	0.5 x ØD1
N	Aluminium alloy	Si < 8%	**130**	250	**200**	300	1.5 x ØD1	0.5 x ØD1	< 1.0 x ØD1	
N	Gold, silver		**140**	160	**200**	220	< 1.0 x ØD1	1 x ØD1	< 1.5 x ØD1	< 0.5 x ØD1

DIXI 7301 - 7302 - 7303 - 7304



	Materials to be machined	CARBIDE			
		Vc [m/min]		ap [mm]	ae [mm]
N	Plastic	**130**	200	< 1.5 x ØD1	1 x ØD1

The plunging feed (Vfp) of an end mill Z = 1 (drilling) must be reduced by 40 to 80 % depending on the material to be machined

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

Feed per tooth **fz [mm]**

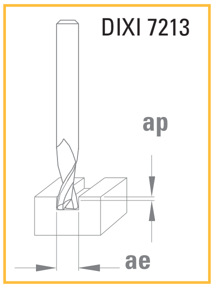
Ø D_1 3.00 - 4.00	Ø D_1 4.00 -5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.02 - 0.03	**0.025** - 0.04	**0.028** - 0.045	**0.032** - 0.05	**0.035** - 0.06	**0.04** - 0.08	**0.06** - 0.10
0.03 - 0.04	**0.04** - 0.06	**0.05** - 0.08	**0.06** - 0.09	**0.07** - 0.1	**0.08** - 0.11	**0.09** - 0.12
0.010 - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.020** - 0.05	**0.023** - 0.05	**0.025** - 0.06

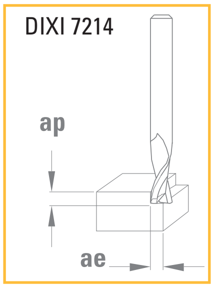
Feed per tooth **fz [mm]**

Ø D_1 2.00 - 2.50	Ø D_1 2.50 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00
0.020 - 0.05	**0.025** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.06** - 0.16	**0.08** - 0.20	**0.10** - 0.28

DIXI 7213 - 7214

CUTTING CONDITIONS


DIXI 7213


DIXI 7214

	Materials to be machined		CARBIDE Vc [m/min]	TiAlN Vc [m/min]	ap [mm]	ae [mm]	ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70** 100	**90** 110	< 1.0 x ØD1	1 x ØD1	< 1 x ØD1	< 0.5 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²		**70** 90	< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
P	Lead alloyed cutting steel		**70** 100		< 1.0 x ØD1	1 x ØD1	< 1.5 x ØD1	< 0.5 x ØD1
P	High alloyed steel	700 – 1500 N/mm²		**40** 60	< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
M	Stainless steel	400 – 700 N/mm²		**80** 100	< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70** 100	**90** 110	< 1.0 x ØD1	1 x ØD1	< 1 x ØD1	< 0.5 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40** 70	**70** 90	< 0.4 x ØD1	1 x ØD1	< 1 x ØD1	< 0.4 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**70** 100	**90** 110	< 0.4 x ØD1	1 x ØD1	< 1 x ØD1	< 0.4 x ØD1
S	Titanium, titanium alloys		**30** 45		< 0.5 x ØD1	1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**140** 160		< 2.0 x ØD1	1 x ØD1	< 1.5 x ØD1	< 0.5 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120** 140	**170** 190	< 1.0 x ØD1	1 x ØD1	< 1 x ØD1	< 0.3 x ØD1
N	Aluminium alloys	Si < 8%	**180** 260	**230** 340	< 2.0 x ØD1	1 x ØD1	< 1.5 x ØD1	< 0.5 x ØD1
N	Cast aluminium	Si > 8%	**140** 160	**210** 230	< 2.0 x ØD1	1 x ØD1	< 1.5 x ØD1	< 0.5 x ØD1
N	Gold, silver		**140** 160	**200** 220	< 1.0 x ØD1	1 x ØD1	< 1.5 x ØD1	< 0.5 x ØD1

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

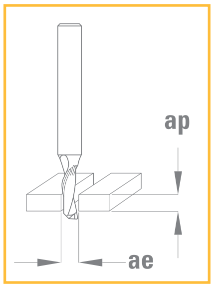
$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 4.00 - 5.00	Ø D_1 5.00 -6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 9.00	Ø D_1 9.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.008 - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.016** - 0.03	**0.018** - 0.04	**0.020** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.03** - 0.07
0.006 - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.015** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.010 - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.020** - 0.05	**0.023** - 0.05	**0.025** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10
0.006 - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.015** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.006 - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.015** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.008 - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.016** - 0.03	**0.018** - 0.04	**0.020** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.03** - 0.07
0.006 - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.015** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.008 - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.016** - 0.03	**0.018** - 0.04	**0.020** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.03** - 0.07
0.006 - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.015** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.010 - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.020** - 0.05	**0.023** - 0.05	**0.025** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10
0.006 - 0.01	**0.008** - 0.02	**0.009** - 0.02	**0.011** - 0.02	**0.012** - 0.02	**0.014** - 0.03	**0.015** - 0.03	**0.02** - 0.04	**0.02** - 0.04	**0.02** - 0.05
0.010 - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.020** - 0.05	**0.023** - 0.05	**0.025** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10
0.010 - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.020** - 0.05	**0.023** - 0.05	**0.025** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10
0.010 - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.018** - 0.04	**0.020** - 0.05	**0.023** - 0.05	**0.025** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.04** - 0.10

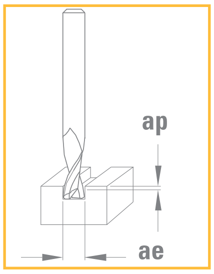
DIXI 7561

CUTTING CONDITIONS



Materials to be machined			CARBIDE		ap	ae
			Vc [m/min]		[mm]	[mm]
P	Lead alloyed cutting steel		**80**	100	< 0.7 x ØD1	1 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**100**	130	< 1 x ØD1	1 x ØD1
N	Aluminium alloys	Si < 8%	**120**	160	< 1 x ØD1	1 x ØD1
N	Cast aluminium	Si > 8%	**100**	130	< 1 x ØD1	1 x ØD1
N	Plastic		**130**	200	< 1.5 x ØD1	1 x ØD1

The plunging feed (Vfp) of an end mill Z = 1 (drilling) must be reduced by 40 to 80 % depending on the material to be machined.



DIXI 7552 - 7562 - 7572 - 7582

Materials to be machined			CARBIDE		TiAlN		DICUT		DIAMOND		ap	ae
			Vc [m/min]		Vc [m/min]		Vc [m/min]		Vc [m/min]		[mm]	[mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**50**	80							< 1 x ØD1	< 1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**70**	100					< 0.5 x ØD1	< 1 x ØD1
P	High alloyed steel	700 – 1500 N/mm²			**40**	60					< 0.5 x ØD1	< 1 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**100**	170							< 1 x ØD1	< 1 x ØD1
S	Titanium, titanium alloys		**60**	80							< 1 x ØD1	< 1 x ØD1
N	Copper alloys - easy to machine (brass - bronze)		**80**	120							< 1.5 x ØD1	< 1 x ØD1
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)					**100**	140			< 1 x ØD1	< 1 x ØD1
N	Aluminium alloys	Si < 8%	**150**	200							< 1.5 x ØD1	< 1 x ØD1
N	Cast aluminium	Si > 8%	**100**	200							< 1 x ØD1	< 1 x ØD1
N	Graphite								**200**	300	3 x ØD1	< 0.30 x ØD1
N	Plastic		**100**	130							< 2 x ØD1	< 1 x ØD1
N	Gold, silver		**90**	130	**100**	140					< 0.5 x ØD1	< 1 x ØD1

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

Feed per tooth **fz [mm]**

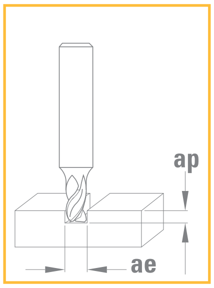
Ø D_1 2.00 - 2.50	Ø D_1 2.50 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00
0.010 - 0.03	**0.013** - 0.04	**0.02** - 0.05	**0.02** - 0.06	**0.03** - 0.07	**0.03** - 0.10	**0.04** - 0.12	**0.05** - 0.17
0.014 - 0.04	**0.018** - 0.05	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.09	**0.04** - 0.12	**0.06** - 0.15	**0.07** - 0.21
0.014 - 0.04	**0.018** - 0.05	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.09	**0.04** - 0.12	**0.06** - 0.15	**0.07** - 0.21
0.014 - 0.04	**0.018** - 0.05	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.09	**0.04** - 0.12	**0.06** - 0.15	**0.07** - 0.21
0.020 - 0.05	**0.025** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.06** - 0.16	**0.08** - 0.20	**0.10** - 0.28

Feed per tooth **fz [mm]**

Ø D_1 1.00 - 2.00	Ø D_1 2.00 -3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 13.00	Ø D_1 13.00 - 16.00	Ø D_1 16.00 - 20.00
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.014 - 0.04	**0.018** - 0.05	**0.021** - 0.05	**0.025** - 0.06	**0.032** - 0.08	**0.04** - 0.09	**0.04** - 0.11	**0.05** - 0.12
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20
0.012 - 0.02	**0.018** - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.07** - 0.12	**0.06** - 0.14	**0.07** - 0.16	**0.08** - 0.20

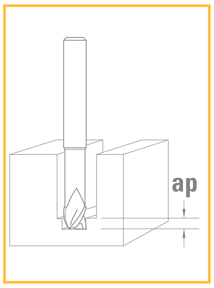
DIXI 7543

CUTTING CONDITIONS



	Materials to be machined		XIDUR Vc [m/min]				ap [mm]	ae [mm]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**90**	110			< 1.0 x ØD1	1 x ØD1
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**70**	90			< 0.6 x ØD1	1 x ØD1
P	Lead alloyed cutting steel		**90**	110			< 1.0 x ØD1	1 x ØD1
P	High alloyed steel	700 – 1500 N/mm²	**40**	55			< 0.3 x ØD1	1 x ØD1
M	Stainless steel	400 – 700 N/mm²	**70**	90			< 0.8 x ØD1	1 x ØD1
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**90**	110			< 0.7 x ØD1	1 x ØD1
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**70**	90			< 0.4 x ØD1	1 x ØD1
K	Nodular ferritic cast iron / Malleable cast iron		**90**	110			< 0.4 x ØD1	1 x ØD1
S	Titanium, titanium alloys		**40**	60			< 0.3 x ØD1	1 x ØD1

DIXI 7593



DIXI 7593 Z = 3-4 **Aluminium** (Vc 400 - 600 m/min)

D_1	Z	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	fz [mm]
6	3	400	21220	570	3	6	0.009
8	3	400	15920	570	4	8	0.012
10	3	400	12730	760	5	10	0.02
12	3	400	10610	760	6	12	0.024
16	3	400	7960	760	8	16	0.032
18	3	400	7070	760	9	18	0.036
20	4	400	6370	1020	10	20	0.04

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

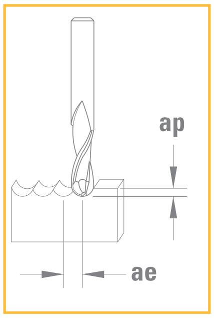
$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 1.00 - 1.50	Ø D_1 1.50 -3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 12.00
0.002 - 0.01	**0.003** - 0.01	**0.006** - 0.02	**0.010** - 0.02	**0.014** - 0.04	**0.02** - 0.05
0.002 - 0.01	**0.002** - 0.01	**0.005** - 0.01	**0.008** - 0.02	**0.011** - 0.03	**0.02** - 0.04
0.003 - 0.01	**0.004** - 0.01	**0.008** - 0.03	**0.013** - 0.04	**0.018** - 0.05	**0.03** - 0.07
0.002 - 0.01	**0.002** - 0.01	**0.005** - 0.01	**0.008** - 0.02	**0.011** - 0.03	**0.02** - 0.04
0.002 - 0.01	**0.002** - 0.01	**0.005** - 0.01	**0.008** -0.02	**0.011** - 0.03	**0.02** - 0.04
0.002 - 0.01	**0.003** - 0.01	**0.006** - 0.02	**0.010** - 0.02	**0.014** - 0.04	**0.02** - 0.05
0.002 - 0.01	**0.002** - 0.01	**0.005** - 0.01	**0.008** - 0.02	**0.011** - 0.03	**0.02** - 0.04
0.002 - 0.01	**0.003** - 0.01	**0.006** - 0.02	**0.010** - 0.02	**0.014** - 0.04	**0.02** - 0.05
0.002 - 0.01	**0.002** - 0.01	**0.005** - 0.01	**0.008** - 0.02	**0.011** - 0.03	**0.02** - 0.04

DIXI 7532 - 7532-D

CUTTING CONDITIONS



DIXI 7532 XIDUR Z = 2 Tool steel and cast iron **30-45 HRC** (Vc 400 - 500 m/min)

D	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	Deff. [mm]	fz [mm]
0.2 - 1		90000	1800	0.02	0.05	0.28	0.01
1.5	400	84890	3400	0.04	0.06	0.48	0.02
2	400	63660	3820	0.05	0.09	0.62	0.03
3	400	42440	3400	0.07	0.13	1.08	0.04
4	400	31830	3180	0.09	0.15	1.20	0.05
5	400	25470	3570	0.15	0.25	1.71	0.07
6	400	21220	3400	0.20	0.30	2.15	0.08
8	400	15920	3180	0.25	0.35	2.78	0.10
10	400	12730	3820	0.30	0.50	3.41	0.15
12	400	10610	4240	0.40	0.60	4.31	0.20

DIXI 7532 XIDUR Z = 2 Tool steel and cast iron **45 - 55 HRC** (Vc 250 - 350 m/min)

D	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	Deff. [mm]	fz [mm]
0.2 - 1	250	79580	1110	0.02	0.05	0.28	0.007
1.5	250	53050	2120	0.03	0.07	0.42	0.02
2	250	39790	2390	0.04	0.09	0.56	0.03
3	250	26530	2120	0.05	0.11	0.77	0.04
4	250	19890	1990	0.07	0.15	1.04	0.05
5	250	15920	1910	0.12	0.20	1.53	0.06
6	250	13260	1860	0.15	0.25	1.87	0.07
8	250	9950	1790	0.20	0.30	2.50	0.09
10	250	7960	1750	0.25	0.40	3.12	0.11
12	250	6630	1720	0.30	0.50	3.75	0.13

DIXI 7532 XIDUR Z = 2 Tool steel and cast iron **55 - 65 HRC** (Vc 100 - 200 m/min)

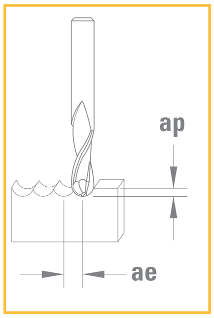
D	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	Deff. [mm]	fz [mm]
0.2 - 1	130	41380	330	0.02	0.04	0.28	0.004
1.5	130	27590	390	0.03	0.05	0.42	0.007
2	130	20690	410	0.04	0.06	0.56	0.010
3	130	13790	410	0.05	0.07	0.77	0.015
4	130	10350	520	0.06	0.10	0.97	0.025
5	130	8280	500	0.08	0.16	1.25	0.030
6	130	6900	550	0.10	0.18	1.54	0.040
8	130	5170	520	0.15	0.20	2.17	0.050
10	130	4140	500	0.18	0.22	2.65	0.060
12	130	3450	550	0.20	0.25	3.07	0.080

Microlubrication recommended, emulsion inadequate

The indicated **n** and **Vf** values should be considered as starting points. Depending on the quality of shape to be machined (precision and surface finish) these values can be increased or reduced.
If the recommended rpm cannot be obtained on the spindle, **Vf** must be reduced proportionally.
Down milling is recommended when possible.

DIXI 7542

CUTTING CONDITIONS



DIXI 7542 XIDUR Z = 2 Tool steel and cast iron **30-45 HRC** (Vc 400 - 500 m/min)

D	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	Deff. [mm]	fz [mm]
1		90000	1800	0.02	0.05	0.28	0.01
1.5	320	67910	2720	0.04	0.06	0.48	0.02
2	320	50930	3060	0.05	0.09	0.62	0.03
3	320	33950	2720	0.07	0.13	1.08	0.04
4	320	25470	2550	0.09	0.15	1.20	0.05
5	320	20370	2850	0.15	0.25	1.71	0.07
6	320	16980	2720	0.20	0.30	2.15	0.08
8	320	12730	2550	0.25	0.35	2.78	0.10
10	320	10190	3060	0.30	0.50	3.41	0.15
12	320	8490	3400	0.40	0.60	4.31	0.20

DIXI 7542 XIDUR Z = 2 Tool steel and cast iron **45 - 55 HRC** (Vc 250 - 350 m/min)

D	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	Deff. [mm]	fz [mm]
1	200	63660	890	0.02	0.05	0.28	0.007
1.5	200	42440	1700	0.03	0.07	0.42	0.020
2	200	31830	1910	0.04	0.09	0.56	0.030
3	200	21220	1700	0.05	0.11	0.77	0.040
4	200	15920	1590	0.07	0.15	1.04	0.050
5	200	12730	1530	0.12	0.20	1.53	0.060
6	200	10610	1490	0.15	0.25	1.87	0.070
8	200	7960	1430	0.20	0.30	2.50	0.090
10	200	6370	1400	0.25	0.40	3.12	0.110
12	200	5310	1380	0.30	0.50	3.75	0.130

DIXI 7542 XIDUR Z = 2 Tool steel and cast iron **55 - 65 HRC** (Vc 100 - 200 m/min)

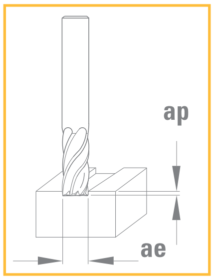
D	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	Deff. [mm]	fz [mm]
1	100	31830	250	0.02	0.04	0.28	0.004
1.5	100	21220	300	0.03	0.05	0.42	0.007
2	100	15920	320	0.04	0.06	0.56	0.010
3	100	10610	320	0.05	0.07	0.77	0.015
4	100	7960	400	0.06	0.10	0.97	0.025
5	100	6370	380	0.08	0.16	1.25	0.030
6	100	5310	420	0.10	0.18	1.54	0.040
8	100	3980	400	0.15	0.20	2.17	0.050
10	100	3180	380	0.18	0.22	2.65	0.060
12	100	2650	420	0.20	0.25	3.07	0.080

Microlubrication recommended, emulsion inadequate

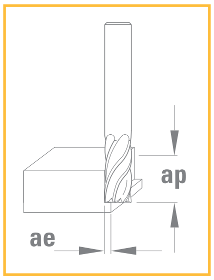
The indicated **n** and **Vf** values should be considered as starting points. Depending on the quality of shape to be machined (precision and surface finish) these values can be increased or reduced.
If the recommended rpm cannot be obtained on the spindle, **Vf** must be reduced proportionally.
Down milling is recommended when possible.

CUTTING CONDITIONS

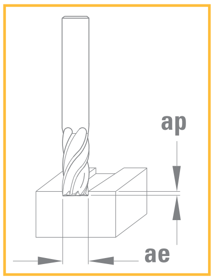
DIXI 7520 XIDUR Z = 3-12			Tool steel and cast iron		**45 - 55 HRC**	(Vc 30 - 70 m/min)	
D_1	Z	Vc (m/min)	n (min -1)	Vf (mm/min)	ap (mm)	ae (mm)	fz (mm)
0.4 - 0.9	3	30	-	-	0.03 x D_1	1 x D_1	0.001 - 0.002
1	4	40	12800	125	0.04	1.00	0.002
1.5	4	40	8500	125	0.05	1.50	0.0035
2	5	40	6300	125	0.07	2.00	0.004
3	5	40	4240	150	0.12	3.00	0.007
4	5	40	3180	160	0.15	4.00	0.010
6	6	40	2120	190	0.20	6.00	0.015
8	6	40	1590	190	0.25	8.00	0.020
10	6	40	1270	190	0.30	10.00	0.025
12	8	40	1060	210	0.40	12.00	0.025
16	10	40	800	240	0.60	16.00	0.030
20	12	40	640	230	0.80	20.00	0.030



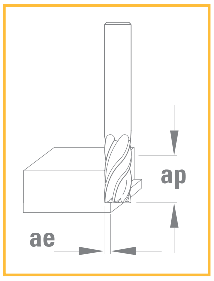
DIXI 7520 XIDUR Z = 3-12			Tool steel and cast iron		**45 - 55 HRC**	(Vc 150 - 250 m/min)	
Ø	Z	Vc (m/min)	n (min -1)	Vf (mm/min)	ap (mm)	ae (mm)	fz (mm)
0.4 - 0.9	3	150	-	-	1 x D_1	0.03 x D_1	0.001 - 0.002
1	4	200	63700	640	1.00	0.04	0.002
1.5	4	200	42450	640	1.50	0.05	0.0035
2	5	200	32000	640	2.00	0.07	0.004
3	5	200	21300	750	3.00	0.12	0.007
4	5	200	15920	800	4.00	0.15	0.010
6	6	200	10610	950	6.00	0.20	0.015
8	6	200	7960	960	8.00	0.25	0.020
10	6	200	6370	960	10.00	0.30	0.025
12	8	200	5310	1060	12.00	0.40	0.025
16	10	200	3980	1190	16.00	0.60	0.030
20	12	200	3180	1140	20.00	0.80	0.030



DIXI 7520 XIDUR Z = 3-12			Tool steel and cast iron		**55 - 65 HRC**	(Vc 12 - 40 m/min)	
Ø	Z	Vc (m/min)	n (min -1)	Vf (mm/min)	ap (mm)	ae (mm)	fz (mm)
0.4 - 0.9	3	12	-	-	0.03 x D_1	1 x D_1	0.001 - 0.002
1	4	15	4700	45	0.03	1.00	0.002
1.5	4	15	3180	45	0.03	1.50	0.0035
2	5	15	2300	45	0.04	2.00	0.004
3	5	15	1600	55	0.05	3.00	0.007
4	5	15	1190	60	0.06	4.00	0.010
6	6	15	800	70	0.09	6.00	0.015
8	6	15	600	70	0.12	8.00	0.020
10	6	15	480	70	0.15	10.00	0.025
12	8	15	400	80	0.18	12.00	0.025
16	10	15	300	90	0.20	16.00	0.030
20	12	15	240	90	0.25	20.00	0.030

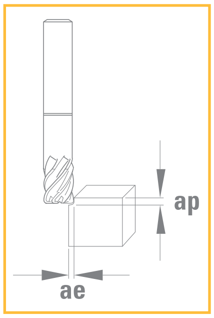


DIXI 7520 XIDUR Z = 3-12			Tool steel and cast iron		**55 - 65 HRC**	(Vc 60 - 120 m/min)	Ø
Z	Vc	n (m/min)	Vf (min -1)	ap (mm/min)	ae (mm)	fz (mm)	(mm)
0.4 - 0.9	3	60	-	-	1 x D_1	0.03 x D_1	0.001 - 0.002
1	4	80	25500	250	1.00	0.03	0.002
1.5	4	80	17000	250	1.50	0.035	0.0035
2	5	80	12700	250	2.00	0.04	0.004
3	5	80	8500	290	3.00	0.05	0.007
4	5	80	6370	320	4.00	0.06	0.010
6	6	80	4240	380	6.00	0.09	0.015
8	6	80	3180	380	8.00	0.12	0.020
10	6	80	2550	380	10.00	0.15	0.025
12	8	80	2120	420	12.00	0.18	0.025
16	10	80	1590	480	16.00	0.20	0.030
20	12	80	1270	460	20.00	0.25	0.030



Microlubrication recommended, emulsion inadequate

DIXI 7070



DIXI 7070 XIDUR Z = 4-6			Tool steel and cast iron		**30-45 HRC**	(Vc 150 - 200 m/min)	
D_1	Z	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	fz [mm]
3	4	150	15900	3800	0.20	0.80	0.06
4	4	150	11940	4300	0.25	0.85	0.09
5	4	150	9550	4580	0.30	0.90	0.12
6	4	150	7960	4460	0.35	1.00	0.14
8	6	150	5970	5730	0.40	1.10	0.16
10	6	150	4770	5150	0.45	1.30	0.18
12	6	150	3980	4780	0.50	1.50	0.20

