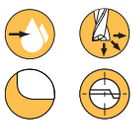
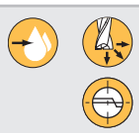
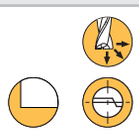
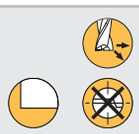
SELECTION OF DIAMOND TOOLS

✓ = 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									
DIXI 76230		1	297				✓		
DIXI 76230 DIA		1	297				☺		
FACE MILLING CUTTERS									
DIXI 81000		2 - 4	300		✓		✓		
DIXI 80000		6 - 16	301		☺	☺		☺	
DRILLS									
DIXI 11140		1	301		☺				
DIXI 11180		2	301		☺				

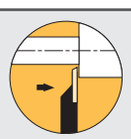
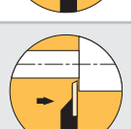
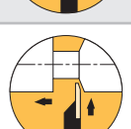
CBN **PCD** **CVD** **ND/MDC**

◯ good ◎ excellent

CBN		PCD									
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

Steel Hardened cast iron > 45 HRC	Cast iron > 35 HRC
◎	○
◎	○
◎	○
◎	○
◎	○
◎	○
◎	○
◎	○
◎	○
◎	○
◎	○

PCD CVD ND/MDC

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

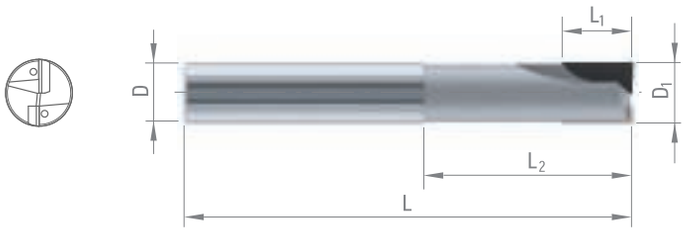
END MILLS, CENTRE CUTTING AND THROUGH COOLANT

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

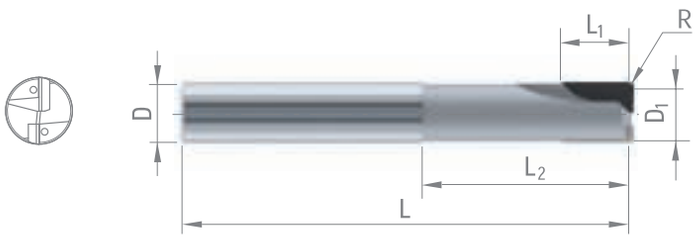
END MILLS, CENTRE CUTTING WITH CORNER RADIUS AND THROUGH COOLANT

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

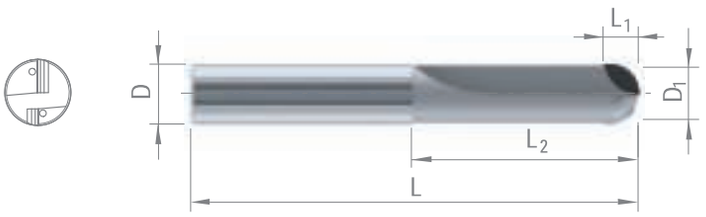
BALL-NOSE END MILLS WITH THROUGH COOLANT

Z = 1-2

P. 308

$D_1 \geq Ø\ 6$

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

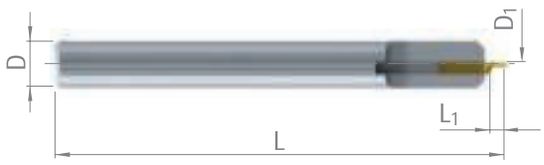
TOOLS ON REQUEST

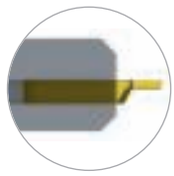
NATURAL DIAMOND MICRO END MILLS

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)