DIXI 7070 XIDUR Z = 4-6			Tool steel and cast iron		**45 - 55 HRC**	(Vc 130 - 170 m/min)	
D_1	Z	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	fz [mm]
3	4	130	13700	2750	0.15	0.70	0.05
4	4	130	10350	3310	0.20	0.75	0.08
5	4	130	8280	3310	0.25	0.75	0.10
6	4	130	6900	3040	0.30	0.80	0.11
8	6	130	5170	3720	0.40	0.80	0.12
10	6	130	4140	3230	0.42	1.00	0.13
12	6	130	3450	2900	0.45	1.20	0.14

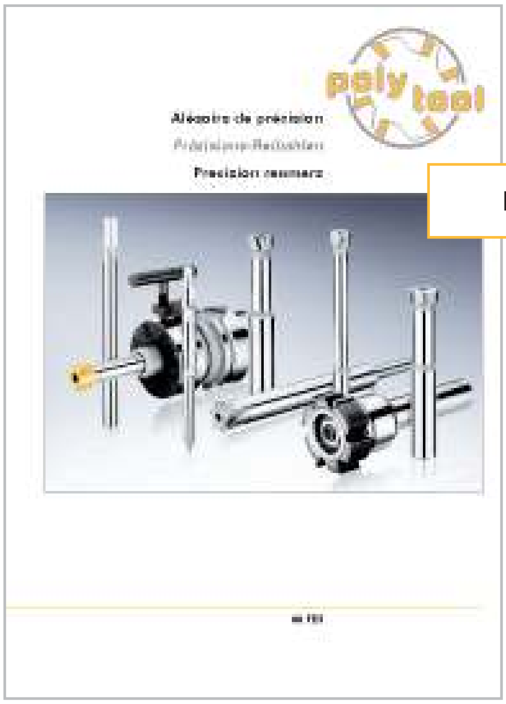
DIXI 7070 XIDUR Z = 4-6			Tool steel and cast iron		**55 - 65 HRC**	(Vc 100 - 130 m/min)	
D_1	Z	Vc [m/min]	n [min -1]	Vf [mm/min]	ap [mm]	ae [mm]	fz [mm]
3	4	100	10600	500	0.08	0.20	0.010
4	4	100	7960	640	0.10	0.25	0.020
5	4	100	6370	890	0.12	0.28	0.035
6	4	100	5310	850	0.15	0.30	0.040
8	6	100	3980	1190	0.18	0.32	0.050
10	6	100	3180	1140	0.20	0.35	0.060
12	6	100	2650	1270	0.25	0.40	0.080

REAMING

SELECTION OF BORING TOOLS AND REAMERS

✓ = item from stock

		Z	Page		☐ CARBIDE				
BORING AND CHAMFERING TOOLS									
DIXI 2577 Ø 0.26 - 0.86		-	274	⊖ ▷	✓				
BORING TOOLS									
DIXI 2579 Ø 0.60 - 3.00		-	274	⊖ ▷	✓				
DIXI 2580 Ø 0.50 - 20.00		-	275	▷	✓				
DIXI 2581 Ø 0.50 - 25.00		-	277	⊖	✓				
REAMERS									
POLY 4001 Ø 0.40 - 12.02		3 - 6	279	⊖ ▷ 💧	✓				
POLY 4005 Ø 2.97 - 6.50		4 - 6	280	⊖ ▷ 💧	✓				
POLY 4007 Ø 0.39 - 12.02		3 - 6	281	⊖ 💧	✓				



Alésoirs de précision
Präzisions-Reibahlen
Precision reamers

For other types of reamers, see the POLYTOOL catalogue

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
◎	◎	○	○		◎	○	◎	◎	◎	◎		◎

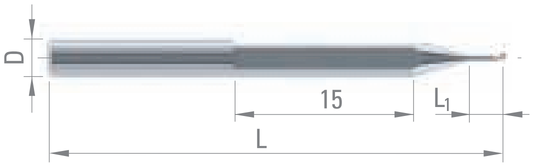
◎	◎	○	○		◎	○	◎	◎	◎	◎		◎
◎	◎	○	○		◎	○	◎	◎	◎	◎		◎
◎	◎	○	○		◎	○	◎	◎	◎	◎		◎

◎	◎	○	○		◎	○	◎	◎	◎	◎		◎
◎	◎	○	○		◎	○	◎	◎	◎	◎		◎
◎	◎	○	○		◎	○	◎	◎	◎	◎		◎

DIXI 2577

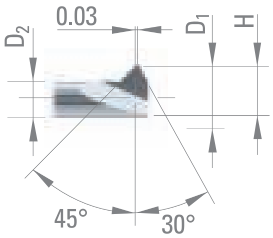
BORING AND CHAMFERING TOOLS

P. 284



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

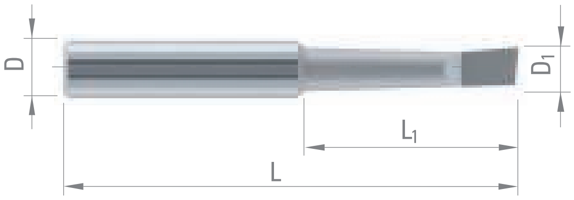
D_1	L_1	D_2	H	D_{h6}	L	for...	CARBIDE
0.26	0.84	0.14	0.20	3	38	S 0.30	☐
0.35	1.04	0.21	0.28	3	38	S 0.40	☐
0.44	1.35	0.28	0.36	3	38	S 0.50	☐
0.53	1.66	0.33	0.43	3	38	S 0.60	☐
0.66	2.04	0.36	0.51	3	38	S 0.70	☐
0.75	2.30	0.43	0.58	3	38	S 0.80	☐
0.86	2.72	0.46	0.66	3	38	S 0.90	☐



DIXI 2579

BORING TOOLS

P. 284



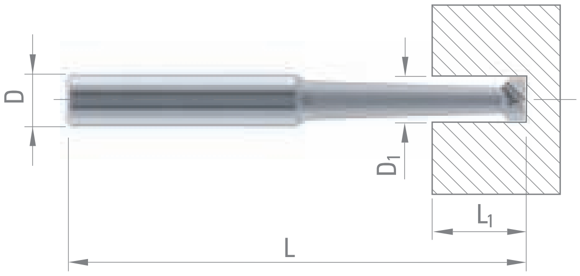
Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_1	L_1	D_{h6}	L	CARBIDE
0.60	3	4	25	☐
0.80	4	4	25	☐
1.00	5	4	25	☐
1.20	6	4	25	☐
1.50	8	4	32	☐
1.80	9	4	32	☐
2.00	10	4	32	☐
2.50	12	4	32	☐
3.00	15	4	32	☐

DIXI 2580

BORING TOOLS
BLIND HOLE

P. 284



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

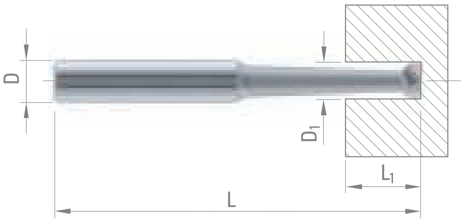
Ref.	D_1	L_1	D_{h6}	L	CARBIDE
004.0050	0.50	3	4	25	☐
004.0080	0.80	4	4	25	☐
004.0100	1.00	4	4	25	☐
004.0120	1.20	6	4	25	☐
004.0150	1.50	7	4	28	☐
004.0170	1.70	7	4	28	☐
004.0200	2.00	9	4	30	☐
004.0220	2.20	9	4	30	☐
004.0250	2.50	12	4	33	☐
004.0300	3.00	14	4	35	☐
004.0350	3.50	14	4	35	☐
004.0400	4.00	17	4	38	☐
004.0500	5.00	23	4	38	☐
006.0200	2.00	9	6	38	☐
006.0250	2.50	12	6	40	☐
006.0300	3.00	14	6	42	☐
006.0400	4.00	17	6	45	☐
006.0500	5.00	22	6	52	☐
006.0600	6.00	24	6	52	☐
006.0700	7.00	30	6	52	☐
006.0800	8.00	32	6	52	☐
006.1000	10.00	40	6	60	☐
008.0300	3.00	17	8	47	☐
008.0400	4.00	21	8	51	☐
008.0500	5.00	22	8	52	☐
008.0600	6.00	25	8	55	☐
008.0700	7.00	28	8	60	☐
008.1000	10.00	45	8	65	☐
008.1200	12.00	54	8	70	☐
008.1300	13.00	54	8	78	☐

DIXI 2580

P. 284

Ref.	D_1	L_1	D_{h6}	L	CARBIDE
010.0300	3.00	17	10	45	☐
010.0400	4.00	21	10	49	☐
010.0500	5.00	22	10	50	☐
010.0600	6.00	25	10	54	☐
010.0700	7.00	28	10	56	☐
010.0900	9.00	32	10	65	☐
010.1000	10.00	32	10	65	☐
010.1200	12.00	45	10	70	☐
010.1300	13.00	55	10	80	☐
010.1500	15.00	75	10	100	☐
010.1800	18.00	75	10	100	☐
012.0800	8.00	30	12	70	☐
012.1000	10.00	40	12	80	☐
012.1300	13.00	60	12	90	☐
012.1500	15.00	70	12	100	☐
012.1800	18.00	70	12	100	☐
016.1300	13.00	60	16	115	☐
016.1500	15.00	60	16	115	☐
016.1800	18.00	75	16	115	☐
016.2000	20.00	75	16	115	☐

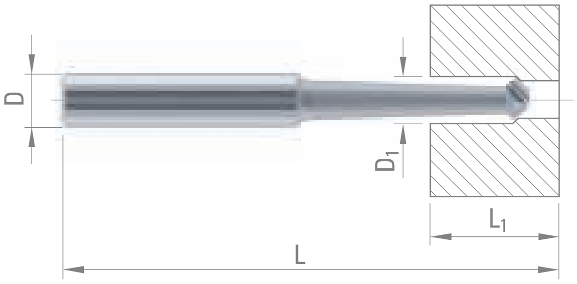
Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				



DIXI 2581

BORING TOOLS
THROUGH HOLE

P. 284



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

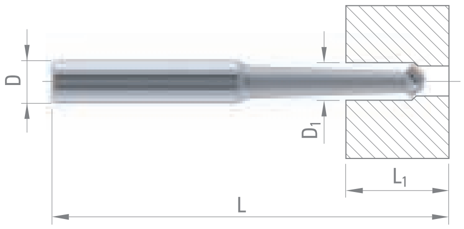
Ref.	D_1	L_1	D_{h6}	L	CARBIDE
4.0050	0.50	3	4	25	☐
4.0080	0.80	4	4	25	☐
4.0100	1.00	4	4	25	☐
4.0120	1.20	6	4	25	☐
4.0150	1.50	7	4	28	☐
4.0170	1.70	7	4	28	☐
4.0200	2.00	9	4	30	☐
4.0220	2.20	9	4	30	☐
4.0250	2.50	12	4	33	☐
4.0300	3.00	14	4	35	☐
4.0350	3.50	14	4	35	☐
4.0400	4.00	17	4	38	☐
4.0500	5.00	23	4	38	☐
6.0200	2.00	9	6	38	☐
6.0250	2.50	12	6	40	☐
6.0300	3.00	14	6	42	☐
6.0400	4.00	17	6	45	☐
6.0500	5.00	22	6	52	☐
6.0600	6.00	24	6	52	☐
6.0800	8.00	32	6	52	☐
6.1000	10.00	40	6	60	☐
8.0300	3.00	17	8	47	☐
8.0400	4.00	21	8	51	☐
8.0500	5.00	22	8	52	☐
8.0600	6.00	25	8	55	☐
8.0700	7.00	28	8	60	☐
8.0900	9.00	45	8	65	☐
8.1100	11.00	54	8	70	☐
8.1300	13.00	54	8	78	☐

DIXI 2581

P. 284

Ref.	D_1	L_1	D_{h6}	L	CARBIDE
10.0300	3.00	17	10	45	☐
10.0400	4.00	21	10	49	☐
10.0500	5.00	22	10	50	☐
10.0600	6.00	25	10	54	☐
10.0700	7.00	28	10	56	☐
10.0900	9.00	32	10	65	☐
10.1000	10.00	32	10	65	☐
10.1200	12.00	45	10	70	☐
10.1300	13.00	55	10	80	☐
10.1500	15.00	75	10	100	☐
10.1800	18.00	75	10	100	☐
12.0800	8.00	30	12	70	☐
12.1000	10.00	40	12	80	☐
12.1300	13.00	60	12	90	☐
12.1500	15.00	70	12	100	☐
12.1800	18.00	70	12	100	☐
12.2000	20.00	80	12	110	☐
16.1300	13.00	60	16	115	☐
16.1500	15.00	60	16	115	☐
16.1800	18.00	75	16	115	☐

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

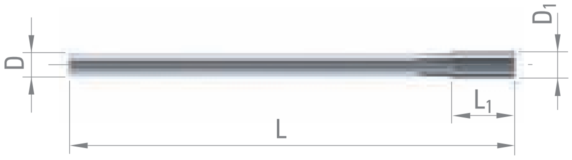


POLY 4001

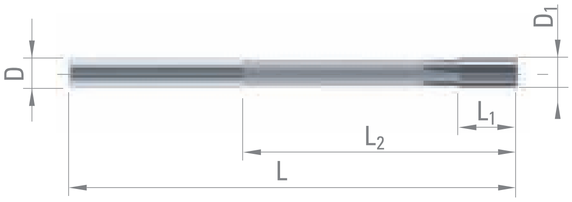
STRAIGHT FLUTE REAMERS
IRREGULAR TEETH

P. 282 > Ø 2.98

Ref. A



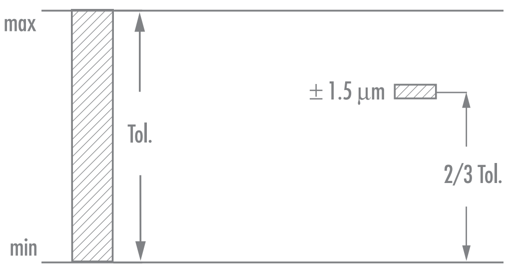
Ref. B



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

$D_{1\ H7}$	L_1	L_2	D_{h6}	L	Z	Ref.	CARBIDE
0.40 - 0.50	3.0	5	3.0	38	3	B	☐
0.51 - 0.60	4.0	6	3.0	38	3	B	☐
0.61 - 0.70	4.0	7	3.0	38	3	B	☐
0.71 - 0.80	4.0	8	3.0	38	3	B	☐
0.81 - 0.90	5.0	9	3.0	38	3	B	☐
0.91 - 1.00	5.0	10	3.0	38	3	B	☐
1.01 - 1.08	5.0	11	3.0	38	3	B	☐
1.09 - 1.20	5.0	12	3.0	38	3	B	☐
1.21 - 1.40	6.0	13	3.0	38	3	B	☐
1.41 - 1.50	7.0	15	3.0	38	3	B	☐
1.51 - 1.60	7.0	15	3.0	50	3	B	☐
1.61 - 1.70	7.0	16	3.0	50	3	B	☐
1.71 - 1.80	7.0	17	3.0	50	3	B	☐
1.81 - 1.90	8.0	17	3.0	50	3	B	☐
1.91 - 2.30	8.0	18	3.0	50	3	B	☐
2.31 - 2.50	10.0	20	3.0	50	3	B	☐
2.51 - 2.60	10.0	20	3.0	61	4	B	☐
2.61 - 2.97	10.0	25	3.0	61	4	B	☐
2.98 - 3.02	10.0	25	3.0	65	4	B	☐
3.03 - 3.52	10.0	-	3.0	70	4	A	☐
3.53 - 4.02	10.0	-	3.5	75	4	A	☐
4.03 - 4.52	12.0	-	4.0	80	6	A	☐
4.53 - 5.03	12.0	-	4.5	86	6	A	☐
5.04 - 5.79	12.0	-	5.0	93	6	A	☐
5.80 - 6.00	12.0	57	6.0	93	6	B	☐
6.01 - 6.77	14.0	63	6.0	101	6	B	☐
6.78 - 7.30	16.0	69	7.0	109	6	B	☐
7.31 - 7.50	16.0	69	8.0	109	6	B	☐
7.51 - 8.50	16.0	75	8.0	117	6	B	☐
8.51 - 9.50	19.0	81	9.0	125	6	B	☐
9.51 - 10.60	19.0	87	10.0	133	6	B	☐
10.61 - 11.80	19.0	96	10.0	142	6	B	☐
11.81 - 12.02	19.0	105	10.0	151	6	B	☐

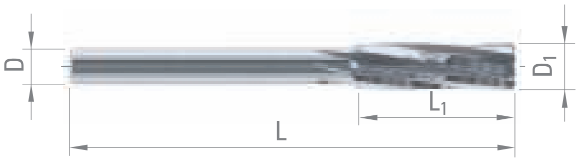
See details of positions in the price list and on the website



POLY 4005

HELICAL REAMERS, RIGHT-HAND SPIRAL
RIGHT-HAND CUTTING, IRREGULAR TEETH

P. 282



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

$D_{1\ H7}$	L_1	D_{h6}	L	Z	CARBIDE
2.97 - 3.49	20.0	2.5	56	4	☐
3.50 - 4.00	20.0	3.0	56	4	☐
4.10 - 4.40	22.0	3.5	63	6	☐
4.50 - 5.40	22.0	4.0	63	6	☐
5.50 - 6.50	22.0	5.0	63	6	☐

See details of positions in the price list and on the website

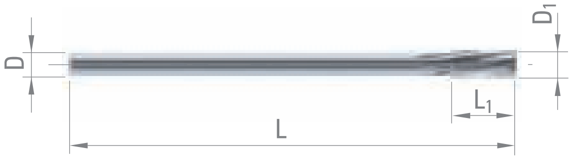
POLY 4007

HELICAL REAMERS, LEFT-HAND SPIRAL RIGHT-HAND CUTTING, IRREGULAR TEETH

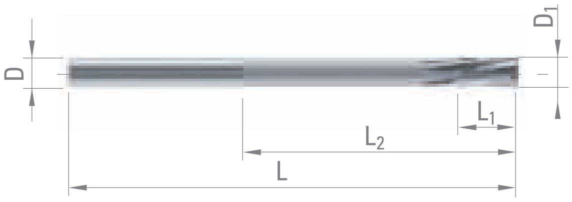
P. 282

> Ø 2.98

Ref. A



Ref. B



Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Al
Plastic

D_1 0/+0.003	L_1	L_2	D_{h6}	L	Z	Ref.	CARBIDE
0.39 - 0.50	3.0	5	3.0	38	3	B	☐
0.51 - 0.60	4.0	6	3.0	38	3	B	☐
0.61 - 0.70	4.0	7	3.0	38	3	B	☐
0.71 - 0.80	4.0	8	3.0	38	3	B	☐
0.81 - 0.90	5.0	9	3.0	38	3	B	☐
0.91 - 1.00	5.0	10	3.0	38	3	B	☐
1.01 - 1.09	5.0	11	3.0	38	3	B	☐
1.10 - 1.20	5.0	12	3.0	38	3	B	☐
1.21 - 1.40	6.0	13	3.0	38	3	B	☐
1.41 - 1.50	7.0	15	3.0	38	3	B	☐
1.51 - 1.60	7.0	15	3.0	50	3	B	☐
1.61 - 1.70	7.0	16	3.0	50	3	B	☐
1.71 - 1.80	7.0	17	3.0	50	3	B	☐
1.81 - 1.90	8.0	17	3.0	50	3	B	☐
1.91 - 2.30	8.0	18	3.0	50	3	B	☐
2.31 - 2.50	10.0	20	3.0	50	3	B	☐
2.51 - 2.60	10.0	20	3.0	61	4	B	☐
2.61 - 2.97	10.0	25	3.0	61	4	B	☐
2.98 - 3.02	10.0	25	3.0	65	4	B	☐
3.03 - 3.52	10.0	-	3.0	70	4	A	☐
3.53 - 4.02	10.0	-	3.5	75	4	A	☐
4.03 - 4.52	12.0	-	4.0	80	6	A	☐
4.53 - 5.03	12.0	-	4.5	86	6	A	☐
5.04 - 5.75	12.0	-	5.0	93	6	A	☐
5.76 - 6.00	12.0	57	6.0	93	6	B	☐
6.01 - 6.77	14.0	63	6.0	101	6	B	☐
6.78 - 7.30	16.0	69	7.0	109	6	B	☐
7.31 - 7.50	16.0	69	8.0	109	6	B	☐
7.51 - 8.52	16.0	75	8.0	117	6	B	☐
8.53 - 9.52	19.0	81	9.0	125	6	B	☐
9.53 -10.60	19.0	87	10.0	133	6	B	☐
10.61 -11.80	19.0	96	10.0	142	6	B	☐
11.81 -12.02	19.0	105	10.0	151	6	B	☐

See details of positions in the price list and on the website

POLY 4001 - POLY 4005 - POLY 4007

CUTTING CONDITIONS

	Materials to be machined		CARBIDE Vc [m/min]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	14 **16** 20
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	12 **14** 16
P	Lead alloyed cutting steel		25 **50** 70
P	High alloyed steel	700 – 1500 N/mm²	8 **10** 12
M	Stainless steel	400 – 700 N/mm²	10 **12** 16
M	DUPLEX stainless steel	> 800 N/mm²	8 **10** 12
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	20 **30** 40
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	12 **18** 24
K	Nodular ferritic cast iron / Malleable cast iron		14 **20** 32
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	8 **10** 12
S	Titanium, titanium alloys		10 **12** 16
N	Copper alloys - easy to machine (brass - bronze)		20 **30** 40
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	16 **24** 30
N	Aluminium alloys	Si < 8%	20 **40** 60
N	Cast aluminium	Si > 8%	20 **36** 50
N	Plastic		20 **40** 60
N	Plastic with fibres		10 **20** 30
N	Gold, silver		20 **30** 40

$$n\ [\text{tr/min}] = \frac{Vc\ [\text{m/min}] \times 1000}{\pi \times D_1\ [\text{mm}]}$$

$$Vf\ [\text{mm/min}] = n\ [\text{tr/min}] \times f\ [\text{mm}]$$

Feed per revolution **f [mm]**

Ø D_1 < 2.00	Ø D_1 2.00 - 4.03	Ø D_1 4.03 - 7.51	Ø D_1 7.51 - 12.02	
0.05	0.10	0.30	0.40	
0.15	**0.20**	**0.50**	**0.60**	
0.20	0.30	0.70	0.80	
0.05	0.10	0.25	0.30	
0.15	**0.20**	**0.40**	**0.50**	
0.20	0.30	0.65	0.70	
0.05	0.20	0.40	0.60	
0.15	**0.40**	**0.60**	**0.80**	
0.20	0.50	0.80	1.00	
0.05	0.10	0.20	0.30	
0.15	**0.15**	**0.30**	**0.40**	
0.20	0.25	0.40	0.50	
0.05	0.10	0.20	0.30	
0.15	**0.15**	**0.30**	**0.40**	
0.20	0.20	0.40	0.50	
0.05	0.10	0.20	0.30	
0.15	**0.15**	**0.30**	**0.40**	
0.20	0.25	0.40	0.50	
0.05	0.10	0.40	0.60	
0.15	**0.15**	**0.50**	**0.70**	
0.20	0.25	0.60	0.80	
0.05	0.10	0.30	0.40	
0.15	**0.15**	**0.40**	**0.50**	
0.20	0.20	0.50	0.60	
0.05	0.10	0.30	0.40	
0.15	**0.20**	**0.40**	**0.50**	
0.20	0.30	0.50	0.60	
0.05	0.10	0.20	0.30	
0.15	**0.15**	**0.30**	**0.40**	
0.20	0.20	0.40	0.50	
0.05	0.10	0.20	0.30	
0.15	**0.15**	**0.30**	**0.40**	
0.20	0.20	0.40	0.50	
0.05	0.10	0.30	0.40	
0.15	**0.20**	**0.40**	**0.50**	
0.20	0.30	0.50	0.60	
0.05	0.10	0.30	0.40	
0.15	**0.20**	**0.40**	**0.50**	
0.20	0.30	0.50	0.60	
0.05	0.10	0.40	0.60	
0.20	**0.25**	**0.60**	**0.80**	
0.30	0.40	0.80	1.00	
0.05	0.10	0.40	0.60	
0.20	**0.25**	**0.60**	**0.80**	
0.30	0.40	0.80	1.00	
0.05	0.10	0.40	0.50	
0.20	**0.25**	**0.50**	**0.60**	
0.30	0.40	0.60	0.70	
0.05	0.10	0.30	0.40	
0.20	**0.25**	**0.40**	**0.50**	
0.30	0.40	0.50	0.60	
0.05	0.10	0.40	0.60	
0.15	**0.20**	**0.60**	**0.80**	
0.20	0.30	0.80	1.00	

0.05	0.10	0.10	0.10	
0.10	**0.15**	**0.15**	**0.15**	Reaming allowance Ø [mm]
0.15	0.20	0.20	0.20	

DIXI 2577 - DIXI 2579 - DIXI 2580 - DIXI 2581

CUTTING CONDITIONS

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Materials to be machined			Stationary tool Vc [m/min]	Rotating tool Vc [m/min]	Feed f [mm/tr]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**100** - 150	**70** - 120	**0.05** - 0.15
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**70** - 120	**50** - 90	**0.04** - 0.10
P	Lead alloyed cutting steel		**120** - 160	**90** - 130	**0.05** - 0.15
P	High alloyed steel	700 – 1500 N/mm²	**30** - 70	**20** - 50	**0.03** - 0.10
M	Stainless steel	400 – 700 N/mm²	**60** - 80	**40** - 60	**0.04** - 0.10
M	DUPLEX stainless steel	> 800 N/mm²	**30** - 70	**20** - 50	**0.03** - 0.10
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**60** - 150	**40** - 120	**0.05** - 0.15
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**20** - 80	**15** - 50	**0.04** - 0.10
K	Nodular ferritic cast iron / Malleable cast iron		**30** - 90	**20** - 60	**0.03** - 0.10
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**10** - 20	**8** - 15	**0.03** - 0.10
S	Titanium, titanium alloys		**15** - 30	**10** - 25	**0.03** - 0.10
N	Copper alloys - easy to machine (brass - bronze)		**150** - 250	**120** - 180	**0.08** - 0.20
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120** - 160	**100** - 140	**0.04** - 0.10
N	Aluminium alloys	Si < 8%	**200** - 400	**150** - 300	**0.05** - 0.15
N	Cast aluminium	Si > 8%	**180** - 350	**150** - 250	**0.05** - 0.155
N	Plastic		**200** - 300	**150** - 250	**0.10** - 0.30
N	Gold, silver		**150** - 250	**120** - 180	**0.08** - 0.20

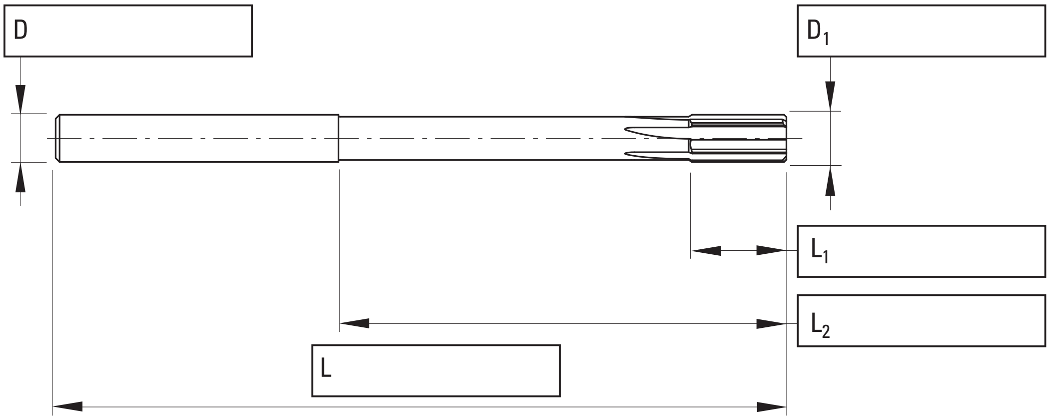
POLY 4001 SP

Z = ☐

Quantity

Dimension and tolerance of the hole to be machined

Material to be machined



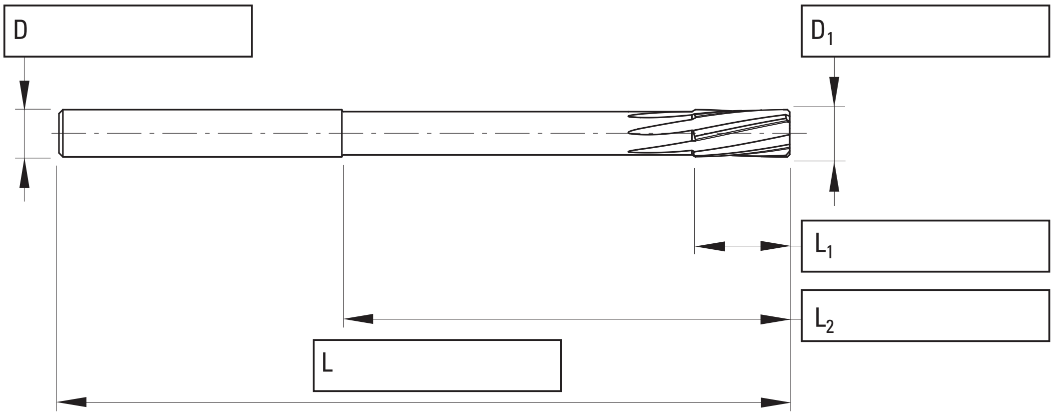
POLY 4007 SP

Z = ☐

Quantity

Dimension and tolerance of the hole to be machined

Material to be machined



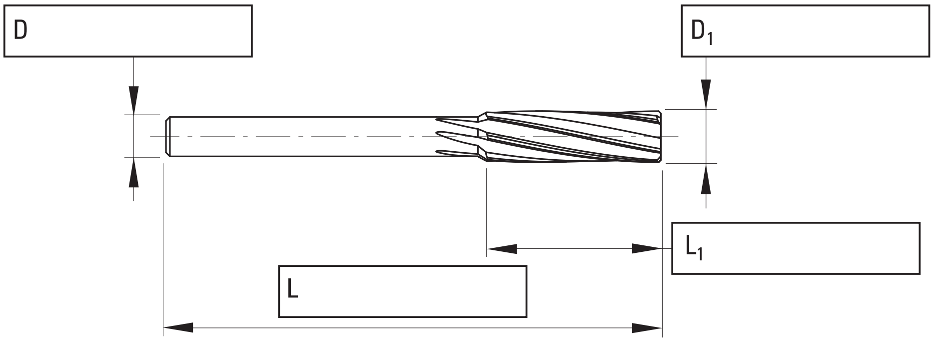
POLY 4005 SP

Z = ☐

Quantity

Dimension and tolerance of the hole to be machined

Material to be machined

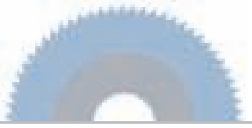
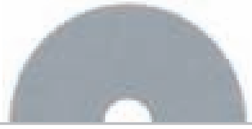
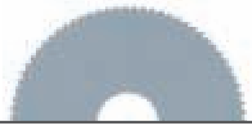
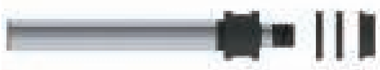
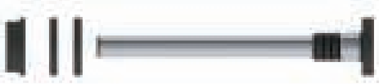



50x0,8x ϕ1
Z=160

SLITTING

SELECTION OF SLITTING SAWS

✓ = item from stock

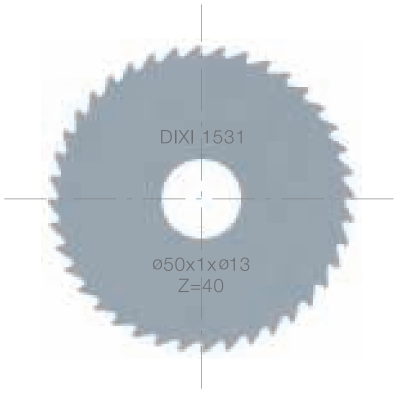
SLITTING SAWS		Page		☐ CARBIDE	🟧 CUTINOX			
DIXI 1531 Ø 15 - 125 		216	● ● ISO NORM 2296 DIN 1840 A	✓				
DIXI 1533 Ø 15 - 160 		219	● ● DIN 1837 DIN 1840 A	✓				
DIXI 1534 Ø 20 - 125 		223	● ● DIN 1838 DIN 1840 B	✓				
DIXI 1537 Ø 50 - 100 		225	● ●		✓			
DIXI 1539 Ø 10 - 50 		226	●	✓				
DIXI 1640 Ø 50 - 100 		230	●	✓				
MILLING ARBORS								
DIXI 2713 Ø 5 - 16 		232						
DIXI 2714 Ø 5 - 16 		233						

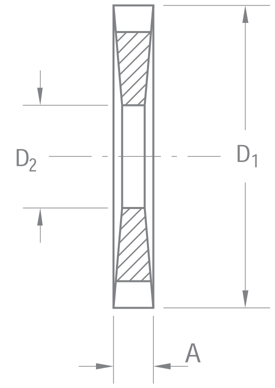
○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
◎	◎	◎	○		◎	◎	◎	○	○	○		○
○	○	○	○		◎	○	○	○	○	○		○
○	○	○	◎		○	○	○	◎	◎	◎		◎
○	○	◎	◎			◎	◎	○	○	○		○
○	○	○	○		◎	○	○	○	○			
○	○	○	○		◎	○	○	◎	○	○		○

DIXI 1531

SLITTING SAWS
COARSE PITCH TEETH





P. 234

ISO 2296

DIN 1840A

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Alu
Plastic

$D_{1\ js12}$	$A_{\pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE
15	0.20	5	32	☐
15	0.30	5	24	☐
15	0.40	5	24	☐
15	0.50	5	24	☐
15	0.60	5	20	☐
15	0.70	5	20	☐
15	0.80	5	20	☐
15	0.90	5	20	☐
15	1.00	5	20	☐
15	1.20	5	16	☐
15	1.50	5	16	☐
15	1.60	5	16	☐
15	1.80	5	16	☐
15	2.00	5	16	☐
20	0.20	5	40	☐
20	0.30	5	32	☐
20	0.40	5	32	☐
20	0.50	5	24	☐
20	0.60	5	24	☐
20	0.70	5	24	☐
20	0.80	5	24	☐
20	0.90	5	24	☐
20	1.00	5	20	☐
20	1.20	5	20	☐
20	1.50	5	20	☐
20	1.60	5	20	☐
20	1.80	5	20	☐
20	2.00	5	16	☐
20	2.50	5	16	☐
25	0.30	8	40	☐
25	0.40	8	32	☐
25	0.50	8	32	☐
25	0.60	8	32	☐
25	0.70	8	32	☐
25	0.80	8	24	☐
25	1.00	8	24	☐
25	1.20	8	24	☐

DIXI 1531

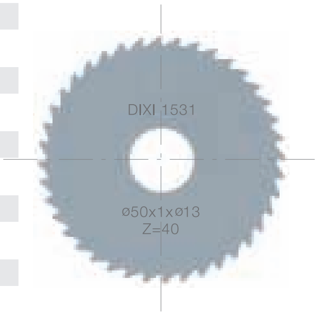
$D_{1\ js12}$	$A_{\ \pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE
25	1.50	8	20	☐
25	1.60	8	20	☐
25	2.00	8	20	☐
25	2.50	8	20	☐
25	3.00	8	16	☐
30	0.30	8	40	☐
30	0.40	8	40	☐
30	0.50	8	40	☐
30	0.60	8	32	☐
30	0.70	8	32	☐
30	0.80	8	32	☐
30	0.90	8	32	☐
30	1.00	8	32	☐
30	1.20	8	24	☐
30	1.50	8	24	☐
30	1.60	8	24	☐
30	1.80	8	24	☐
30	2.00	8	24	☐
30	2.50	8	20	☐
30	3.00	8	20	☐
30	4.00	8	20	☐
30	5.00	8	16	☐
40	0.40	10	48	☐
40	0.50	10	40	☐
40	0.60	10	40	☐
40	0.70	10	40	☐
40	0.80	10	40	☐
40	0.90	10	40	☐
40	1.00	10	32	☐
40	1.20	10	32	☐
40	1.50	10	32	☐
40	1.60	10	32	☐
40	1.80	10	32	☐
40	2.00	10	24	☐
40	2.50	10	24	☐
40	3.00	10	24	☐
40	4.00	10	20	☐
40	5.00	10	20	☐
50	0.40	13	48	☐
50	0.50	13	48	☐
50	0.60	13	48	☐
50	0.70	13	48	☐
50	0.80	13	40	☐
50	0.90	13	40	☐
50	1.00	13	40	☐
50	1.20	13	40	☐
50	1.40	13	40	☐
50	1.50	13	32	☐
50	1.60	13	32	☐
50	1.80	13	32	☐
50	2.00	13	32	☐
50	2.50	13	32	☐
50	3.00	13	24	☐
50	4.00	13	24	☐
50	5.00	13	24	☐

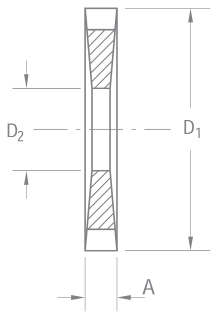
P. 234

ISO 2296

DIN 1840 A

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Alu
Plastic				





DIXI 1531

$D_{1\ js12}$	A $_{\pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE
63	0.80	16	48	☐
63	1.00	16	48	☐
63	1.20	16	40	☐
63	1.50	16	40	☐
63	1.60	16	40	☐
63	1.80	16	40	☐
63	2.00	16	40	☐
63	2.50	16	32	☐
63	3.00	16	32	☐
63	4.00	16	32	☐
63	5.00	16	24	☐
80	0.80	22	64	☐
80	1.00	22	48	☐
80	1.20	22	48	☐
80	1.50	22	48	☐
80	1.60	22	48	☐
80	1.80	22	48	☐
80	2.00	22	40	☐
80	2.50	22	40	☐
80	3.00	22	40	☐
80	4.00	22	32	☐
80	5.00	22	32	☐
100	1.00	22	64	☐
100	1.20	22	64	☐
100	1.50	22	48	☐
100	1.60	22	48	☐
100	1.80	22	48	☐
100	2.00	22	48	☐
100	2.50	22	48	☐
100	3.00	22	40	☐
100	4.00	22	40	☐
125	1.00	22	80	☐
125	1.20	22	64	☐
125	1.50	22	64	☐
125	2.00	22	64	☐

P. 234

ISO 2296

DIN 1840 A

Steel < 600MPa

Steel > 600MPa

High alloyed steel

DUPLEX stainless steel

Cast iron

Refractory alloy

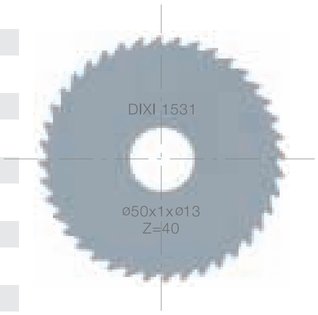
Titanium, titanium alloy

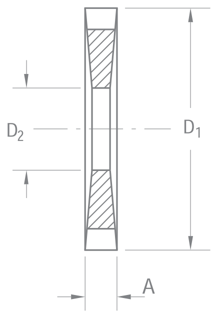
Cu alloy Silver Gold

Cu alloy difficult to machine

Alu

Plastic





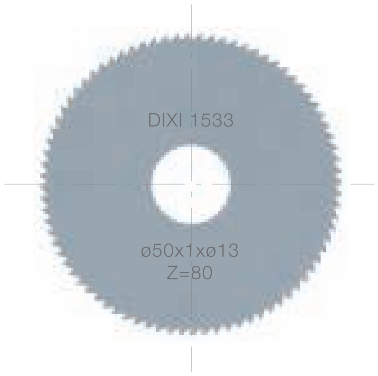
DIXI 1533

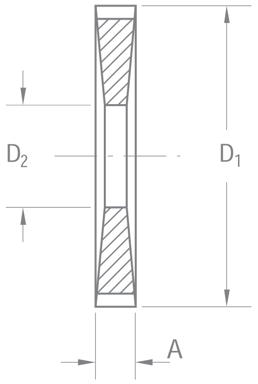
SLITTING SAWS
FINE PITCH TEETH

P. 234

DIN 1837

DIN 1840A





Steel < 600MPa

Steel > 600MPa

High alloyed steel

DUPLEX stainless steel

Cast iron

Refractory alloy

Titanium, titanium alloy

Cu alloy Silver Gold

Cu alloy difficult to machine

Alu

Plastic

$D_{1\ js12}$	A $_{\pm0.01}$	$D_{2\ H6}$	Z	CARBIDE
15	0.20	5	64	☐
15	0.25	5	64	☐
15	0.30	5	48	☐
15	0.40	5	48	☐
15	0.50	5	48	☐
15	0.60	5	40	☐
15	0.70	5	40	☐
15	0.80	5	40	☐
15	0.90	5	40	☐
15	1.00	5	40	☐
15	1.10	5	32	☐
15	1.20	5	32	☐
15	1.50	5	32	☐
15	1.60	5	32	☐
15	1.70	5	32	☐
15	1.80	5	32	☐
15	2.00	5	32	☐
20	0.20	5	80	☐
20	0.25	5	64	☐
20	0.30	5	64	☐
20	0.40	5	64	☐
20	0.50	5	48	☐
20	0.60	5	48	☐
20	0.70	5	48	☐
20	0.80	5	48	☐
20	0.90	5	48	☐
20	1.00	5	40	☐
20	1.10	5	40	☐
20	1.20	5	40	☐
20	1.30	5	40	☐
20	1.40	5	40	☐
20	1.50	5	40	☐
20	1.60	5	40	☐
20	1.80	5	40	☐
20	2.00	5	32	☐
20	2.50	5	32	☐
20	3.00	5	32	☐

DIXI 1533

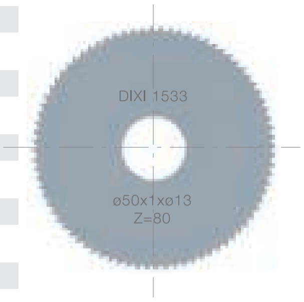
$D_{1\ js12}$	$A_{\pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE
25	0.20	8	80	☐
25	0.25	8	80	☐
25	0.30	8	80	☐
25	0.35	8	80	☐
25	0.40	8	64	☐
25	0.50	8	64	☐
25	0.60	8	64	☐
25	0.70	8	64	☐
25	0.80	8	48	☐
25	0.90	8	48	☐
25	1.00	8	48	☐
25	1.10	8	48	☐
25	1.20	8	48	☐
25	1.30	8	48	☐
25	1.40	8	48	☐
25	1.50	8	40	☐
25	1.80	8	40	☐
25	2.00	8	40	☐
25	2.50	8	40	☐
25	3.00	8	32	☐
25	4.00	8	32	☐
30	0.20	8	100	☐
30	0.25	8	100	☐
30	0.30	8	80	☐
30	0.40	8	80	☐
30	0.50	8	80	☐
30	0.60	8	64	☐
30	0.70	8	64	☐
30	0.80	8	64	☐
30	0.90	8	64	☐
30	1.00	8	64	☐
30	1.10	8	48	☐
30	1.20	8	48	☐
30	1.30	8	48	☐
30	1.40	8	48	☐
30	1.50	8	48	☐
30	1.60	8	48	☐
30	1.70	8	48	☐
30	1.80	8	48	☐
30	2.00	8	48	☐
30	2.50	8	40	☐
30	3.00	8	40	☐
30	4.00	8	40	☐
30	5.00	8	32	☐
40	0.20	10	128	☐
40	0.25	10	100	☐
40	0.30	10	100	☐
40	0.40	10	100	☐
40	0.50	10	80	☐
40	0.60	10	80	☐
40	0.70	10	80	☐
40	0.80	10	80	☐
40	0.90	10	80	☐
40	1.00	10	64	☐
40	1.10	10	64	☐

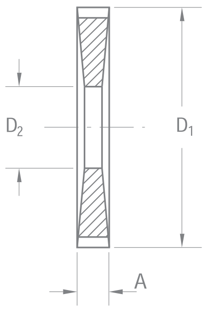
f Vc Ap ? ?
P. 234

DIN 1837

DIN 1840A

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Alu
Plastic				





DIXI 1533

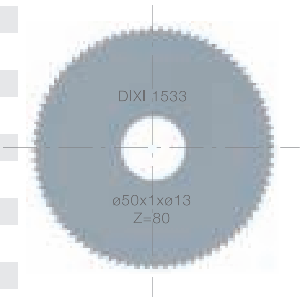
$D_{1\ js12}$	A $_{\pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE
40	1.20	10	64	☐
40	1.30	10	64	☐
40	1.40	10	64	☐
40	1.50	10	64	☐
40	1.60	10	64	☐
40	1.70	10	64	☐
40	1.80	10	64	☐
40	2.00	10	48	☐
40	2.50	10	48	☐
40	3.00	10	48	☐
40	4.00	10	40	☐
40	5.00	10	40	☐
50	0.20	13	128	☐
50	0.25	13	128	☐
50	0.30	13	128	☐
50	0.40	13	100	☐
50	0.50	13	100	☐
50	0.60	13	100	☐
50	0.70	13	100	☐
50	0.80	13	80	☐
50	0.90	13	80	☐
50	1.00	13	80	☐
50	1.10	13	80	☐
50	1.20	13	80	☐
50	1.30	13	80	☐
50	1.40	13	80	☐
50	1.50	13	64	☐
50	1.60	13	64	☐
50	1.70	13	64	☐
50	1.80	13	64	☐
50	2.00	13	64	☐
50	2.50	13	64	☐
50	3.00	13	48	☐
50	4.00	13	48	☐
50	5.00	13	48	☐
63	0.30	16	128	☐
63	0.40	16	128	☐
63	0.50	16	128	☐
63	0.60	16	100	☐
63	0.70	16	100	☐
63	0.80	16	100	☐
63	1.00	16	100	☐
63	1.20	16	80	☐
63	1.40	16	80	☐
63	1.50	16	80	☐
63	1.60	16	80	☐
63	1.70	16	80	☐
63	1.80	16	80	☐
63	2.00	16	80	☐
63	2.50	16	64	☐
63	3.00	16	64	☐
63	4.00	16	64	☐
63	5.00	16	48	☐

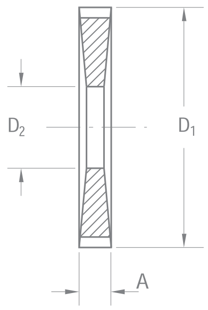
P. 234

DIN 1837

DIN 1840 A

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Alu
Plastic				





DIXI 1533

$D_{1\ js12}$	A $_{\pm0.01}$	$D_{2\ H6}$	Z	CARBIDE
80	0.80	22	128	☐
80	1.00	22	100	☐
80	1.20	22	100	☐
80	1.40	22	100	☐
80	1.50	22	100	☐
80	1.60	22	100	☐
80	1.80	22	100	☐
80	2.00	22	80	☐
80	2.50	22	80	☐
80	3.00	22	80	☐
80	4.00	22	64	☐
80	5.00	22	64	☐
100	0.80	22	128	☐
100	1.00	22	128	☐
100	1.20	22	128	☐
100	1.50	22	100	☐
100	1.60	22	100	☐
100	2.00	22	100	☐
100	2.50	22	100	☐
100	3.00	22	80	☐
100	4.00	22	80	☐
100	5.00	22	80	☐
125	1.00	22	160	☐
125	1.20	22	128	☐
125	1.50	22	128	☐
125	1.80	22	128	☐
125	2.00	22	128	☐
125	3.00	22	100	☐
160	1.20	32	160	☐
160	1.50	32	160	☐

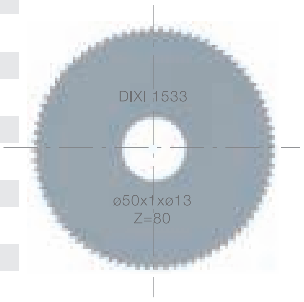
f Vc Ap ? ?