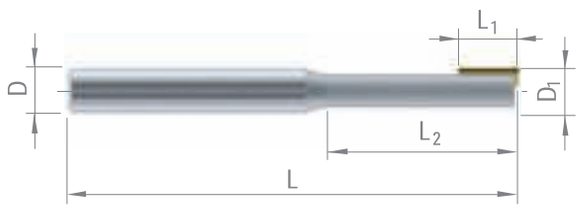
DIXI 72421 TOOLS ON REQUEST

END MILLS FOR ACRYL

Z = 1

P. 308

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

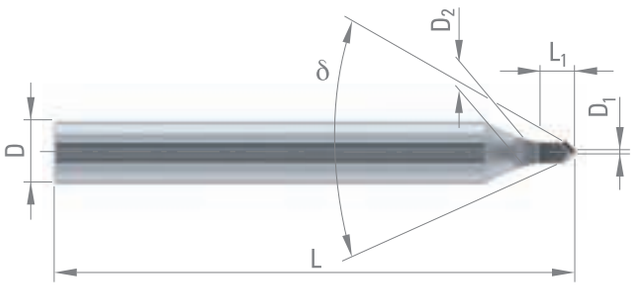


D_1	L_1	L_2	D_{h6}	L	ND/MDC
6	4	25	6	60	◆
6	6	25	6	60	◆
6	8	25	6	60	◆
8	4	25	8	60	◆
8	6	25	8	60	◆
8	8	25	8	60	◆
10	4	25	10	60	◆
10	6	25	10	60	◆
10	8	25	10	60	◆
10	10	25	10	60	◆
12	4	25	12	60	◆
12	6	25	12	60	◆
12	8	25	12	60	◆
12	10	25	12	60	◆

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	◆

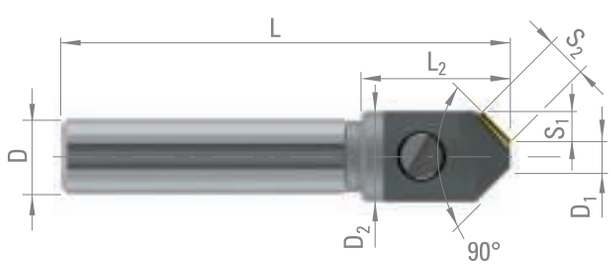
* not cutting

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

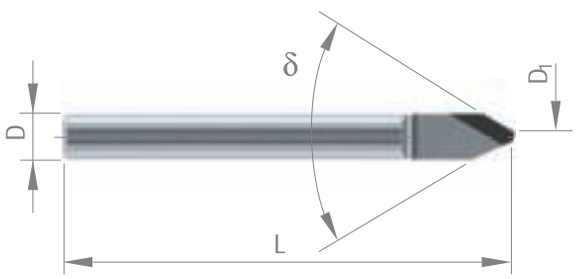
Material to be machined:

HRC hardness:

DIXI 70XX0 TOOLS ON REQUEST

ENGRAVING TOOLS

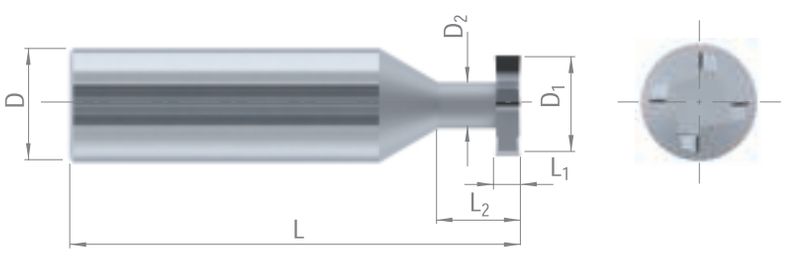
D_1 =
D =
L =
δ =



DIXI 15150 TOOLS ON REQUEST

T-SLOT CUTTERS

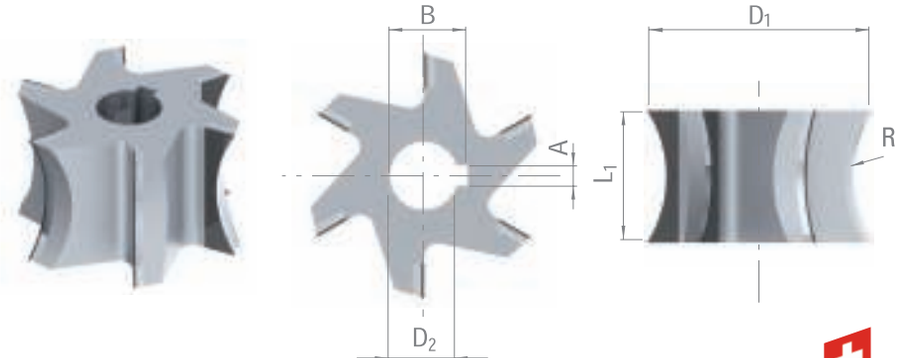
Z =
D =
D_1 =
D_2 =
L =
L_1 =
L_2 =
R =



DIXI 16560 TOOLS ON REQUEST

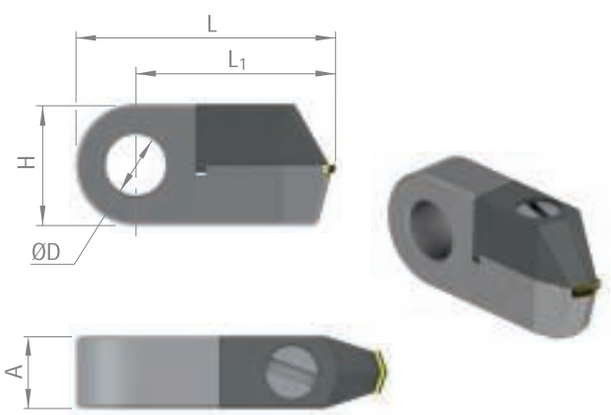
CONCAVE SLITTING SAWS

D_1 =
D_2 =
L_1 =
R =
A =
B =

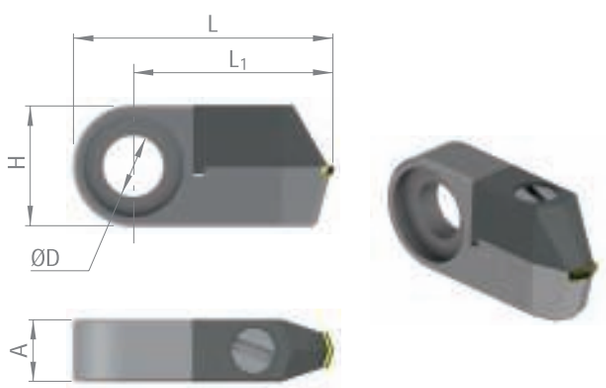


TURNING AND MILLING DIAMOND TOOLS

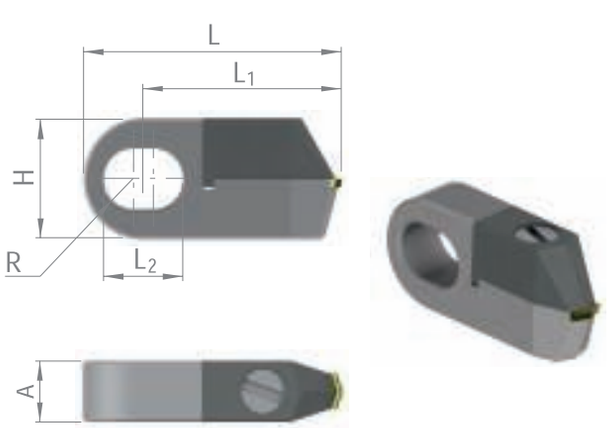
A



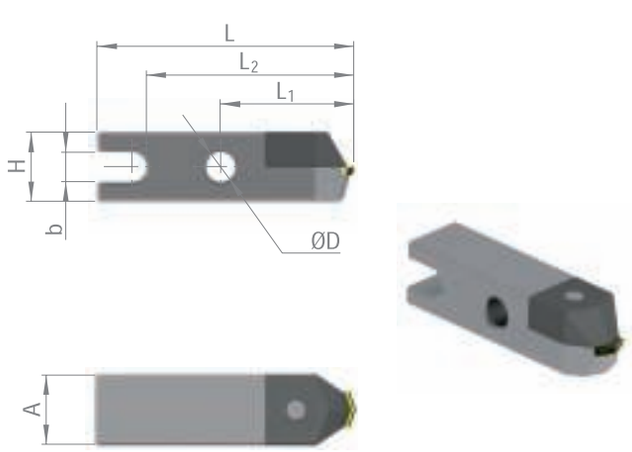
B



C



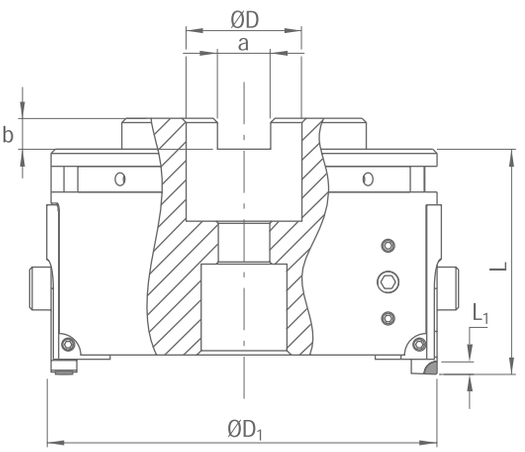
D

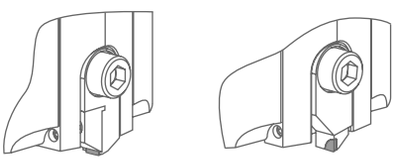


A large variety of diamond tools for turning and milling on request.
When ordering, please specify the cutting material (PCD - CBN - MDC / ND - CVD) and the material to be machined + its hardness in HRC (CBN tool).
For a range of special shapes, see pages **305-306**.