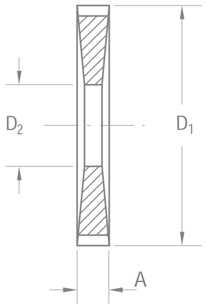
P. 234

DIN 1837

DIN 1840A

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Alu
Plastic				





DIXI 1534

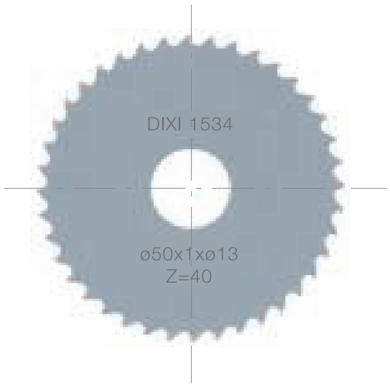
SLITTING SAWS
HELLER PITCH TEETH

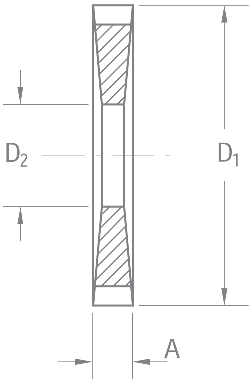
f Vc Ap
P. 234

DIN 1838

DIN 1840A

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine
Alu
Plastic





$D_{1\ js12}$	$A_{\pm0.01}$	$D_{2\ H6}$	Z	CARBIDE
20	0.30	5	32	☐
20	0.50	5	24	☐
20	0.60	5	24	☐
20	0.70	5	24	☐
20	0.80	5	24	☐
20	0.90	5	24	☐
20	1.00	5	20	☐
20	1.20	5	20	☐
20	1.30	5	20	☐
20	1.50	5	20	☐
20	1.80	5	20	☐
20	2.00	5	16	☐
20	3.00	5	16	☐
25	0.30	8	40	☐
25	0.50	8	32	☐
25	0.60	8	32	☐
25	0.80	8	24	☐
25	0.90	8	24	☐
25	1.00	8	24	☐
25	1.20	8	24	☐
25	1.30	8	24	☐
25	1.50	8	20	☐
25	2.00	8	20	☐
25	2.50	8	20	☐
25	3.00	8	16	☐
25	4.00	8	16	☐
30	0.30	8	40	☐
30	0.40	8	40	☐
30	0.50	8	40	☐
30	0.60	8	32	☐
30	0.70	8	32	☐
30	0.80	8	32	☐
30	1.00	8	32	☐
30	1.20	8	24	☐

DIXI 1534

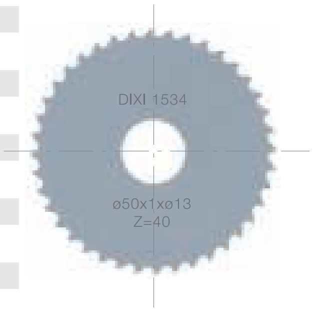
$D_{1\ js12}$	$A_{\pm0.01}$	$D_{2\ H6}$	Z	CARBIDE
30	1.30	8	24	☐
30	1.50	8	24	☐
30	1.60	8	24	☐
30	1.80	8	24	☐
30	2.00	8	24	☐
30	3.00	8	20	☐
30	3.50	8	20	☐
30	4.00	8	20	☐
30	5.00	8	16	☐
40	0.30	10	48	☐
40	0.40	10	48	☐
40	0.50	10	40	☐
40	0.60	10	40	☐
40	0.80	10	40	☐
40	1.00	10	32	☐
40	1.20	10	32	☐
40	1.50	10	32	☐
40	1.80	10	32	☐
40	2.00	10	24	☐
40	2.50	10	24	☐
40	3.00	10	24	☐
40	4.00	10	20	☐
50	0.30	13	64	☐
50	0.40	13	48	☐
50	0.50	13	48	☐
50	0.60	13	48	☐
50	0.70	13	48	☐
50	0.80	13	40	☐
50	0.90	13	40	☐
50	1.00	13	40	☐
50	1.20	13	40	☐
50	1.30	13	40	☐
50	1.50	13	32	☐
50	1.60	13	32	☐
50	1.80	13	32	☐
50	2.00	13	32	☐
50	2.50	13	32	☐
50	3.00	13	24	☐
50	4.00	13	24	☐
50	5.00	13	24	☐
63	0.40	16	64	☐
63	0.50	16	64	☐
63	0.60	16	48	☐
63	0.80	16	48	☐
63	1.00	16	48	☐
63	1.20	16	40	☐
63	1.30	16	40	☐
63	1.50	16	40	☐
63	1.60	16	40	☐
63	1.80	16	40	☐
63	2.00	16	40	☐
63	2.50	16	32	☐
63	3.00	16	32	☐
63	3.50	16	32	☐
63	4.00	16	32	☐
63	5.00	16	32	☐

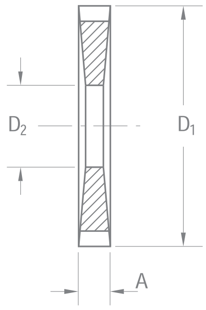
P. 234

DIN 1838

DIN 1840A

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Alu
Plastic				





DIXI 1534

$D_{1\ js12}$	A $_{\pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE
80	0.80	22	64	☐
80	1.00	22	48	☐
80	1.20	22	48	☐
80	1.50	22	48	☐
80	1.60	22	48	☐
80	2.00	22	40	☐
80	3.00	22	40	☐
100	0.80	22	64	☐
100	1.00	22	64	☐
100	1.20	22	64	☐
100	1.50	22	48	☐
100	1.60	22	48	☐
100	2.00	22	48	☐
100	3.00	22	40	☐
100	4.00	22	40	☐
125	1.50	22	64	☐
125	2.00	22	64	☐

f Vc Ap P. 234

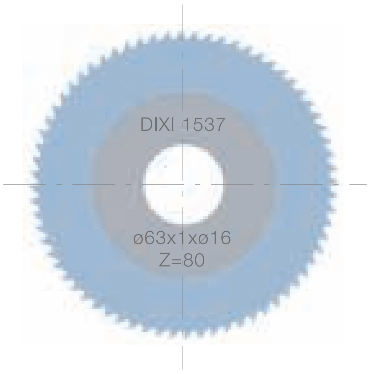
DIN 1838

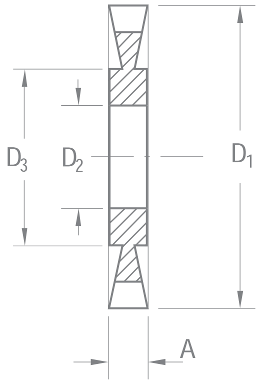
DIN 1840A

- Steel < 600MPa
- Steel > 600MPa
- High alloyed steel
- DUPLEX stainless steel
- Cast iron
- Refractory alloy
- Titanium, titanium alloy
- Cu alloy Silver Gold
- Cu alloy difficult to machine
- Alu
- Plastic

DIXI 1537 CUTINOX

SLITTING SAWS
FOR STAINLESS STEEL





f Vc Ap P. 236

- High alloyed steel
- DUPLEX stainless steel

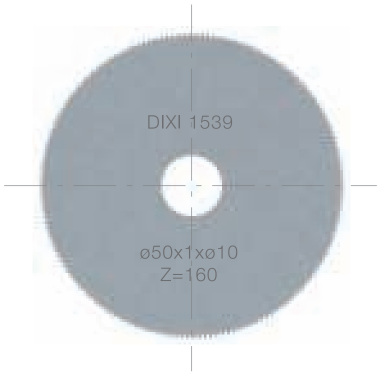
$D_{1\ js12}$	A $_{\pm 0.01}$	D_3	$D_{2\ H6}$	Z	CUTINOX
50	0.80	30	13	68	🟧
50	1.00	30	13	68	🟧
63	0.60	40	16	80	🟧
63	0.80	40	16	80	🟧
63	1.00	40	16	80	🟧
80	0.60	50	22	100	🟧
80	0.80	50	22	100	🟧
80	1.00	50	22	100	🟧
100	0.80	60	22	120	🟧
100	1.00	60	22	120	🟧

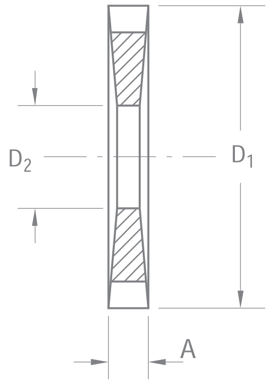
DIXI 1539

SLITTING SAWS
EXTRA FINE TEETH

P. 236

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine





$D_{1\ \pm0.03}$	$A_{\ \pm0.005}$	$D_{2\ H6}$	Z	CARBIDE
10	0.10	3	60	☐
10	0.11	3	60	☐
10	0.12	3	60	☐
10	0.13	3	60	☐
10	0.14	3	60	☐
10	0.15	3	60	☐
10	0.16	3	60	☐
10	0.17	3	60	☐
10	0.18	3	60	☐
10	0.19	3	60	☐
10	0.20	3	60	☐
10	0.22	3	60	☐
10	0.24	3	60	☐
15	0.10	5	80	☐
15	0.12	5	80	☐
15	0.13	5	80	☐
15	0.14	5	80	☐
15	0.15	5	80	☐
15	0.16	5	80	☐
15	0.17	5	80	☐
15	0.18	5	80	☐
15	0.20	5	80	☐
15	0.21	5	80	☐
15	0.25	5	80	☐
15	0.30	5	80	☐
15	0.35	5	80	☐
15	0.40	5	80	☐
15	0.50	5	80	☐
15	0.60	5	80	☐
15	0.70	5	80	☐
15	0.80	5	80	☐
15	0.90	5	80	☐
15	1.00	5	80	☐
15	1.10	5	80	☐
15	1.20	5	80	☐
15	1.40	5	80	☐
15	1.50	5	80	☐
20	0.12	5	100	☐
20	0.14	5	100	☐
20	0.15	5	100	☐
20	0.16	5	100	☐
20	0.18	5	100	☐

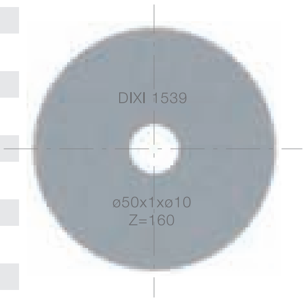
DIXI 1539

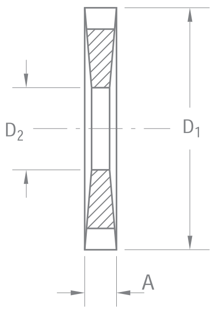
D_1 ±0.03	A ±0.005	D_2 H6	Z	CARBIDE
20	0.20	5	100	☐
20	0.25	5	100	☐
20	0.30	5	100	☐
20	0.35	5	100	☐
20	0.40	5	100	☐
20	0.50	5	100	☐
20	0.60	5	100	☐
20	0.70	5	100	☐
20	0.80	5	100	☐
20	0.90	5	100	☐
20	1.00	5	100	☐
20	1.10	5	100	☐
20	1.20	5	100	☐
20	1.40	5	100	☐
20	1.50	5	100	☐
20	0.12	6	100	☐
20	0.14	6	100	☐
20	0.16	6	100	☐
20	0.18	6	100	☐
20	0.20	6	100	☐
20	0.25	6	100	☐
20	0.30	6	100	☐
20	0.35	6	100	☐
20	0.40	6	100	☐
20	0.50	6	100	☐
20	0.60	6	100	☐
20	0.70	6	100	☐
20	0.80	6	100	☐
20	0.90	6	100	☐
20	1.00	6	100	☐
20	1.10	6	100	☐
20	1.20	6	100	☐
20	1.40	6	100	☐
20	1.50	6	100	☐

D_1 js10	A ±0.01	D_2 H6	Z	
25	0.20	6	120	☐
25	0.25	6	120	☐
25	0.30	6	120	☐
25	0.35	6	120	☐
25	0.40	6	120	☐
25	0.50	6	120	☐
25	0.60	6	120	☐
25	0.70	6	120	☐
25	0.80	6	120	☐
25	0.90	6	120	☐
25	1.00	6	120	☐
25	1.10	6	120	☐
25	1.20	6	120	☐
25	1.40	6	120	☐
25	1.50	6	120	☐
25	0.20	8	120	☐
25	0.25	8	120	☐
25	0.30	8	120	☐
25	0.35	8	120	☐
25	0.40	8	120	☐
25	0.50	8	120	☐
25	0.60	8	120	☐

P. 236

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	



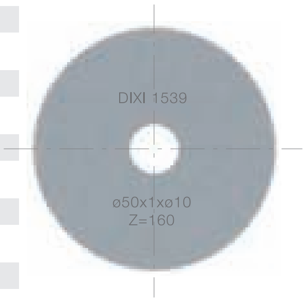


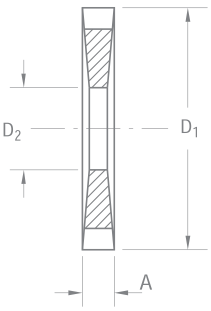
DIXI 1539

$D_{1\ js10}$	$A_{\pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE
25	0.70	8	120	☐
25	0.80	8	120	☐
25	0.90	8	120	☐
25	1.00	8	120	☐
25	1.10	8	120	☐
25	1.20	8	120	☐
25	1.40	8	120	☐
25	1.50	8	120	☐
30	0.30	8	128	☐
30	0.35	8	128	☐
30	0.40	8	128	☐
30	0.50	8	128	☐
30	0.60	8	128	☐
30	0.70	8	128	☐
30	0.80	8	128	☐
30	0.90	8	128	☐
30	1.00	8	128	☐
30	1.10	8	128	☐
30	1.20	8	128	☐
30	1.40	8	128	☐
30	1.50	8	128	☐
40	0.30	8	160	☐
40	0.35	8	160	☐
40	0.40	8	160	☐
40	0.50	8	160	☐
40	0.60	8	160	☐
40	0.70	8	160	☐
40	0.80	8	160	☐
40	0.90	8	160	☐
40	1.00	8	160	☐
40	1.10	8	160	☐
40	1.20	8	160	☐
40	1.40	8	160	☐
40	1.50	8	160	☐
40	0.30	10	160	☐
40	0.35	10	160	☐
40	0.40	10	160	☐
40	0.50	10	160	☐
40	0.60	10	160	☐
40	0.70	10	160	☐
40	0.80	10	160	☐
40	0.90	10	160	☐
40	1.00	10	160	☐
40	1.10	10	160	☐
40	1.20	10	160	☐
40	1.40	10	160	☐
40	1.50	10	160	☐
45	0.35	8	128	☐
45	0.40	8	128	☐
45	1.10	8	160	☐
45	1.20	8	160	☐

P. 236

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	



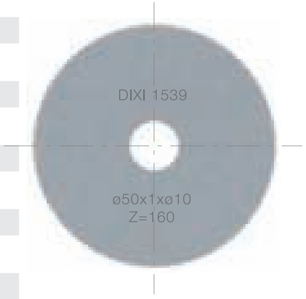


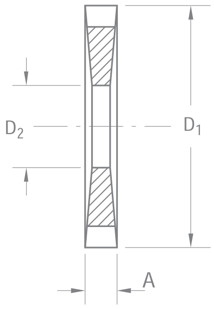
DIXI 1539

P. 236

Steel < 600MPa
Steel > 600MPa
High alloyed steel
DUPLEX stainless steel
Cast iron
Refractory alloy
Titanium, titanium alloy
Cu alloy Silver Gold
Cu alloy difficult to machine

$D_{1\ js10}$	A $_{\pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE
50	0.30	10	160	☐
50	0.35	10	160	☐
50	0.40	10	160	☐
50	0.50	10	160	☐
50	0.60	10	160	☐
50	0.70	10	160	☐
50	0.80	10	160	☐
50	0.90	10	160	☐
50	1.00	10	160	☐
50	1.10	10	160	☐
50	1.20	10	160	☐
50	1.50	10	160	☐



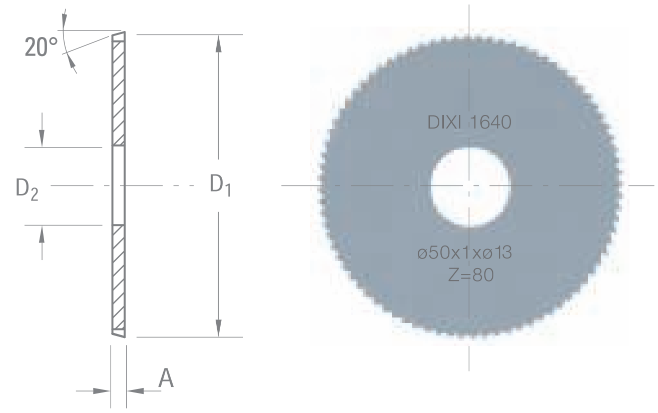


DIXI 1640 R + L

PARTING OFF SLITTING SAWS
LEFT AND RIGHT HAND CUTTING

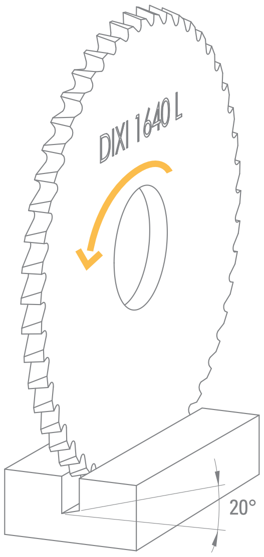
P. 234

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Alu
Plastic				



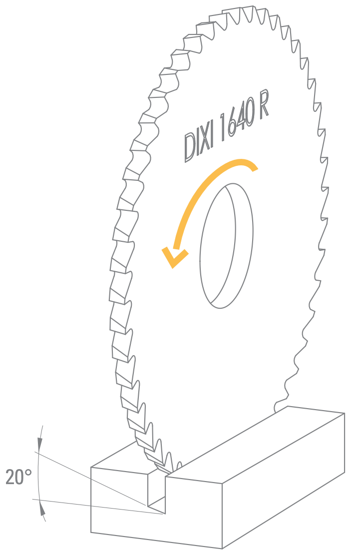
DIXI 1640 L

$D_{1\ js12.}$	$A_{\pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE	CUTINOX
50	0.50	13	100	☐	🟧
50	0.80	13	80	☐	🟧
50	1.00	13	80	☐	🟧
63	0.50	16	128	☐	🟧
63	0.80	16	100	☐	🟧
63	1.00	16	100	☐	🟧
80	0.80	22	128	☐	🟧
80	1.00	22	100	☐	🟧
100	0.80	22	100	☐	🟧
100	1.00	22	100	☐	🟧



DIXI 1640 R

$D_{1\ js12.}$	$A_{\pm 0.01}$	$D_{2\ H6}$	Z	CARBIDE	CUTINOX
50	0.50	13	100	☐	🟧
50	0.80	13	80	☐	🟧
50	1.00	13	80	☐	🟧
63	0.50	16	128	☐	🟧
63	0.80	16	100	☐	🟧
63	1.00	16	100	☐	🟧
80	0.80	22	128	☐	🟧
80	1.00	22	100	☐	🟧
100	0.80	22	100	☐	🟧
100	1.00	22	100	☐	🟧

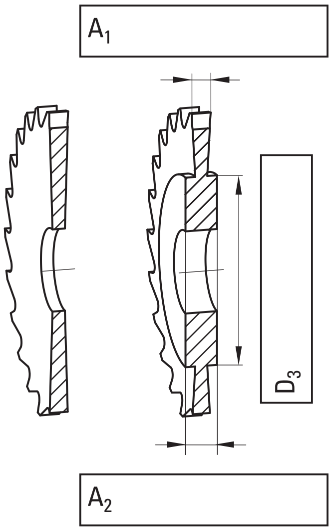


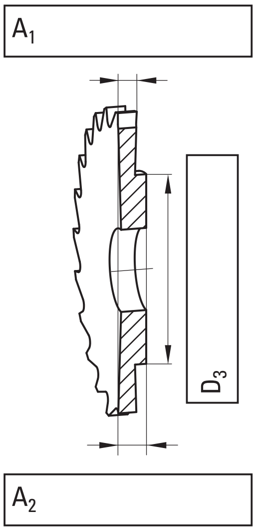
TOOLS ON REQUEST

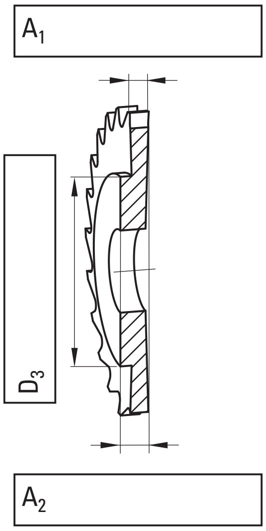
Z = ☐

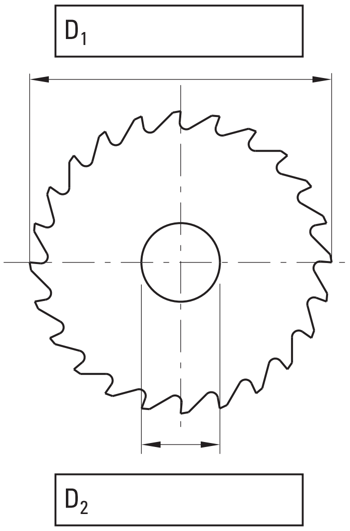
Quantity

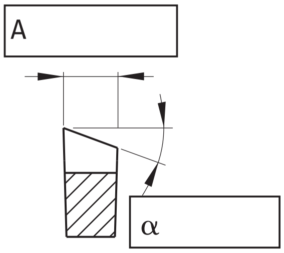
Material to be machined

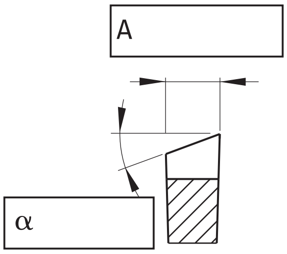


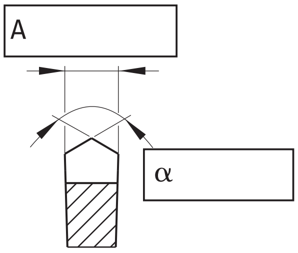


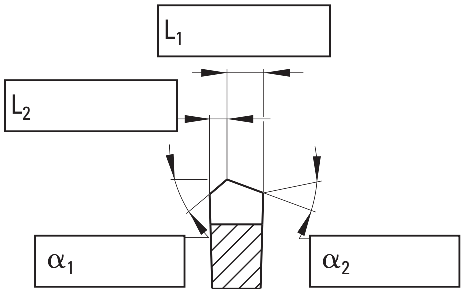


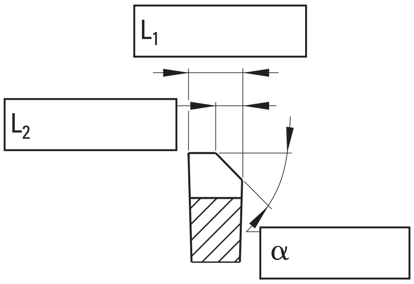


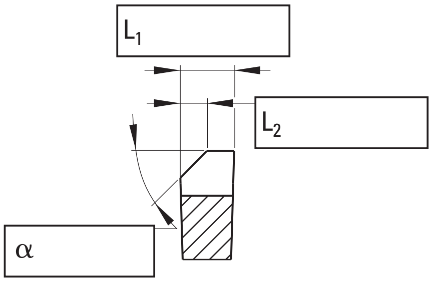


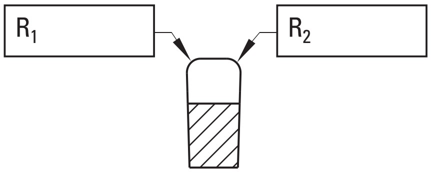


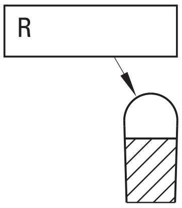


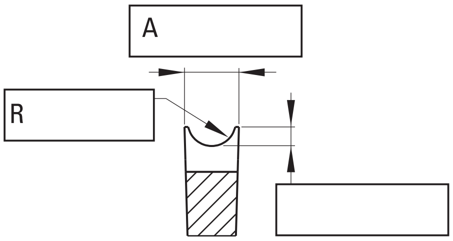








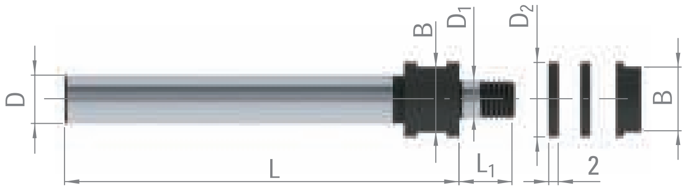


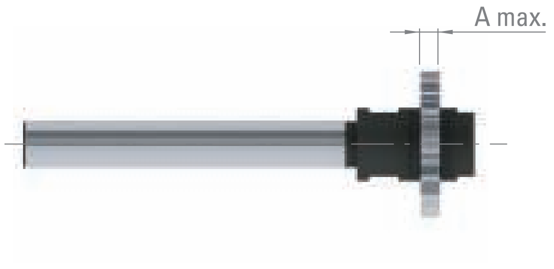


DIXI 2713

MILLING ARBORS
WITH FRONT CLAMPING

Ref.	$D_{1\ h6}$	D_{h6}	D_2	L	L_1	B	A
DIXI 2713 - 3 - 5	3.00	5	5	60	7.0	4	3
DIXI 2713 - 5 - 6	5.00	6	10	70	10.0	8	6
DIXI 2713 - 5 - 10	5.00	10	10	80	10.0	8	6
DIXI 2713 - 6 - 10	6.00	10	12	80	10.5	10	6
DIXI 2713 - 8 - 10	8.00	10	15	80	10.0	13	6
DIXI 2713 - 8 - 12	8.00	12	15	90	11.0	13	6
DIXI 2713 - 10 - 10	10.00	10	18	80	10.5	15	6
DIXI 2713 - 10 - 16	10.00	16	18	100	11.5	15	6
DIXI 2713 - 13 - 16	13.00	16	22	110	12.0	19	6
DIXI 2713 - 16 - 20	16.00	20	26	120	13.0	22	6

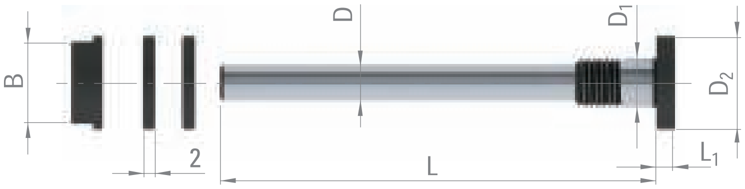


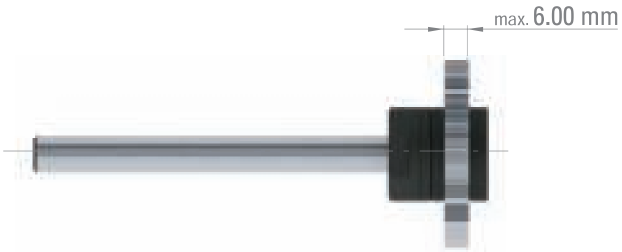


DIXI 2714

MILLING ARBORS
WITH REAR CLAMPING

Ref.	$D_{1\ h6}$	D_{h6}	D_2	L	L_1	B
DIXI 2714 - 5 - 4	5.00	4	10	50	3.0	8
DIXI 2714 - 6 - 5	6.00	5	12	60	3.0	10
DIXI 2714 - 8 - 6	8.00	6	15	70	3.0	13
DIXI 2714 - 8 - 7	8.00	7	15	80	3.0	13
DIXI 2714 - 10 - 6	10.00	6	18	70	3.5	15
DIXI 2714 - 10 - 8	10.00	8	18	90	3.5	15
DIXI 2714 - 13 - 10	13.00	10	22	110	3.5	19
DIXI 2714 - 16 - 12	16.00	12	26	120	3.5	22





DIXI 1531 - 1533 - 1534 - 1640

CUTTING CONDITIONS

	Material to be machined		CARBIDE Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**80**	140
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2	**50**	80
P	Lead alloyed cutting steel		**120**	160
P	High alloyed steel	700 – 1500 N/mm^2	**50**	80
M	Stainless steel	400 – 700 N/mm^2	**80**	120
M	DUPLEX stainless steel	> 800 N/mm^2	**50**	80
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**80**	140
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**50**	80
K	Nodular ferritic cast iron / Malleable cast iron		**50**	80
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**20**	30
S	Titanium, titanium alloys		**30**	70
N	Copper alloys - easy to machine (brass - bronze)		**200**	450
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**150**	300
N	Aluminium alloys	Si < 8%	**200**	500
N	Cast aluminium	Si > 8%	**200**	450
N	Plastic		**130**	200
N	Gold, silver		**140**	180

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times z$$

Feed per tooth fz [mm]

Ø D_1 15 - 30	Ø D_1 30 - 50	Ø D_1 50 - 80	Ø D_1 80 - 125	Ø D_1 125 - 160
0.002 - 0.004	**0.003** - 0.007	**0.004** - 0.008	**0.004** - 0.012	**0.004** - 0.012
0.001 - 0.004	**0.002** - 0.005	**0.002** - 0.008	**0.003** - 0.012	**0.003** - 0.012
0.003 - 0.007	**0.004** - 0.008	**0.005** - 0.010	**0.005** - 0.010	**0.005** - 0.012
0.001 - 0.004	**0.002** - 0.005	**0.002** - 0.008	**0.003** - 0.012	**0.003** - 0.012
0.001 - 0.004	**0.002** - 0.005	**0.002** - 0.008	**0.003** - 0.012	**0.003** - 0.012
0.001 - 0.004	**0.002** - 0.005	**0.002** - 0.008	**0.003** - 0.012	**0.003** - 0.012
0.002 - 0.004	**0.003** - 0.007	**0.004** - 0.01	**0.004** - 0.01	**0.004** - 0.01
0.001 - 0.004	**0.002** - 0.005	**0.002** - 0.008	**0.003** - 0.012	**0.003** - 0.012
0.002 - 0.004	**0.003** - 0.007	**0.004** - 0.01	**0.004** - 0.01	**0.004** - 0.01
0.001 - 0.004	**0.002** - 0.005	**0.002** - 0.008	**0.003** - 0.012	**0.003** - 0.012
0.001 - 0.004	**0.002** - 0.005	**0.002** - 0.008	**0.003** - 0.012	**0.003** - 0.012
0.003 - 0.007	**0.004** - 0.008	**0.005** - 0.010	**0.005** - 0.010	**0.005** - 0.012
0.001 - 0.004	**0.002** - 0.005	**0.002** - 0.008	**0.003** - 0.012	**0.003** - 0.012
0.003 - 0.007	**0.004** - 0.008	**0.005** - 0.010	**0.005** - 0.010	**0.005** - 0.012
0.003 - 0.007	**0.004** - 0.008	**0.005** - 0.010	**0.005** - 0.010	**0.005** - 0.012
0.003 - 0.010	**0.004** - 0.010	**0.005** - 0.012	**0.005** - 0.012	**0.005** - 0.015
0.003 - 0.007	**0.004** - 0.008	**0.005** - 0.010	**0.005** - 0.010	**0.005** - 0.012

DIXI 1537

CUTTING CONDITIONS

Material to be machined			CUTINOX Vc [m/min]	
P	High alloyed steel	700 – 1500 N/mm^2	**100**	150
M	Stainless steel	400 – 700 N/mm^2	**250**	400
M	DUPLEX stainless steel	> 800 N/mm^2	**100**	150

DIXI 1539

Material to be machined			CARBIDE Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**80**	140
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2	**50**	80
P	Lead alloyed cutting steel		**120**	160
P	High alloyed steel	700 – 1500 N/mm^2	**50**	80
M	Stainless steel	400 – 700 N/mm^2	**80**	120
M	DUPLEX stainless steel	> 800 N/mm^2	**50**	80
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**80**	140
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**50**	80
K	Nodular ferritic cast iron / Malleable cast iron		**50**	80
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**20**	30
S	Titanium, titanium alloys		**30**	70
N	Copper alloys - easy to machine (brass - bronze)		**200**	450
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**150**	300

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times z$$

Feed per tooth **fz [mm]**

Ø D_1 50	Ø D_1 63	Ø D_1 80	Ø D_1 100	
0.002 - 0.008	**0.002** - 0.008	**0.002** - 0.008	**0.002** - 0.008	
0.002 - 0.008	**0.002** - 0.008	**0.002** - 0.008	**0.002** - 0.008	
0.002 - 0.008	**0.002** - 0.008	**0.002** - 0.008	**0.002** - 0.008	

Feed per tooth **fz [mm]**

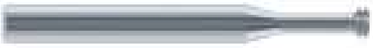
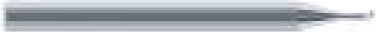
Ø D_1 15 - 30	Ø D_1 30 - 40	Ø D_1 40 - 50	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	
0.0003 - 0.002	**0.0003** - 0.002	**0.0003** - 0.002	


S 1,40 NIHS NT GO
S 1,40 NIHS NT NO GO

THREADING

SELECTION OF THREADING TOOLS

✓ = item from stock

MICRO-TAPS		Z	Page		☐ CARBIDE	🟦 TiAlN	🟨 CUTINOX	🟥 DI-TOP	
DIXI 1712 R S 0.30 - M 2.00		3	244	NIHS 06 ISO 60°	✓				
DIXI 1712 L S 0.60 - S 1.00		3	245	NIHS 06	✓				
DIXI 1713 S 0.40 - S 1.40		3	245	NIHS 06	✓				
DIXI 1715 S 0.40 - M 2.20		-	246	NIHS 06 ISO 60°				✓	
GAUGES									
DIXI 1718 R+L **R** S 0.30 - S 1.40 M 1.00 - M 3.00 **L** S 0.50 - S 1.00		-	247	NIHS 06 ISO 60°	✓				
DIXI 1719 R+L **R** S 0.30 - S 1.40 M 1.00 - M 3.00 **L** S 0.50 - S 1.00		-	247	NIHS 06 ISO 60°	✓				
WHIRLING TOOLS									
DIXI 1730 M 0.80 - M 10.00		3 - 6	248	ISO 60°	✓	✓			
DIXI 1731 M 0.80 - M 10.00		3 - 6	249	ISO 60°	✓	✓			
DIXI 1735 UNC N°1 - 1/2''		3 - 6	250	UN 60°	✓	✓			
DIXI 1736 UNC N°1 - 1/2''		3 - 6	251	UN 60°	✓	✓			
DIXI 1738 S 0.70 - M 3.00		3	252	NIHS 06 ISO 60°	✓		✓		
DIXI 1739 S 0.30 - S 1.40		1	253	NIHS 06	✓				

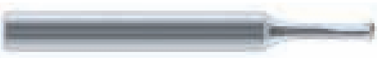
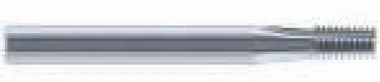
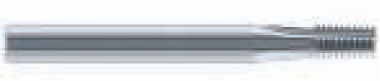
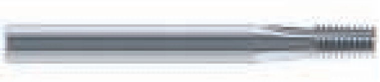
○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron 45-65 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
○								◎				
○								◎				
◎								○	○	○		
○	◎	○	◎				◎	○	◎	◎		

○	◎	◎	◎		○	◎	◎	○	○	○	○	○
○	◎	◎	◎		○	◎	◎	○	○	○	○	○
○	◎	◎	◎		○	◎	◎	○	○	○	○	○
○	◎	◎	◎		○	◎	◎	○	○	○	○	○
			◎			○	◎					
○	○	○	○				◎	○	◎	○		○

SELECTION OF THREADING TOOLS

✓ = item from stock

DRILLING THREAD WHIRLER		Z	Page		☐ CARBIDE	🟦 TiAlN	🟨 CUTINOX		
DIXI 1740 M 0.80 - M 10.00		1 - 3	254	ISO 60°	✓		✓		
THREAD MILLS									
DIXI 7908 M 1.6 - M 24		3 - 6	255	ISO 60°	✓	✓			
DIXI 7910 M 1.4 - M 24		2 - 4	256	ISO 60°	✓	✓			
DIXI 7918 UNF N°2 - UNC 3/4″		3 - 5	257	UN 60°	✓	✓			
DIXI 7920 UNF N°2 - UNC 3/4″		2 - 4	258	UN 60°	✓	✓			
DIXI 7940 R 1/16″ - 1″		3 - 4	259	BSP 55°	✓				
DIXI 7946 R 1/16″ - 2-1/2″		3 - 4	259	BSPT 55°	✓				
DIXI 7950 NPT 1/4″ - 3″		3 - 4	260	NPT 60°	✓				
DIXI 7956 NPTF 1/16″ - 2″		3 - 4	260	NPTF 60°	✓				

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
○	○	○	○		◎	○	◎	◎	◎	◎	○	◎

◎	○	○	○		◎		○	◎	◎	◎		◎
◎	○	○	○		◎		○	◎	◎	◎		◎
◎	○	○	○		◎		○	◎	◎	◎		◎
◎	○	○	○		◎		○	◎	◎	◎		◎
◎	○	○	○		◎		○	◎	◎	◎		◎
◎	○	○	○		◎		○	◎	◎	◎		◎
◎	○	○	○		◎		○	◎	◎	◎		◎
◎	○	○	○		◎		○	◎	◎	◎		◎

DIXI 1712 R

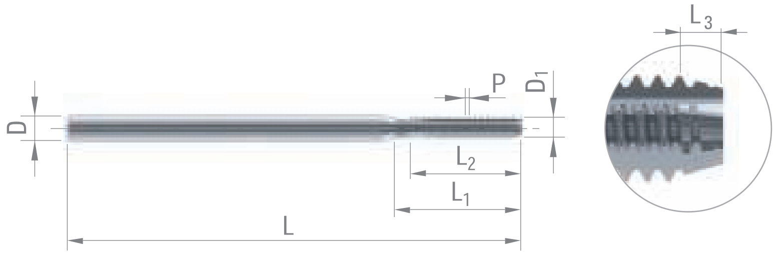
MICRO-TAPS

Z = 3

i
P. 261

NIHS 06

ISO 60°



Steel < 600MPa	Cu alloy Silver Gold

Nominal Ø	Pitch	Drill. Ø brass	Drill. Ø steel	D_1	L_1	L_2	L_3	D_{h6}	L	Z	CARBIDE
S 0.30	0.08	0.23	0.24	0.306	1.1	1.0	0.25	1.5	30	3	☐
S 0.35	0.09	0.27	0.28	0.356	1.7	1.5	0.27	1.5	30	3	☐
S 0.40	0.10	0.32	0.33	0.406	2.5	2.0	0.30	1.5	30	3	☐
		0.33	0.34	0.416	3.0	2.5	0.30	1.5	30	3	☐
S 0.50	0.125	0.40	0.42	0.506	3.0	2.5	0.38	1.5	30	3	☐
		0.41	0.43	0.516	4.0	3.5	0.38	1.5	30	3	☐
S 0.60	0.15	0.48	0.50	0.606	3.5	3.0	0.45	1.5	30	3	☐
		0.49	0.51	0.616	4.5	4.0	0.45	1.5	30	3	☐
		0.50	0.52	0.626	4.5	4.0	0.45	1.5	30	3	☐
S 0.70	0.175	0.56	0.58	0.716	3.5	3.0	0.52	1.5	30	3	☐
		0.57	0.59	0.726	4.5	4.0	0.52	1.5	30	3	☐
		0.58	0.60	0.736	4.5	4.0	0.52	1.5	30	3	☐
S 0.80	0.20	0.64	0.66	0.816	4.0	3.5	0.60	1.5	30	3	☐
		0.65	0.67	0.826	5.0	4.0	0.60	1.5	30	3	☐
		0.66	0.68	0.836	5.0	4.0	0.60	1.5	30	3	☐
S 0.90	0.225	0.72	0.74	0.916	4.5	4.0	0.67	1.5	30	3	☐
		0.73	0.75	0.926	5.0	4.0	0.67	1.5	30	3	☐
		0.74	0.76	0.936	5.0	4.0	0.67	1.5	30	3	☐
S 1.00	0.25	0.80	0.82	1.016	5.0	4.0	0.76	1.5	30	3	☐
		0.81	0.83	1.026	5.0	4.0	0.76	1.5	30	3	☐
		0.82	0.84	1.036	5.0	4.0	0.76	1.5	30	3	☐
S 1.20	0.25	1.00	1.02	1.216	6.0	5.0	0.76	1.5	30	3	☐
		1.01	1.03	1.226	6.0	5.0	0.76	1.5	30	3	☐
		1.02	1.04	1.236	6.0	5.0	0.76	1.5	30	3	☐
S 1.40	0.30	1.15	1.17	1.426	6.0	5.0	0.85	1.5	30	3	☐
		1.16	1.18	1.436	6.0	5.0	0.85	1.5	30	3	☐
M 1.50	0.30	1.26	1.28	1.536	7.0	6.0	0.85	2.0	38	3	☐
M 2.00	0.40	1.65	1.68	2.056	12.0	11.0	1.00	2.5	43	3	☐

n Rotation speed [rev/min] **500 - 2500**

DIXI 1712 L

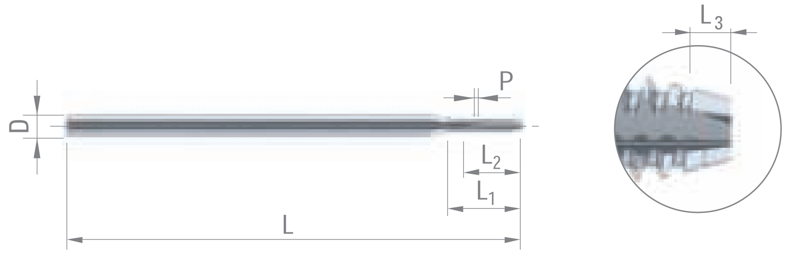
MICRO-TAPS
LEFT HAND CUTTING

Z = 3

P. 261

NIHS 06

Steel < 600MPa	Cu alloy Silver Gold



Nominal Ø	Pitch	Drill. Ø brass	Drill. Ø steel	L_1	L_2	L_3	D_{h6}	L	Z	CARBIDE
S 0.60	0.15	0.49	0.51	4.5	4.0	0.45	1.5	30	3	☐
S 0.70	0.175	0.57	0.59	4.5	4.0	0.52	1.5	30	3	☐
S 0.80	0.20	0.65	0.67	5.0	4.0	0.60	1.5	30	3	☐
S 0.90	0.225	0.73	0.75	5.0	4.0	0.67	1.5	30	3	☐
S 1.00	0.25	0.81	0.83	5.0	4.0	0.75	1.5	30	3	☐

n Rotation speed [rev/min] **500 - 2500**

DIXI 1713

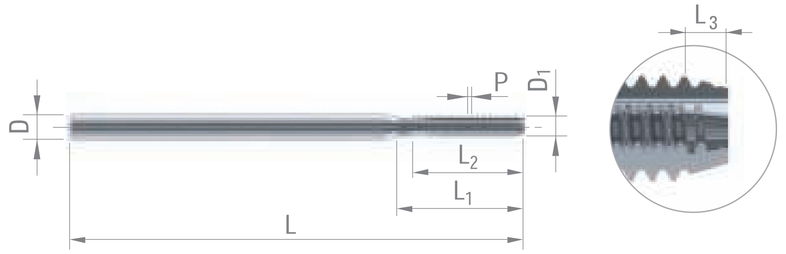
HIGH PERFORMANCE MICRO-TAPS

Z = 3

P. 161

NIHS 06

Steel < 600MPa	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



Nominal Ø	Pitch	Drill. Ø brass	Drill. Ø steel	L_1	L_2	L_3	D_{h6}	L	Z	CARBIDE
S 0.40	0.10	0.33	0.34	3.0	2.5	0.30	2.0	32	3	☐
S 0.50	0.125	0.41	0.43	4.0	3.5	0.38	2.0	32	3	☐
S 0.60	0.15	0.49	0.51	4.5	4.0	0.45	2.0	32	3	☐
S 0.70	0.175	0.57	0.59	4.5	4.0	0.52	2.0	32	3	☐
S 0.80	0.20	0.65	0.67	5.0	4.0	0.60	2.0	32	3	☐
S 0.90	0.225	0.73	0.75	5.0	4.0	0.67	2.0	32	3	☐
S 1.00	0.25	0.81	0.83	5.0	4.0	0.76	2.0	32	3	☐
S 1.20	0.25	1.01	1.03	6.0	5.0	0.76	2.0	32	3	☐
S 1.40	0.30	1.16	1.18	6.0	5.0	0.85	2.0	32	3	☐

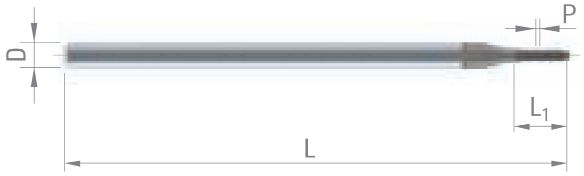
n Rotation speed [rev/min] **500 - 2500**

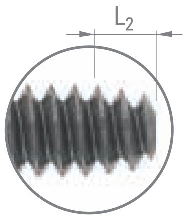
DIXI 1715

MICRO-THREAD FORMERS

NIHS 06

ISO 60°





Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al		

Nominal Ø	Pitch	L_1	L_2	D_{h6}	L	DI-TOP
S 0.40	0.10	2.0	0.30	1.5	30	🟥
S 0.50	0.125	2.0	0.37	1.5	30	🟥
S 0.60	0.15	2.4	0.45	1.5	30	🟥
S 0.70	0.175	2.8	0.52	1.5	30	🟥
S 0.80	0.20	3.2	0.60	1.5	30	🟥
S 0.90	0.225	3.6	0.67	1.5	30	🟥
*M 1.00	0.25	4.0	0.75	1.5	30	🟥
*M 1.20	0.25	4.8	0.75	1.5	30	🟥
*M 1.40	0.20	5.6	0.60	1.5	30	🟥
M 1.40	0.30	5.6	0.90	1.5	38	🟥
M 1.50	0.30	6.0	0.90	2.0	38	🟥
M 1.60	0.35	6.4	1.05	2.0	38	🟥
M 1.80	0.20	7.2	0.60	2.0	38	🟥
M 2.00	0.20	8.0	0.60	2.5	43	🟥
M 2.00	0.40	8.0	1.20	2.5	43	🟥
M 2.20	0.25	8.0	0.75	2.5	43	🟥

* M 1.00 to M 1.40 are compatible
with the NIHS 06 norm S 1.00 to S 1.40

Nominal Ø	Pitch	Drill Ø	[rev/min]
S 0.40	0.10	0.37 - 0.38	500
S 0.50	0.125	0.46 - 0.47	500
S 0.60	0.15	0.55 - 0.56	500
S 0.70	0.175	0.63 - 0.64	500
S 0.80	0.20	0.72 - 0.73	500
S 0.90	0.225	0.81 - 0.82	500
M 1.00	0.25	0.90 - 0.91	600
M 1.20	0.25	1.10 - 1.11	600
M 1.40	0.20	1.32 - 1.33	800
M 1.40	0.30	1.28 - 1.29	800
M 1.50	0.30	1.38 - 1.39	800
M 1.60	0.35	1.46 - 1.47	800
M 1.80	0.20	1.72 - 1.73	1'000
M 2.00	0.20	1.92 - 1.93	1'000
M 2.00	0.40	1.83 - 1.84	1'000
M 2.20	0.25	2.10 - 2.11	1'000

Nominal Ø	Pitch	Drill Ø	[rev/min]
S 0.40	0.10	0.36 - 0.37	500
S 0.50	0.125	0.45 - 0.46	1'000
S 0.60	0.15	0.54 - 0.55	1'000
S 0.70	0.175	0.62 - 0.63	1'000
S 0.80	0.20	0.71 - 0.72	1'500
S 0.90	0.225	0.80 - 0.81	1'500
M 1.00	0.25	0.89 - 0.90	1'500
M 1.20	0.25	1.09 - 1.10	1'500
M 1.40	0.20	1.31 - 1.32	2'000
M 1.40	0.30	1.27 - 1.28	2'000
M 1.50	0.30	1.37 - 1.38	2'500
M 1.60	0.35	1.45 - 1.46	2'500
M 1.80	0.20	1.71 - 1.72	2'500
M 2.00	0.20	1.91 - 1.92	2'500
M 2.00	0.40	1.83 - 1.84	2'500
M 2.20	0.25	2.09 - 2.10	2'500

Materials to be machined

Unalloyed steel / Low alloyed steel

Lead alloyed cutting steel

Stainless steel 400 – 700 N/mm²

Titanium, titanium alloy

Copper alloy – difficult to machine

Copper alloy – easy to machine

Aluminium alloy / Magnesium alloy

Gold, silver

HIGH PRECISION THREAD PLUG GAUGES
“GO” - “NO GO”
LEFT AND RIGHT HAND THREADS

NIHS 06 NT

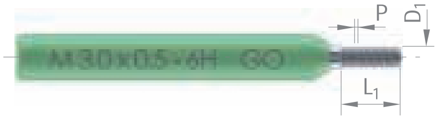
MINI

MAXI

NIHS 06

Nominal Ø	Pitch	L_1	Tol.	1718 R	1718 L	1719 R	1719 L
S 0.30	0.080	1.0	NIHS NT	☐		☐	
S 0.35	0.090	1.3	NIHS NT	☐		☐	
S 0.40	0.100	2.0	NIHS NT	☐		☐	
S 0.50	0.125	2.5	NIHS NT	☐	☐	☐	☐
S 0.60	0.150	3.0	NIHS NT	☐	☐	☐	☐
S 0.70	0.175	3.0	NIHS NT	☐	☐	☐	☐
S 0.80	0.200	3.5	NIHS NT	☐	☐	☐	☐
S 0.90	0.225	4.0	NIHS NT	☐	☐	☐	☐
S 1.00	0.250	4.0	NIHS NT	☐	☐	☐	☐
S 1.20	0.250	5.0	NIHS NT	☐	☐	☐	☐
S 1.40	0.300	5.0	NIHS NT	☐		☐	

ISO NORM 60°



ISO 60°

Nominal Ø	Pitch	L_1	Tol.	1718 R	1719 R
M 1.00	0.250	5.0	5H	☐	☐
M 1.20	0.250	5.0	5H	☐	☐
M 1.40	0.200	5.0	5H	☐	☐
M 1.40	0.300	6.0	5H	☐	☐
M 1.50	0.300	6.0	6H	☐	☐
M 1.60	0.200	5.0	5H	☐	☐
M 1.60	0.350	6.0	6H	☐	☐
M 1.80	0.200	5.0	5H	☐	☐
M 1.80	0.350	6.0	6H	☐	☐
M 2.00	0.200	5.0	5H	☐	☐
M 2.00	0.400	6.0	6H	☐	☐
M 2.20	0.200	5.0	5H	☐	☐
M 2.20	0.250	5.0	5H	☐	☐
M 2.20	0.450	8.0	6H	☐	☐
M 2.50	0.200	5.0	5H	☐	☐
M 2.50	0.450	8.0	6H	☐	☐
M 3.00	0.300	6.0	6H	☐	☐
M 3.00	0.500	8.0	6H	☐	☐

DIXI 1730

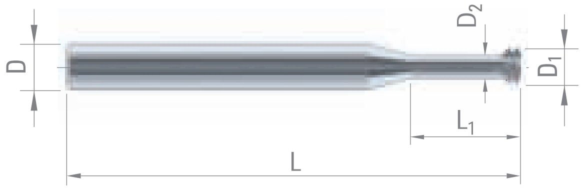
WHIRLING TOOLS

L_1 = 2 x Ø nom.

Z = 3-6

P. 261 P. 262

ISO 60°



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron
Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Alu	Graphite	Plastic		

Nominal Ø	Pitch	D_1	L_1	D_2	D_{h6}	L	Z	CARBIDE	TiAlN
M 0.8	0.20	0.60	1.85	0.27	3	38	3	☐	■
M 0.9	0.225	0.66	2.10	0.33	3	38	3	☐	■
M 1.0	0.25	0.73	2.30	0.34	3	38	3	☐	■
M 1.2	0.25	0.92	2.80	0.53	3	38	3	☐	■
M 1.4	0.30	1.05	3.20	0.60	3	38	3	☐	■
M 1.6	0.35	1.21	3.70	0.69	3	38	3	☐	■
M 1.8	0.20	1.41	4.10	0.89	3	38	3	☐	■
M 1.8	0.35	1.41	4.10	0.89	3	38	3	☐	■
M 2.0	0.40	1.55	4.60	0.96	3	38	3	☐	■
M 2.2	0.20	1.72	5.10	1.08	3	38	3	☐	■
M 2.2	0.45	1.72	5.10	1.08	3	38	3	☐	■
M 2.5	0.25	2.00	5.80	1.35	3	38	3	☐	■
M 2.5	0.35	2.00	5.80	1.35	3	38	3	☐	■
M 2.5	0.45	2.00	5.80	1.35	3	38	3	☐	■
M 3.0	0.50	2.44	7.00	1.70	4	42	3	☐	■
M 4.0	0.70	3.20	9.30	2.25	4	42	3	☐	■
M 5.0	0.80	4.00	11.50	2.80	6	57	4	☐	■
M 6.0	1.00	4.85	13.80	3.15	6	57	4	☐	■
M 8.0	1.25	6.50	18.40	4.65	8	75	6	☐	■
M 10.0	1.50	7.90	23.00	5.60	8	75	6	☐	■

DIXI 1731

WHIRLING TOOLS

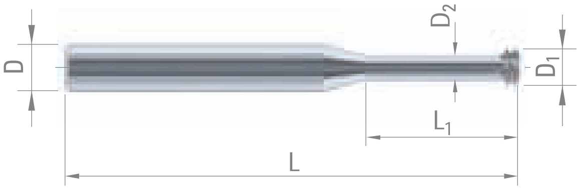
Z = 3-6

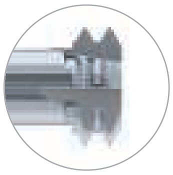
L_1 = 3 x Ø nom.

P. 261

P. 262

ISO 60°





Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron
Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Alu	Graphite	Plastic		

Nominal Ø	Pitch	D_1	L_1	D_2	D_{h6}	L	Z	CARBIDE	TiAlN
M 0.8	0.20	0.60	2.60	0.27	3	38	3	☐	🟦
M 0.9	0.225	0.66	2.90	0.33	3	38	3	☐	🟦
M 1.0	0.25	0.73	3.20	0.34	3	38	3	☐	🟦
M 1.2	0.25	0.92	3.85	0.53	3	38	3	☐	🟦
M 1.4	0.30	1.05	4.50	0.60	3	38	3	☐	🟦
M 1.6	0.35	1.21	5.10	0.69	3	38	3	☐	🟦
M 1.8	0.20	1.41	5.80	0.89	3	38	3	☐	🟦
M 1.8	0.35	1.41	5.80	0.89	3	38	3	☐	🟦
M 2.0	0.40	1.55	6.40	0.96	3	38	3	☐	🟦
M 2.2	0.20	1.72	7.10	1.08	3	38	3	☐	🟦
M 2.2	0.45	1.72	7.10	1.08	3	38	3	☐	🟦
M 2.5	0.25	2.00	8.00	1.35	3	38	3	☐	🟦
M 2.5	0.35	2.00	8.00	1.35	3	38	3	☐	🟦
M 2.5	0.45	2.00	8.00	1.35	3	38	3	☐	🟦
M 3.0	0.50	2.44	9.60	1.70	4	42	3	☐	🟦
M 4.0	0.70	3.20	12.80	2.25	4	42	3	☐	🟦
M 5.0	0.80	4.00	16.00	2.80	6	57	4	☐	🟦
M 6.0	1.00	4.85	19.20	3.15	6	57	4	☐	🟦
M 8.0	1.25	6.50	25.60	4.65	8	75	6	☐	🟦
M 10.0	1.50	7.90	32.00	5.60	8	75	6	☐	🟦

DIXI 1735

WHIRLING TOOLS

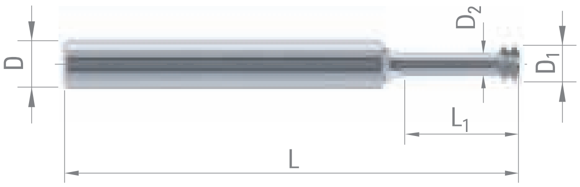
Z = 3-6

L_1 = 2 x Ø nom.

i P. 261

f Vc Ap P. 262

UN 60°



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron
Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Alu	Graphite	Plastic		

UNC	UNF	UNEF	UN	TPI	D_1	L_1	D_2	D_{h6}	L	Z	CARBIDE	TiAlN
	N°1			72	1.40	4.3	0.85	3	38	3	☐	■
N°1	N°2			64	1.40	4.3	0.80	3	38	3	☐	■
N°2	N°3			56	1.65	5.0	0.95	3	38	3	☐	■
N°3	N°4			48	1.90	5.8	1.10	3	38	3	☐	■
	N°5			44	2.00	7.3	1.15	3	38	3	☐	■
N°4				40	2.10	6.6	1.17	4	42	3	☐	■
N°5	N°6			40	2.45	7.3	1.52	4	42	3	☐	■
	N°8			36	3.30	9.6	2.15	4	42	3	☐	■
N°6				32	2.55	8.1	1.30	4	42	3	☐	■
N°8	N°10	N°12 - 1/4''		32	3.10	9.6	1.90	4	55	3	☐	■
	N°12	5/16'' - 3/8''		28	4.20	12.6	2.85	6	63	3	☐	■
	1/4''	5/16'' - 3/8''		28	5.00	14.6	3.55	6	63	4	☐	■
N°10				24	3.40	11.1	1.90	4	55	3	☐	■
N°12	5/16'' - 3/8''	5/16'' - 1-1/16''		24	4.10	12.6	2.70	6	57	4	☐	■
1/4''	7/16''		5/16'' - 3/8''	20	4.70	14.6	2.90	6	57	4	☐	■
5/16''				18	6.10	18.2	4.00	8	63	6	☐	■
3/8''	3/4''		7/16'' - 9/16''	16	7.50	21.9	5.30	8	63	6	☐	■
7/16''	7/8''			14	8.70	25.6	6.20	10	75	6	☐	■
1/2''				13	10.00	29.2	7.30	12	75	6	☐	■

DIXI 1736

WHIRLING TOOLS

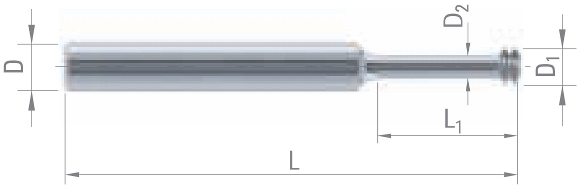
$L_1 = 3 \times Ø$ nom.

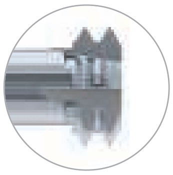
Z = 3-6

i P. 261

f Vc Ap P. 262

UN 60°





Steel < 600MPa

Steel > 600MPa

High alloyed steel

DUPLEX stainless steel

Steel Hardened cast iron

Cast iron

Refractory alloy

Titanium, titanium alloy

Cu alloy Silver Gold

Cu alloy difficult to machine

Alu

Graphite

Plastic

UNC	UNF	UNEF	UN	TPI	D_1	L_1	D_2	D_{h6}	L	Z	CARBIDE	TiAIN
	N°1			72	1.40	6.0	0.85	3	38	3	☐	🟦
N°1	N°2			64	1.40	6.0	0.80	3	38	3	☐	🟦
N°2	N°3			56	1.65	7.0	0.95	3	38	3	☐	🟦
N°3	N°4			48	1.90	8.1	1.10	3	38	3	☐	🟦
	N°5			44	2.00	10.2	1.15	3	42	3	☐	🟦
N°4				40	2.10	9.1	1.17	4	42	3	☐	🟦
N°5	N°6			40	2.45	10.2	1.52	4	42	3	☐	🟦
	N°8			36	3.30	13.4	2.15	4	42	3	☐	🟦
N°6				32	2.55	11.3	1.30	4	42	3	☐	🟦
N°8	N°10	N°12 - 1/4″		32	3.10	13.4	1.90	4	55	3	☐	🟦
	N°12	5/16″ - 3/8″		28	4.20	17.6	2.85	6	63	3	☐	🟦
	1/4″	5/16″ - 3/8″		28	5.00	20.3	3.55	6	63	4	☐	🟦
N°10				24	3.40	15.5	1.90	4	55	3	☐	🟦
N°12	5/16″ - 3/8″	5/16″ - 1-1/16″		24	4.10	17.6	2.70	6	57	4	☐	🟦
1/4″	7/16″		5/16″ - 3/8″	20	4.70	20.3	2.90	6	63	4	☐	🟦
5/16″				18	6.10	25.4	4.00	8	75	6	☐	🟦
3/8″	3/4″		7/16″ - 9/16″	16	7.50	30.5	5.30	8	75	6	☐	🟦
7/16″	7/8″			14	8.70	35.5	6.20	10	86	6	☐	🟦
1/2″				13	10.00	40.6	7.30	12	93	6	☐	🟦

DIXI 1738

WHIRLING TOOLS

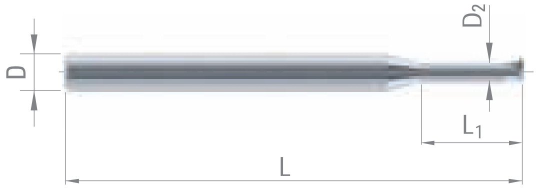
Z = 3

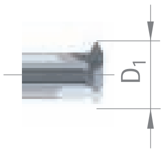
P. 261 P. 262

NIHS 06

ISO 60°

DUPLEX stainless steel | Refractory alloy | Titanium, titanium alloy





Nominal Ø		Pitch	Drilling Ø	D_1	L_1	D_2	D_{h6}	L	Z	CARBIDE	CUTINOX
	S 0.70	0.175	0.56	0.54	1.80	0.0.23	3	38	3	☐	🟧
	S 0.80	0.20	0.64	0.62	2.30	0.29	3	38	3	☐	🟧
	S 0.90	0.225	0.72	0.70	2.50	0.35	3	38	3	☐	🟧
M 1.00	S 1.00	0.25	0.80	0.78	2.80	0.38	3	38	3	☐	🟧
M 1.20	S 1.20	0.25	1.00	0.98	3.40	0.62	3	38	3	☐	🟧
M 1.40	S 1.40	0.30	1.15	1.12	4.00	0.68	3	38	3	☐	🟧
M 1.40		0.20	1.22	1.18	4.00	0.74	3	38	3	☐	🟧
M 1.60		0.35	1.30	1.26	4.50	0.72	3	38	3	☐	🟧
M 1.80		0.35	1.50	1.45	5.10	0.77	3	38	3	☐	🟧
		0.20	1.62	1.45	5.10	0.77	3	38	3	☐	🟧
M 2.00		0.40	1.65	1.60	5.60	0.85	3	38	3	☐	🟧
		0.20	1.82	1.60	5.60	0.85	3	38	3	☐	🟧
M 2.20		0.45	1.80	1.70	6.20	0.91	3	38	3	☐	🟧
		0.25	1.93	1.70	6.20	0.91	3	38	3	☐	🟧
M 2.50		0.45	2.10	2.00	7.00	1.20	3	38	3	☐	🟧
		0.35	2.15	2.00	7.00	1.20	3	38	3	☐	🟧
		0.25	2.25	2.00	7.00	1.20	3	38	3	☐	🟧
		0.20	2.30	2.00	7.00	1.20	3	38	3	☐	🟧
M 3.00		0.50	2.50	2.40	8.40	1.60	3	38	3	☐	🟧
		0.35	2.65	2.40	8.40	1.60	3	38	3	☐	🟧
		0.25	2.75	2.40	8.40	1.60	3	38	3	☐	🟧
		0.20	2.80	2.40	8.40	1.60	3	38	3	☐	🟧

DIXI 1739

WHIRLING TOOLS

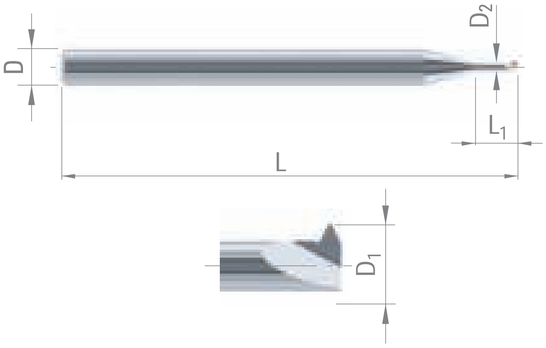
Z = 1

P. 261

P. 262

NIHS 06

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic	



Nominal Ø	Pitch	Drilling Ø	D_1	L_1	D_2	D_{h6}	L	Z	CARBIDE
S 0.30	0.08	0.23	0.22	0.70	0.125	3	38	1	☐
S 0.35	0.09	0.27	0.25	0.90	0.17	3	38	1	☐
S 0.40	0.10	0.32	0.30	0.90	0.18	3	38	1	☐
S 0.50	0.125	0.40	0.38	1.20	0.20	3	38	1	☐
S 0.60	0.15	0.48	0.46	1.50	0.24	3	38	1	☐
S 0.70	0.175	0.56	0.54	1.80	0.29	3	38	1	☐
S 0.80	0.20	0.64	0.60	2.00	0.31	3	38	1	☐
S 0.90	0.225	0.72	0.68	2.20	0.36	3	38	1	☐
S 1.00	0.25	0.80	0.76	2.40	0.40	3	38	1	☐
S 1.20	0.25	1.00	0.94	3.00	0.58	3	38	1	☐
S 1.40	0.30	1.15	1.10	3.30	0.66	3	38	1	☐

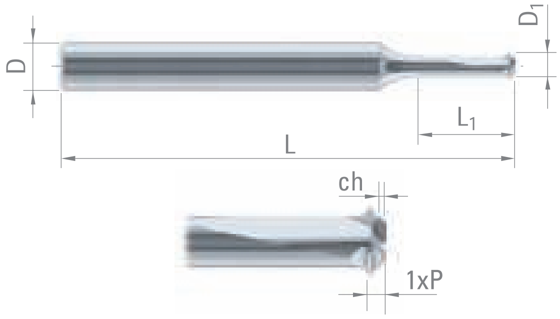
DIXI 1740

DRILLING THREAD WHIRLER

Z = 1-3

P. 264

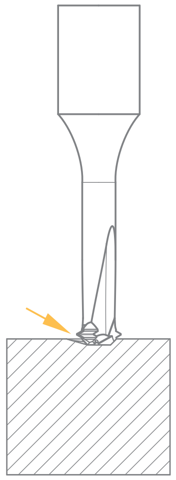
ISO 60°



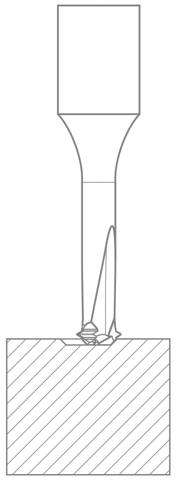
Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			

Nominal Ø	Pitch	D_1	ch	L_1	D_{h6}	L	Z	CARBIDE	CUTINOX
M 0.80	0.20	0.60	0.10	2.4	3	38	1	☐	🟧
M 0.90	0.225	0.66	0.12	2.7	3	38	1	☐	🟧
M 1.00	0.20	0.80	0.10	3.0	3	38	1	☐	🟧
M 1.00	0.25	0.73	0.15	3.0	3	38	1	☐	🟧
M 1.20	0.20	1.00	0.11	3.6	3	38	1	☐	🟧
M 1.20	0.25	0.92	0.15	3.6	3	38	1	☐	🟧
M 1.40	0.20	1.20	0.11	4.2	3	38	1	☐	🟧
M 1.40	0.30	1.05	0.19	4.2	3	38	1	☐	🟧
M 1.60	0.35	1.21	0.22	4.8	3	38	1	☐	🟧
M 2.00	0.40	1.55	0.25	6.0	3	38	2	☐	🟧
M 2.50	0.45	2.00	0.29	7.5	3	38	2	☐	🟧
M 3.00	0.50	2.44	0.33	9.0	6	57	2	☐	🟧
M 4.00	0.70	3.20	0.45	12.0	6	57	2	☐	🟧
M 5.00	0.80	4.00	0.53	15.0	6	57	2	☐	🟧
M 6.00	1.00	4.85	0.65	18.0	6	57	3	☐	🟧
M 8.00	1.25	6.50	0.80	24.0	8	75	3	☐	🟧
M 10.00	1.50	7.90	1.00	30.0	8	75	3	☐	🟧

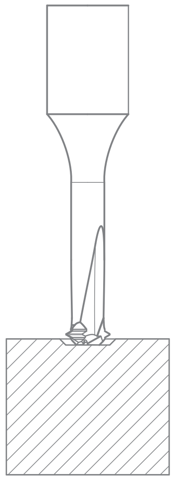
Example for difficult to machine materials (titanium, stainless steel).
For easy to machine materials, step n° 5 is not necessary.



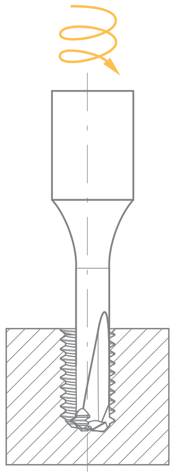
❶
Approach X0 Y0 Z0.10
then angular plunging
on 2 axis (XZ)



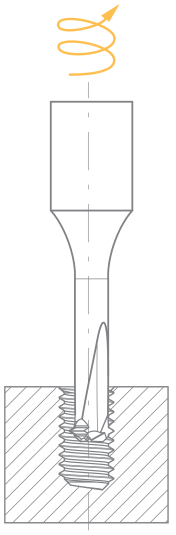
❷
Circular interpolation
on 1 rotation
(Ø of hole is chanfered)



❸
Back to the center
of the hole X0 Y0



❹
Helical plunging
to the roughing Ø
(finishing Ø -2%)



❺
Up-milling to the
finished thread Ø

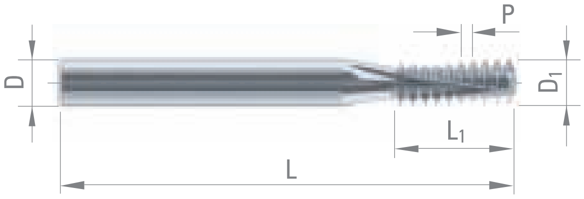
DIXI 7908

HELICAL THREAD MILLS

Z = 3-6

P. 268

ISO 60°



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

DIXI 7908 N = Internal

Nominal Ø	Pitch	Ref.	D_1	L_1	D_{h6}	L	Z	CARBIDE	TiAlN
M 1.6	0.35	03.010	1.00	2.45	3	38	3	☐	🟦
M 2.0	0.40	03.013	1.30	3.20	3	38	3	☐	🟦
M 2.3	0.40	03.015	1.50	3.20	3	38	3	☐	🟦
M 2.5	0.35	03.013	1.30	2.80	3	38	3	☐	🟦
M 2.5	0.45	03.015	1.50	3.60	3	38	3	☐	🟦
M 3.0	0.50	03.021	2.10	4.50	3	38	3	☐	🟦
M 4.0	0.50	03.026	2.60	5.50	3	38	3	☐	🟦
M 4.0	0.70	03.026	2.60	6.30	3	38	3	☐	🟦
M 4.5	0.75	04.030	3.00	6.75	4	42	3	☐	🟦
M 5.0	0.80	04.036	3.60	8.00	4	42	3	☐	🟦
M 6.0	1.00	06.040	4.00	9.00	6	57	3	☐	🟦
M 8.0	0.75	06.059	5.90	15.00	6	57	5	☐	🟦
M 8.0	1.25	06.050	5.00	12.50	6	57	3	☐	🟦
M 10.0	1.50	06.059	5.90	15.00	6	57	5	☐	🟦
M 12.0	0.50	10.099	9.90	10.00	10	50	5	☐	🟦
M 12.0	1.00	08.079	7.90	20.00	8	63	5	☐	🟦
M 12.0	1.75	08.079	7.90	19.25	8	63	5	☐	🟦
M 14.0	1.50	10.099	9.90	24.00	10	72	5	☐	🟦
M 14.0	2.00	10.099	9.90	24.00	10	72	5	☐	🟦
M 18.0	1.50	12.119	11.90	30.00	12	83	5	☐	🟦
M 18.0	2.00	12.119	11.90	30.00	12	83	5	☐	🟦
M 18.0	2.50	12.119	11.90	30.00	12	83	5	☐	🟦
M 24.0	3.00	16.159	15.90	36.00	16	92	6	☐	🟦

DIXI 7908 E = External

Nominal Ø	Pitch	Ref.	D_1	L_1	D	L	Z	CARBIDE	TiAlN
M 3.0	0.50	06.059	5.90	15.00	6	57	5	☐	🟦
M 4.5	0.75	08.079	7.90	19.50	8	63	5	☐	🟦
M 6.0	1.00	10.099	9.90	24.00	10	72	5	☐	🟦
M 10.0	1.50	12.119	11.90	30.00	12	83	5	☐	🟦
M 14.0	2.00	12.119	11.90	30.00	12	83	5	☐	🟦

DIXI 7910

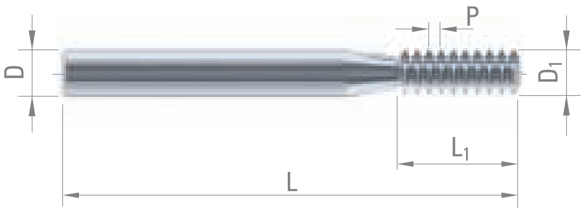
THREAD MILLS

Z = 2-4

P. 266

ISO 60°

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



DIXI 7910 N = Internal

Nominal Ø	Pas	Ref.	D_1	L_1	D_{h6}	L	Z	CARBIDE	TiAlN
M 1.4	0.30	03.009	0.90	2.10	3	38	2	☐	🟦
M 1.6	0.35	03.010	1.00	2.45	3	38	2	☐	🟦
M 2.0	0.40	03.013	1.30	3.20	3	38	2	☐	🟦
M 2.3	0.40	03.015	1.50	3.20	3	38	2	☐	🟦
M 2.5	0.35	03.013	1.30	2.80	3	38	2	☐	🟦
M 2.5	0.45	03.015	1.50	3.60	3	38	2	☐	🟦
M 3.0	0.50	03.021	2.10	4.50	3	38	3	☐	🟦
M 4.0	0.50	03.026	2.60	5.50	3	38	3	☐	🟦
M 4.0	0.70	03.026	2.60	6.30	3	38	3	☐	🟦
M 4.5	0.75	04.030	3.00	6.75	4	42	3	☐	🟦
M 5.0	0.80	04.036	3.60	8.00	4	42	3	☐	🟦
M 6.0	1.00	06.040	4.00	9.00	6	57	3	☐	🟦
M 8.0	0.75	06.059	5.90	15.00	6	57	3	☐	🟦
M 8.0	1.25	06.050	5.00	12.50	6	57	3	☐	🟦
M 10.0	1.50	06.059	5.90	15.00	6	57	3	☐	🟦
M 12.0	1.00	08.079	7.90	20.00	8	63	4	☐	🟦
M 12.0	1.75	08.079	7.90	19.25	8	63	4	☐	🟦
M 14.0	1.50	10.099	9.90	24.00	10	72	4	☐	🟦
M 14.0	2.00	10.099	9.90	24.00	10	72	4	☐	🟦
M 18.0	1.50	12.119	11.90	30.00	12	83	4	☐	🟦
M 18.0	2.00	12.119	11.90	30.00	12	83	4	☐	🟦
M 18.0	2.50	12.119	11.90	30.00	12	83	4	☐	🟦
M 24.0	3.00	16.159	15.90	36.00	16	92	4	☐	🟦

DIXI 7910 E = External

Nominal Ø	Pas	Ref.	D_1	L_1	D_{h6}	L	Z	CARBIDE	TiAlN
M 3.0	0.50	06.059	5.90	15.00	6	57	3	☐	🟦
M 4.5	0.75	08.079	7.90	19.50	8	63	4	☐	🟦
M 6.0	1.00	10.099	9.90	24.00	10	72	4	☐	🟦
M 10.0	1.50	12.119	11.90	30.00	12	83	4	☐	🟦
M 14.0	2.00	12.119	11.90	30.00	12	83	4	☐	🟦

DIXI 7918

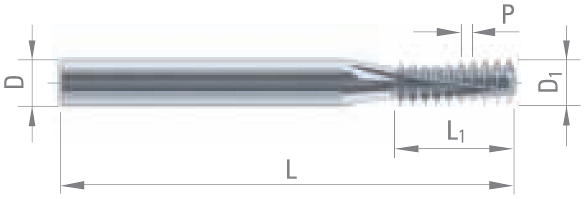
HELICAL THREAD MILLS

Z = 3-5

f Vc Ap
P. 268

UN 60°

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



DIXI 7918 N = Internal

UNC	UNF	UNEF	UN	Ref.	TPI	D$_1$	L$_1$	D$_{h6}$	L	Z	CARBIDE	TiAlN
	N° 2			03.015	64	1.50	3.17	3	38	3	☐	🟦
N° 2	N° 3			03.015	56	1.50	3.17	3	38	3	☐	🟦
N° 3	N° 4			03.015	48	1.50	3.17	3	38	3	☐	🟦
	N° 5			03.021	44	2.10	4.62	3	38	3	☐	🟦
N° 5	N° 6			03.021	40	2.10	4.44	3	38	3	☐	🟦
	N° 8			04.030	36	3.00	6.35	4	42	3	☐	🟦
N° 8	N° 10	N° 12 – 1/4"		04.030	32	3.00	6.35	4	42	3	☐	🟦
		5/16" – 3/8"	7/16" – 1"	06.059	32	5.90	14.28	6	57	5	☐	🟦
	N° 12 – 1/4"	5/16" –3/8"		04.036	28	3.60	8.16	4	42	3	☐	🟦
		7/16" – 1/2"	9/16" –1-1/2"	08.079	28	7.90	19.95	8	63	5	☐	🟦
N° 12	5/16" – 3/8"	5/8" – 1-1/16"		06.040	24	4.00	8.46	6	57	3	☐	🟦
1/4"	7/16"		5/16" – 3/8"	06.040	20	4.00	10.16	6	57	3	☐	🟦
	1/2"	3/4 "– 1"	9/16" – 3"	10.099	20	9.90	22.86	10	72	5	☐	🟦
5/16"				06.050	18	5.00	12.70	6	57	3	☐	🟦
	9/16" – 5/8"	1-1/16" – 1-11/16"		10.099	18	9.90	23.98	10	72	5	☐	🟦
3/8"	3/4"		7/16" – 9/16"	06.059	16	5.90	14.28	6	57	5	☐	🟦
			5/8" – 6"	12.119	16	11.90	28.57	12	83	5	☐	🟦
7/16"	7/8"			08.079	14	7.90	16.33	8	63	5	☐	🟦
1/2"				08.079	13	7.90	19.53	8	63	5	☐	🟦
9/16"				10.099	12	9.90	23.28	10	72	5	☐	🟦
	1" – 1-1/2"		1-9/16" – 6"	12.119	12	11.90	29.63	12	83	5	☐	🟦
5/8"				10.099	11	9.90	23.09	10	72	5	☐	🟦
3/4"			1"	12.119	10	11.90	27.94	12	83	5	☐	🟦

DIXI 7918 E = External

UNC	UN	Ref.	TPI	D$_1$	L$_1$	D$_{h6}$	L	Z	CARBIDE	TiAlN
N°6	N° 10 – 1"	06.059	32	5.90	14.28	6	57	5	☐	🟦
	N° 12 – 1-1/2"	08.079	28	7.90	19.95	8	63	5	☐	🟦
1/4"	7/16" – 3"	10.099	20	9.90	22.86	10	72	5	☐	🟦
5/16"	9/16" – 1-11/16"	10.099	18	9.90	23.98	10	72	5	☐	🟦
3/8"	7/16" – 6"	12.119	16	11.90	28.57	12	83	5	☐	🟦
9/16"	5/8" – 6"	12.119	12	11.90	29.63	12	83	5	☐	🟦

DIXI 7920

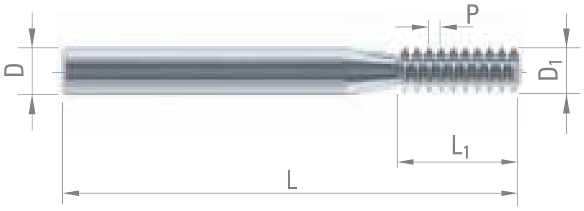
THREAD MILLS

Z = 2-4

f ? Vc Ap ?

P. 266

UN 60°



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

DIXI 7920 N = Internal

UNC	UNF	UNEF	UN	Ref.	TPI	D_1	L_1	D_{h6}	L	Z	CARBIDE	TiAlN
N° 2	N° 3			03.015	56	1.50	3.17	3	38	2	☐	🟦
N° 3	N° 4			03.015	48	1.50	3.17	3	38	2	☐	🟦
N° 5	N° 6			03.021	40	2.10	4.44	3	38	3	☐	🟦
	N° 8			04.030	36	3.00	6.35	4	42	3	☐	🟦
N° 8	N° 10	N° 12 – 1/4"		04.030	32	3.00	6.35	4	42	3	☐	🟦
		5/16" – 3/8"	7/16" – 1"	06.059	32	5.90	14.28	6	57	3	☐	🟦
	N° 12 – 1/4"	5/16" –3/8"		04.036	28	3.60	8.16	4	42	3	☐	🟦
		7/16" – 1/2"	9/16" –1-1/2"	08.079	28	7.90	19.95	8	63	4	☐	🟦
N° 12	5/16" – 3/8"	5/8" – 1-1/16"		06.040	24	4.00	8.46	6	57	3	☐	🟦
1/4"	7/16"		5/16" – 3/8"	06.040	20	4.00	10.16	6	57	3	☐	🟦
	1/2"	3/4 "– 1"	9/16" – 3"	10.099	20	9.90	22.86	10	72	4	☐	🟦
5/16"				06.050	18	5.00	12.70	6	57	3	☐	🟦
	9/16" – 5/8"	1-1/16" – 1-11/16"		10.099	18	9.90	23.98	10	72	4	☐	🟦
3/8"	3/4"		7/16" – 9/16"	06.059	16	5.90	14.28	6	57	3	☐	🟦
			5/8" – 6"	12.119	16	11.90	28.57	12	83	4	☐	🟦
7/16"	7/8"			08.079	14	7.90	16.33	8	63	4	☐	🟦
1/2"				08.079	13	7.90	19.53	8	63	4	☐	🟦
9/16"				10.099	12	9.90	23.28	10	72	4	☐	🟦
	1" – 1-1/2"		1-9/16" – 6"	12.119	12	11.90	29.63	12	83	4	☐	🟦
5/8"				10.099	11	9.90	23.09	10	72	4	☐	🟦
3/4"			1"	12.119	10	11.90	27.94	12	83	4	☐	🟦

DIXI 7920 E = External

UNC	UN	Ref.	TPI	D_1	L_1	D_{h6}	L	Z	CARBIDE	TiAlN
N°6	N° 10 – 1"	06.059	32	5.90	14.28	6	57	3	☐	🟦
	N° 12 – 1-1/2"	08.079	28	7.90	19.95	8	63	4	☐	🟦
1/4"	7/16" – 3"	10.099	20	9.90	22.86	10	72	4	☐	🟦
5/16"	9/16" – 1-11/16"	10.099	18	9.90	23.98	10	72	4	☐	🟦
3/8"	7/16" – 6"	12.119	16	11.90	28.57	12	83	4	☐	🟦
9/16"	5/8" – 6"	12.119	12	11.90	29.63	12	83	4	☐	🟦

DIXI 7940

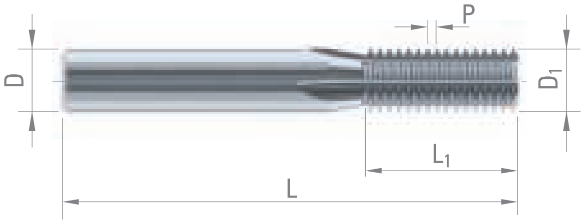
THREAD MILLS

Z = 3-4

f Vc Ap

P. 266

BSP 55°



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

BSP	Ref.	TPI	D$_1$	L$_1$	D$_{h6}$	L	Z	CARBIDE
R1/16" – R1/8"	06.059	28	5.90	14.51	6	57	3	☐
R1/4" – R3/8"	08.079	19	7.90	18.71	8	63	4	☐
R1/2" – R5/8"– R3/4"– R7/8"	12.119	14	11.90	29.02	12	83	4	☐
R1"	16.159	11	15.90	34.63	16	92	4	☐

For internal and external threading

DIXI 7946

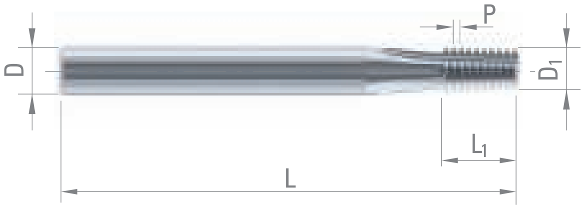
THREAD MILLS

Z = 3-4

f Vc Ap

P. 266

BSPT 55°



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

BSPT	Ref.	TPI	D$_1$	L$_1$	D$_{h6}$	L	Z	CARBIDE
R1/16" – R1/8"	06.059	28	5.34	9.97	6	57	3	☐
R1/4" – R3/8"	08.079	19	7.07	14.70	8	63	4	☐
R1/2" – R5/8" –R3/4" – R7/8"	12.119	14	10.77	19.95	12	83	4	☐
R1 " => R2-1/2"	16.159	11	14.32	27.70	16	92	4	☐

For internal and external threading

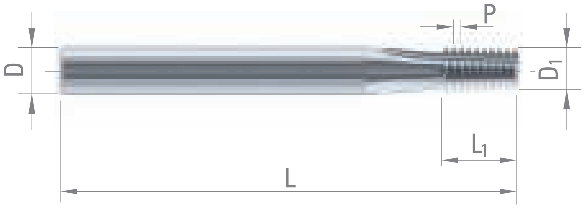
DIXI 7950

THREAD MILLS

Z = 3-4

P. 266

NPT 60°



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

NPT	Ref.	TPI	D_1	L_1	D_{h6}	L	Z	CARBIDE
1/16" – 1/8"	06.059	27	5.37	9.40	6	57	3	☐
1/4" – 3/8"	08.079	18	7.10	14.11	8	63	4	☐
1/2" – 3/4"	12.119	14	10.65	19.95	12	83	4	☐
1" – 1-1/4" – 1-1/2" – 2"	16.159	11.5	14.38	26.50	16	92	4	☐

For internal and external threads

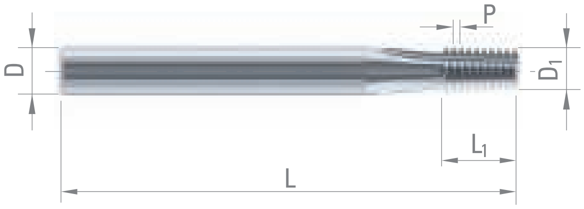
DIXI 7956

THREAD MILLS

Z = 3-4

P. 266

NPTF 60°



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

NPTF	Ref.	TPI	D_1	L_1	D_{h6}	L	Z	CARBIDE
1/16" – 1/8"	06.059	27	5.37	9.40	6	57	3	☐
1/4" – 3/8"	08.079	18	7.10	14.11	8	63	4	☐
1/2" – 3/4"	12.119	14	10.65	19.95	12	83	4	☐
1" – 1-1/4" – 1-1/2" – 2"	16.159	11.5	14.38	26.50	16	92	4	☐

For internal and external threads

DRILLING Ø BEFORE TAPPING OR INTERNAL WHIRLING OPERATION AS PER ISO 261 NORM

Nominal Ø	Pitch	Tolerance	Drilling Ø		Drill Ø
			min.	max.	
M 0.8	0.20	-	0.608	0.685	**0.65**
M 0.9	0.225	-	0.684	0.765	**0.70**
M 1.0	0.25	5H	0.729	0.785	**0.75**
M 1.1	0.25	5H	0.829	0.885	**0.85**
M 1.2	0.25	5H	0.929	0.985	**0.95**
M 1.4	0.30	6H	1.075	1.142	**1.10**
M 1.6	0.35	6H	1.221	1.321	**1.25**
M 1.7	0.35	6H	1.321	1.421	**1.35**
M 1.8	0.35	6H	1.421	1.521	**1.45**
M 2.0	0.40	6H	1.567	1.679	**1.60**
M 2.2	0.45	6H	1.713	1.838	**1.75**
M 2.5	0.45	6H	2.013	2.138	**2.05**
M 3.0	0.50	6H	2.459	2.599	**2.50**
M 3.5	0.60	6H	2.850	3.010	**2.90**
M 4.0	0.70	6H	3.242	3.422	**3.30**
M 4.5	0.75	6H	3.688	3.878	**3.70**
M 5.0	0.80	6H	4.134	4.334	**4.20**
M 6.0	1.00	6H	4.917	5.153	**5.00**
M 7.0	1.00	6H	5.917	6.153	**6.00**
M 8.0	1.25	6H	6.647	6.912	**6.80**
M 9.0	1.25	6H	7.647	7.912	**7.80**
M 10.0	1.50	6H	8.376	8.676	**8.50**
M 11.0	1.50	6H	9.376	9.676	**9.50**
M 12.0	1.75	6H	10.106	10.441	**10.20**
M 14.0	2.00	6H	11.835	12.210	**12.00**
M 16.0	2.00	6H	13.835	14.210	**14.00**
M 18.0	2.50	6H	15.294	15.744	**15.50**
M 20.0	2.50	6H	17.294	17.744	**17.50**

DRILLING Ø BEFORE THREADING AS PER ANSI B1.1 NORM

UNC	TPI	Drilling Ø		Drill Ø
		min.	max.	
Nº 1	64	1.425	1.582	**1.50**
Nº 2	56	1.695	1.871	**1.80**
Nº 3	48	1.941	2.146	**2.00**
Nº 5	40	2.487	2.697	**2.60**
Nº 8	32	3.302	3.530	**3.50**
Nº 10	24	3.683	0.396	**3.80**
Nº 12	24	4.344	4.597	**4.50**
1/4′′	20	4.979	5.257	**5.10**
5/16′′	18	6.401	6.731	**6.50**
3/8′′	16	7.798	8.153	**7.90**
7/16′′	14	9.144	9.550	**9.30**
1/2′′	13	10.592	11.023	**10.70**
9/16′′	12	11.989	12.446	**12.30**
5/8′′	11	13.386	13.868	**13.50**
3/4′′	10	16.307	16.840	**16.50**

DIXI 1730 - 1731 - 1735 - 1736 - 1738 - 1739

CUTTING CONDITIONS

MACHINING WITH A FIXED WORKPIECE

	Materials to be machined		CARBIDE		TiALN		CUTINOX	
			Vc [m/min]		Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**65**	80	**70**	100		
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**40**	60		
P	High alloyed steel	700 – 1500 N/mm²			**25**	50	**60**	80
M	Stainless steel	400 – 700 N/mm²	**35**	40	**40**	60	**70**	90
M	DUPLEX stainless steel	> 800 N/mm²			**25**	50	**60**	80
K	Tool steel and cast iron	> 1500 N/mm² (50 - 65 HRC)	**65**	80	**70**	100		
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**35**	40	**40**	60		
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**35**	40	**40**	60		
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy			**25**	50	**40**	60
S	Titanium, titanium alloys		**15**	35				
N			**100**	200				
N								
N								

MACHINING ON A SWISS-TURNING MACHINE - Workpiece turns

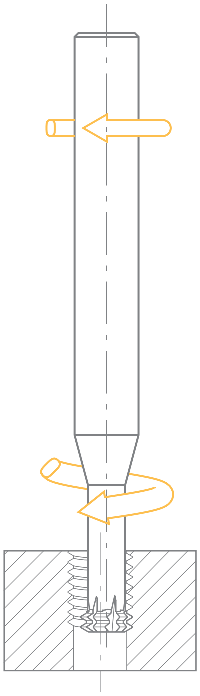
	Materials to be machined	CARBIDE Vc [m/min]	fz [mm] Pitch 0.20 - 0.25	fz [mm] Pitch 0.30 - 0.35	fz [mm] Pitch 0.40 - 0.50	fz [mm] Pitch 0.70 - 1.00
P	Steel	**50** - 100	**0.002** - 0.004	**0.002** - 0.004	**0.003** - 0.006	**0.005** - 0.013
M	Stainless steel	**40** - 80	**0.002** - 0.003	**0.002** - 0.004	**0.002** - 0.005	**0.004** - 0.01
S	Titanium, titanium alloys	**50** - 90	**0.002** - 0.003	**0.002** - 0.004	**0.002** - 0.005	**0.004** - 0.01
N	Copper alloys	**60** - 150	**0.002** - 0.005	**0.002** - 0.006	**0.003** - 0.007	**0.005** - 0.013

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times z$$

Feed per tooth **fz [mm]**

Ø D_1 0.20 - 0.60	Ø D_1 0.60 - 1.20	Ø D_1 1.20 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 8.00
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07
0.003 - 0.006	**0.004** - 0.01	**0.01** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07



Example for M2 x 0.40 in titanium, DIXI 1730 Ø D_1 = 1.55

❶ **Tool rotation n (min^{-1})** $= \frac{1000 \times Vc}{\pi \times Ø\ D_1}$

$$\frac{1000 \times 90}{(\pi \times 1.55)} \Rightarrow 19'000\ min^{-1}$$

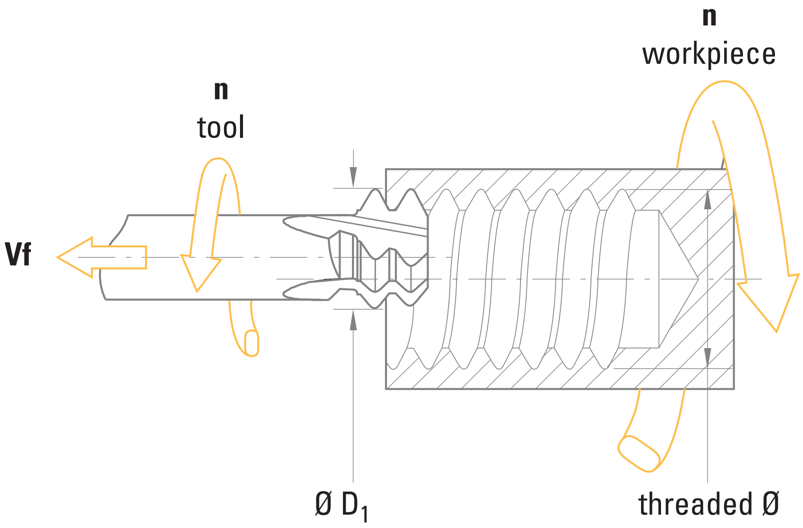
❷ **Feed Vf mm/min** = n x fz x z

19’000 x 0.004 x 3 = 223 mm/min

❸ **Piece rotation min^{-1}** $= \frac{Vf}{\text{threaded } Ø \times \pi}$

$$\frac{223}{M2 \times \pi} \Rightarrow 36\ min^{-1}$$

When necessary, convert in degrees nb° = min^{-1} x 360° ⇒ 36 min^{-1} x 360° = 12960°



CUTTING CONDITIONS

	Materials to be machined		CARBIDE		CUTINOX	
			Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**100**	150	**120**	180
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2	**90**	130	**110**	150
P	Lead alloyed cutting steel		**100**	180	**120**	200
P	High alloyed steel	700 – 1500 N/mm^2	**40**	70	**50**	80
M	Stainless steel	400 – 700 N/mm^2	**50**	80	**60**	110
M	DUPLEX stainless steel	> 800 N/mm^2	**35**	60	**45**	75
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**100**	200	**150**	250
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**100**	140	**120**	160
K	Nodular ferritic cast iron / Malleable cast iron		**70**	110	**80**	140
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**20**	45	**30**	60
S	Titanium, titanium alloys		**40**	65	**40**	65
N	Copper alloys - easy to machine (brass - bronze)		**100**	200	**100**	200
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**80**	150	**80**	150
N	Aluminium alloys	Si < 8%	**100**	250	**100**	250
N	Cast aluminium	Si > 8%	**100**	200	**100**	200
N	Graphite		**100**	200	**100**	200
N	Plastic		**100**	250	**100**	250
N	Gold, silver		**100**	200	**100**	200

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times z$$

Feed per tooth fz [mm]

Ø D_1 0.60 - 1.00	Ø D_1 1.00 -1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 9.00
0.008 - 0.015	**0.010** - 0.025	**0.015** - 0.030	**0.020** - 0.050	**0.030** - 0.070	**0.040** - 0.080
0.005 - 0.012	**0.008** - 0.020	**0.013** - 0.025	**0.020** - 0.045	**0.025** - 0.060	**0.035** - 0.075
0.012 - 0.030	**0.020** - 0.040	**0.025** - 0.055	**0.030** - 0.070	**0.035** -0.080	**0.050** - 0.100
0.002 - 0.011	**0.008** - 0.015	**0.012** - 0.023	**0.015** - 0.038	**0.023** - 0.060	**0.038** -0.060
0.003 - 0.016	**0.011** - 0.023	**0.018** - 0.034	**0.023** - 0.056	**0.034** - 0.090	**0.056** -0.090
0.002 - 0.009	**0.007** - 0.014	**0.011** - 0.020	**0.014** - 0.034	**0.020** - 0.054	**0.034** - 0.054
0.012 - 0.030	**0.020** - 0.040	**0.025** - 0.055	**0.030** - 0.070	**0.050** - 0.100	**0.080** - 0.150
0.005 - 0.012	**0.008** - 0.020	**0.013** - 0.025	**0.020** - 0.045	**0.025** -0.060	**0.035** - 0.075
0.005 - 0.012	**0.008** - 0.020	**0.013** - 0.025	**0.020** - 0.045	**0.025** - 0.060	**0.035** - 0.075
0.001 - 0.007	**0.005** - 0.010	**0.008** - 0.015	**0.010** - 0.025	**0.015** - 0.040	**0.025** - 0.040
0.008 - 0.015	**0.010** - 0.020	**0.015** - 0.040	**0.030** - 0.060	**0.040** - 0.080	**0.060** - 0.100
0.015 - 0.035	**0.020** - 0.040	**0.025** - 0.050	**0.030** - 0.070	**0.050** - 0.100	**0.080** - 0.150
0.012 - 0.030	**0.020** - 0.040	**0.025** - 0.055	**0.030** - 0.070	**0.050** - 0.100	**0.080** - 0.150
0.015 - 0.035	**0.020** - 0.040	**0.025** - 0.055	**0.030** - 0.070	**0.050** - 0.100	**0.080** - 0.150
0.015 - 0.035	**0.020** - 0.040	**0.025** - 0.055	**0.030** - 0.070	**0.050** - 0.100	**0.080** - 0.150
0.015 - 0.035	**0.020** - 0.040	**0.025** - 0.055	**0.030** - 0.070	**0.050** - 0.100	**0.080** - 0.150
0.015 - 0.035	**0.020** - 0.040	**0.025** - 0.055	**0.030** - 0.070	**0.050** - 0.100	**0.080** - 0.150
0.015 - 0.035	**0.020** - 0.040	**0.025** - 0.055	**0.030** - 0.070	**0.050** - 0.100	**0.080** - 0.150

DIXI 7910 - 7920 - 7940 - 7946 - 7950 - 7956

CUTTING CONDITIONS

Materials to be machined			CARBIDE		TiALN	
			Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70**	100	**90**	110
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**70**	90
P	Lead alloyed cutting steel		**70**	100	**90**	110
P	High alloyed steel	700 – 1500 N/mm²			**40**	55
M	Stainless steel	400 – 700 N/mm²	**40**	60	**70**	90
M	DUPLEX stainless steel	> 800 N/mm²			**40**	55
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70**	100	**90**	110
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40**	70	**70**	90
K	Nodular ferritic cast iron / Malleable cast iron		**70**	100	**90**	110
S	Titanium, titanium alloys		**30**	45	**40**	60
N	Copper alloys - easy to machine (brass - bronze)		**140**	160	**200**	220
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120**	140	**170**	190
N	Aluminium alloys	Si < 8%	**180**	260	**230**	340
N	Cast aluminium	Si > 8%	**140**	160	**210**	230
N	Plastic		**240**	260	**300**	340
N	Gold, silver		**140**	160	**200**	220

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times fz\,[mm] \times z$$

Feed per tooth fz [mm]

Ø D_1 0.90 - 1.50	Ø D_1 1.50 -2.00	Ø D_1 2.00 - 2.50	Ø D_1 2.50 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00
		0.008 - 0.02	**0.010** - 0.02	**0.012** - 0.03	**0.016** - 0.04	**0.024** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.11
		0.006 - 0.01	**0.008** - 0.01	**0.009** - 0.02	**0.012** - 0.03	**0.018** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.04** - 0.08
0.005 - 0.015	**0.008** - 0.020	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.020** - 0.06	**0.030** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.06** - 0.16
			0.008 - 0.01	**0.009** - 0.02	**0.012** - 0.03	**0.018** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.04** - 0.08
		0.006 - 0.01	**0.008** - 0.01	**0.009** - 0.02	**0.012** - 0.03	**0.018** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.04** - 0.08
			0.008 - 0.01	**0.009** - 0.02	**0.012** - 0.03	**0.018** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.04** - 0.08
		0.008 - 0.02	**0.010** - 0.02	**0.012** - 0.03	**0.016** - 0.04	**0.024** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.11
			0.008 - 0.01	**0.009** - 0.02	**0.012** - 0.03	**0.018** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.04** - 0.08
	0.006 - 0.014	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.03	**0.016** - 0.04	**0.024** - 0.06	**0.03** - 0.07	**0.04** - 0.08	**0.05** - 0.11
		0.006 - 0.01	**0.008** - 0.01	**0.009** - 0.02	**0.012** - 0.03	**0.018** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.04** - 0.08
0.005 - 0.015	**0.008** - 0.020	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.020** - 0.06	**0.030** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.06** - 0.16
0.003 - 0.008	**0.005** - 0.010	**0.006** - 0.01	**0.008** - 0.01	**0.009** - 0.02	**0.012** - 0.03	**0.018** - 0.04	**0.02** - 0.05	**0.03** - 0.06	**0.04** - 0.08
0.005 - 0.015	**0.008** - 0.020	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.020** - 0.06	**0.030** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.06** - 0.16
0.005 - 0.015	**0.008** - 0.020	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.020** - 0.06	**0.030** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.06** - 0.16
0.006 - 0.023	**0.011** - 0.030	**0.014** - 0.04	**0.018** - 0.04	**0.021** - 0.06	**0.028** - 0.09	**0.042** - 0.12	**0.06** - 0.15	**0.07** - 0.18	**0.08** - 0.24
0.005 - 0.015	**0.008** - 0.020	**0.010** - 0.03	**0.013** - 0.03	**0.015** - 0.04	**0.020** - 0.06	**0.030** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.06** - 0.16

DIXI 7908 - 7918

CUTTING CONDITIONS

Materials to be machined			CARBIDE		TiALN	
			Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm^2	**70**	100	**90**	110
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm^2	**40**	60	**70**	90
P	Lead alloyed cutting steel		**70**	100	**90**	110
P	High alloyed steel	700 – 1500 N/mm^2	**40**	60	**70**	90
M	Stainless steel	400 – 700 N/mm^2	**30**	45	**40**	55
M	DUPLEX stainless steel	> 800 N/mm^2	**40**	60	**70**	90
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70**	100	**90**	110
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40**	70	**70**	90
K	Nodular ferritic cast iron / Malleable cast iron		**70**	100	**90**	110
S	Titanium, titanium alloys		**30**	45	**40**	60
N	Copper alloys - easy to machine (brass - bronze)		**140**	160	**200**	220
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**120**	140	**170**	190
N	Aluminium alloys	Si < 8%	**180**	260	**230**	270
N	Cast aluminium	Si > 8%	**140**	160	**210**	230
N	Plastic		**240**	260	**300**	340
N	Gold, silver		**140**	160	**200**	220

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

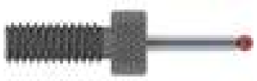
$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times z$$

Feed per tooth fz [mm]

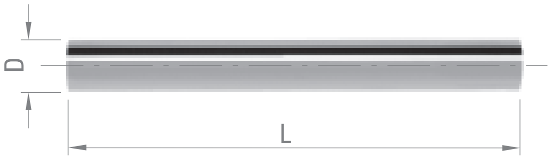
Ø D_1 0.90 - 1.50	Ø D_1 1.50 -2.00	Ø D_1 2.00 - 2.50	Ø D_1 2.50 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00
0.005 - 0.012	**0.009** - 0.016	**0.012** - 0.02	**0.015** - 0.02	**0.018** - 0.03	**0.024** - 0.05	**0.036** - 0.06	**0.05** - 0.08	**0.06** - 0.10	**0.07** - 0.13
0.004 - 0.009	**0.006** - 0.012	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.016** - 0.04	**0.024** - 0.05	**0.03** - 0.06	**0.04** - 0.07	**0.05** - 0.10
0.006 - 0.018	**0.011** - 0.024	**0.014** - 0.03	**0.018** - 0.03	**0.021** - 0.05	**0.028** - 0.07	**0.042** - 0.10	**0.06** - 0.12	**0.07** - 0.14	**0.08** - 0.19
0.004 - 0.009	**0.006** - 0.012	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.016** - 0.04	**0.024** - 0.05	**0.03** - 0.06	**0.04** - 0.07	**0.05** - 0.10
0.004 - 0.009	**0.006** - 0.012	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.016** - 0.04	**0.024** - 0.05	**0.03** - 0.06	**0.04** - 0.07	**0.05** - 0.10
0.004 - 0.009	**0.006** - 0.012	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.016** - 0.04	**0.024** - 0.05	**0.03** - 0.06	**0.04** - 0.07	**0.05** - 0.10
0.005 - 0.012	**0.009** - 0.016	**0.012** - 0.02	**0.015** - 0.02	**0.018** - 0.03	**0.024** - 0.05	**0.036** - 0.06	**0.05** - 0.08	**0.06** - 0.10	**0.07** - 0.13
0.004 - 0.009	**0.006** - 0.012	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.016** - 0.04	**0.024** - 0.05	**0.03** - 0.06	**0.04** - 0.07	**0.05** - 0.10
0.005 - 0.012	**0.009** - 0.016	**0.012** - 0.02	**0.015** - 0.02	**0.018** - 0.03	**0.024** - 0.05	**0.036** - 0.06	**0.05** - 0.08	**0.06** - 0.10	**0.07** - 0.13
0.004 - 0.009	**0.006** - 0.012	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.016** - 0.04	**0.024** - 0.05	**0.03** - 0.06	**0.04** - 0.07	**0.05** - 0.10
0.006 - 0.018	**0.011** - 0.024	**0.014** - 0.03	**0.018** - 0.03	**0.021** - 0.05	**0.028** - 0.07	**0.042** - 0.10	**0.06** - 0.12	**0.07** - 0.14	**0.08** - 0.19
0.004 - 0.009	**0.006** - 0.012	**0.008** - 0.02	**0.010** - 0.02	**0.012** - 0.02	**0.016** - 0.04	**0.024** - 0.05	**0.03** - 0.06	**0.04** - 0.07	**0.05** - 0.10
0.006 - 0.018	**0.011** - 0.024	**0.014** - 0.03	**0.018** - 0.03	**0.021** - 0.05	**0.028** - 0.07	**0.042** - 0.10	**0.06** - 0.12	**0.07** - 0.14	**0.08** - 0.19
0.006 - 0.018	**0.011** - 0.024	**0.014** - 0.03	**0.018** - 0.03	**0.021** - 0.05	**0.028** - 0.07	**0.042** - 0.10	**0.06** - 0.12	**0.07** - 0.14	**0.08** - 0.19
0.007 - 0.027	**0.012** - 0.036	**0.016** - 0.05	**0.020** - 0.05	**0.024** - 0.07	**0.032** - 0.11	**0.048** - 0.14	**0.06** - 0.18	**0.08** - 0.22	**0.10** - 0.29
0.006 - 0.018	**0.011** - 0.024	**0.014** - 0.03	**0.018** - 0.03	**0.021** - 0.05	**0.028** - 0.07	**0.042** - 0.10	**0.06** - 0.12	**0.07** - 0.14	**0.08** - 0.19


10
0

WEAR PARTS



GROUND RODS



D_{h6} [mm]	L [mm]	
0.300	30	☐
0.350	30	☐
0.400	30	☐
0.450	30	☐
0.500	30	☐
0.500	38	☐
0.550	30	☐
0.550	38	☐
0.600	30	☐
0.600	38	☐
0.650	30	☐
0.650	38	☐
0.700	30	☐
0.700	38	☐
0.750	30	☐
0.750	38	☐
0.800	30	☐
0.800	38	☐
0.800	102	☐
0.850	30	☐
0.850	38	☐
0.900	30	☐
0.900	38	☐
0.950	30	☐
0.950	38	☐
1.000	30	☐
1.000	38	☐
1.000	102	☐
1.050	30	☐
1.050	38	☐
1.100	30	☐
1.100	38	☐
1.100	102	☐
1.150	30	☐
1.150	38	☐
1.200	30	☐
1.200	38	☐
1.200	102	☐
1.250	30	☐
1.250	38	☐
1.300	30	☐
1.300	38	☐
1.300	102	☐
1.350	30	☐
1.350	38	☐
1.400	30	☐
1.400	40	☐
1.400	102	☐
1.450	30	☐
1.450	38	☐
1.500	30	☐
1.500	40	☐
1.500	102	☐
1.550	38	☐
1.600	38	☐
1.600	43	☐
1.600	102	☐
1.650	38	☐
1.700	38	☐
1.700	43	☐
1.700	102	☐
1.750	38	☐
1.800	38	☐
1.800	46	☐
1.800	102	☐
1.850	38	☐
1.900	38	☐
1.900	46	☐
1.900	102	☐
1.950	38	☐
2.000	25	☐
2.000	32	☐
2.000	38	☐
2.000	102	☐
2.050	38	☐
2.100	38	☐
2.100	102	☐
2.150	40	☐
2.200	40	☐
2.200	53	☐
2.200	102	☐
2.250	40	☐
2.300	40	☐
2.300	53	☐
2.300	102	☐
2.350	40	☐
2.400	43	☐
2.400	57	☐
2.400	102	☐
2.450	43	☐
2.500	32	☐
2.500	43	☐
2.500	57	☐
2.500	102	☐
2.550	43	☐
2.600	43	☐
2.600	57	☐
2.600	102	☐
2.650	43	☐
2.700	46	☐
2.700	61	☐
2.700	102	☐
2.750	102	☐
2.800	46	☐
2.800	61	☐
2.800	102	☐
2.850	102	☐
2.900	46	☐
2.900	61	☐
2.900	102	☐
2.950	102	☐
3.000	38	☐
3.000	46	☐
3.000	61	☐
3.000	102	☐
3.050	102	☐
3.100	65	☐
3.100	102	☐
3.150	102	☐
3.200	65	☐
3.200	102	☐
3.250	102	☐
3.300	65	☐
3.300	102	☐
3.350	102	☐
3.400	52	☐
3.400	70	☐
3.400	102	☐
3.450	52	☐
3.500	40	☐
3.500	52	☐
3.500	70	☐
3.500	102	☐
3.550	52	☐
3.600	52	☐
3.600	70	☐
3.600	102	☐
3.650	52	☐
3.700	52	☐
3.700	70	☐
3.700	102	☐
3.750	52	☐
3.800	55	☐
3.800	75	☐
3.800	102	☐
3.850	55	☐
3.900	55	☐
3.900	75	☐
3.900	102	☐
3.950	55	☐
4.000	55	☐
4.000	62	☐
4.000	75	☐
4.000	102	☐
4.000	320	☐
4.050	55	☐
4.100	55	☐
4.100	75	☐
4.100	102	☐
4.150	55	☐
4.200	55	☐
4.200	75	☐
4.200	102	☐
4.250	55	☐
4.300	58	☐
4.300	80	☐
4.300	102	☐
4.350	58	☐
4.400	58	☐
4.400	80	☐
4.400	102	☐
4.450	58	☐

DIXI 6801

D h6 [mm]	L [mm]	
4.500	58	☐
4.500	80	☐
4.500	102	☐
4.550	58	☐
4.600	58	☐
4.600	80	☐
4.600	102	☐
4.650	58	☐
4.700	58	☐
4.700	80	☐
4.700	102	☐
4.750	58	☐
4.800	62	☐
4.800	86	☐
4.800	102	☐
4.850	62	☐
4.900	62	☐
4.900	86	☐
4.900	102	☐
4.950	62	☐
5.000	62	☐
5.000	75	☐
5.000	86	☐
5.000	102	☐
5.000	320	☐
5.100	62	☐
5.100	86	☐
5.100	102	☐
5.200	62	☐
5.200	86	☐
5.200	102	☐
5.300	62	☐
5.300	86	☐
5.300	102	☐
5.400	66	☐
5.400	93	☐
5.400	102	☐
5.500	66	☐
5.500	102	☐
5.600	66	☐
5.600	102	☐
5.700	66	☐
5.700	102	☐
5.800	66	☐
5.800	102	☐
5.900	66	☐
5.900	102	☐
6.000	57	☐
6.000	66	☐
6.000	75	☐
6.000	93	☐
6.000	102	☐
6.000	320	☐
6.100	70	☐
6.100	102	☐
6.200	70	☐
6.200	102	☐
6.300	70	☐
6.300	102	☐
6.350	75	☐
6.400	70	☐
6.400	102	☐
6.500	70	☐
6.500	102	☐
6.600	70	☐
6.600	102	☐
6.700	70	☐
6.700	102	☐
6.800	74	☐
6.800	109	☐
6.900	74	☐
6.900	109	☐
7.000	60	☐
7.000	75	☐
7.000	109	☐
7.500	74	☐
7.500	109	☐
7.800	79	☐
8.000	63	☐
8.000	75	☐
8.000	79	☐
8.000	102	☐
8.000	117	☐
8.000	320	☐
8.500	79	☐
8.500	117	☐
9.000	67	☐
9.000	84	☐
9.000	102	☐
9.000	125	☐
9.500	84	☐
9.500	125	☐
10.000	66	☐
10.000	72	☐
10.000	75	☐
10.000	90	☐
10.000	102	☐
10.000	133	☐
10.000	320	☐
10.200	89	☐
10.500	89	☐
11.000	75	☐
11.000	102	☐
11.000	142	☐
11.500	142	☐
12.000	73	☐
12.000	83	☐
12.000	102	☐
12.000	151	☐
12.000	320	☐
12.500	102	☐
12.500	151	☐
13.000	75	☐
13.000	83	☐
13.000	102	☐
13.000	151	☐
13.500	107	☐
14.000	75	☐
14.000	83	☐
14.000	107	☐
14.000	152	☐
14.000	160	☐
14.000	320	☐
15.000	75	☐
15.000	111	☐
16.000	82	☐
16.000	92	☐
16.000	102	☐
16.000	120	☐
16.000	152	☐
16.000	320	☐
18.000	92	☐
18.000	125	☐
18.000	152	☐
18.000	320	☐
20.000	105	☐
20.000	130	☐
20.000	152	☐
20.000	320	☐

DIXI 6820

POLISHED CARBIDE BALLS

P. 320

[mm]	inches	
0.79375	1/32"	☐
0.800		☐
1.000		☐
1.19025	3/64"	☐
1.200		☐
1.500		☐
1.587	1/16"	☐
1.750		☐
2.000		☐
2.3815	3/32"	☐
2.500		☐
2.750		☐
2.77825	7/64"	☐
3.000		☐
3.175	1/8"	☐
3.200		☐
3.500		☐
3.9685	5/32"	☐
4.000		☐
4.500		☐
4.762	3/16"	☐
5.000		☐
5.500		☐
5.5565	7/32"	☐
6.000		☐
6.350	1/4"	☐
6.500		☐
6.74675	17/64"	☐
7.000		☐
7.1435	9/32"	☐
7.500		☐
7.937	5/16"	☐
8.000		☐
8.500		☐
8.7315	11/32"	☐
9.000		☐
9.500		☐
9.525	3/8"	☐
10.000		☐
11.000		☐
11.112	7/16"	☐
11.906	15/32"	☐
12.000		☐
12.700	1/2"	☐
13.000		☐
13.493	17/32"	☐
14.000		☐
14.287	9/16"	☐
15.000		☐
15.081	19/32"	☐
15.875	5/8"	☐
16.000		☐
16.6688	21/32"	☐
17.000		☐
17.462	11/16"	☐
18.000		☐
19.000		☐
19.050	3/4"	☐
19.843	25/32"	☐
20.000		☐
21.000		☐
21.431	27/32"	☐
22.000		☐
22.225	7/8"	☐
23.000		☐
24.000		☐
25.000		☐
25.400	1"	☐
26.000		☐
28.000		☐
30.000		☐
32.000		☐

DIXI 6960

POLISHED RUBY / SAPPHIRE BALLS

P. 320

[mm]	inches
1	
1.50	
1.587	1/16"
2	
2.381	3/32"
2.50	
3	
3.175	1/8"
4	
4.762	3/16"

[mm]	inches
5	
6	
6.35	1/4"
7	
8	
10	
11	
11.112	7/16"
12	
12.700	1/2"

DIXI 6961

POLISHED $Al_2 0_3$ - SiC BALLS

P. 320

[mm]	inches
1.50	
2	
2.50	
3	
3.175	1/8"
4	
4.50	
5	
6	
7	
8	

BALLS

PROPERTIES OF MATERIALS

	Tungsten carbide	Ruby / Sapphire	Ceramic	Silicon carbide
Compound	94 WC+6 Co	$Al_2 0_3$	$Al_2 0_3$	SiC
Specific weight	14.90	3.98	3.90	3.1
Hardness HV 50	1700	-	-	2500
Knoop hardness	-	1800/2200	2000	-
Modulus of elasticity E (kN/mm^2)	640	420	350	400
Compression resistance (kN/mm^2)	5.7	2.1	2.4	4.1
Tensile strength (kN/mm^2)	1.7	0.019	0.025	0.4
Softening point (°C)	600	1800	1725	1400
Melting or dissociation point (°C)	2600	2050	2050	1900
Thermic dilatation (10^{-6}/°C)	5	5.3-6.2	6.6	4.3
Specific heat (j/g/°C)	0.20	0.043	0.06	0.8
Porosity	porous	resistant	porous	porous
Resistance to acid attacks	relative	total	total	excellent
Resistance to alkaline attacks	relative	total	total	excellent

PROBES & GAUGES

The materials used for DIXI probes are in accordance
with their intended application and geometrical specifications:
- Minimal inertia
- Minimal bending
- Wear and/or environment resistance
- Specific geometry
- Precision

Dimensions and materials must be indicated when ordering.

SOLID CARBIDE ANVILS

Absolutely necessary as a reference basis, DIXI anvils are perfectly polished and manufactured to very fine flatness limits.
PCD and CBN anvils are also available on request.

Dimensions and diameters must be indicated when ordering.