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

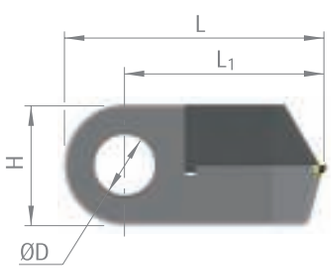
Interchangeable tool holders

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

DIXI 20370

MILLING TOOLS

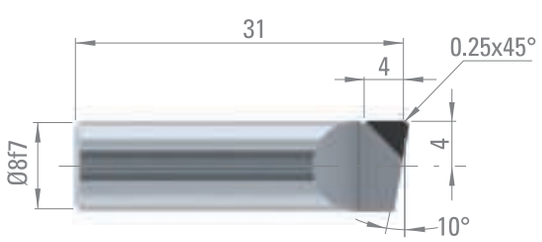
for DIXI 81000 face milling heads



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



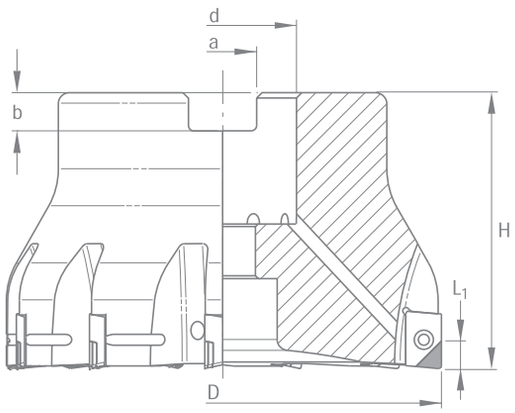
Ref.	Description
968179	PCD pin for roughing (black)
968181	PCD pin for finishing (red)
974193	PCD pin for satined surface (green)
968178	Diamond pin for transparent surface finish (blue)

DIXI 80000

ADJUSTABLE HOLDER FOR ISO INSERTS
FOR FACE MILLING APPLICATION

Z = 6-16

P. 310



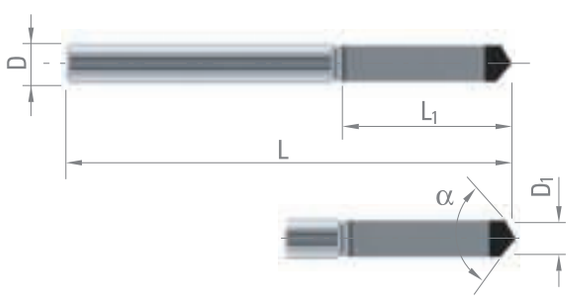
D	L_1	H	a	b	d	Z	Weight [kg]
40.00	3.0	40	8.4	6.6	16	6	0.20
50.00	3.0	40	10.4	7.2	22	7	0.35
63.00	3.0	40	10.4	7.2	22	8	0.60
80.00	3.0	50	12.4	7.2	27	11	1.20
100.00	3.0	50	14.4	8.2	32	13	2.00
125.00	3.0	50	16.4	9.0	32	16	2.20

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)

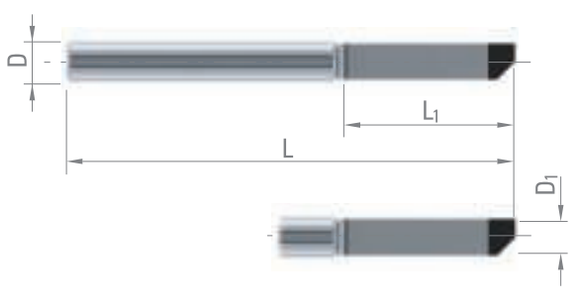
DIXI 11140 - 11180 TOOLS ON REQUEST

STRAIGHT FLUTE DRILLS

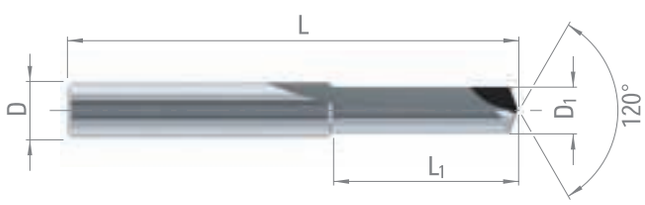
DIXI 11140 A - PCD



DIXI 11140 B - PCD



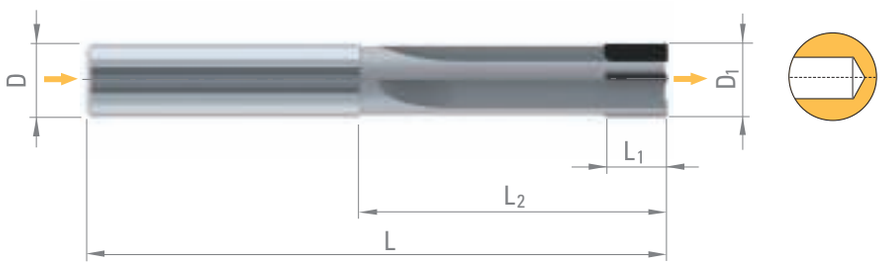
DIXI 11180 - PCD



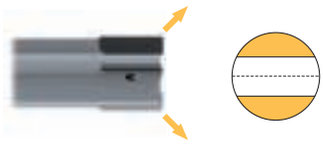
POLY 40010-2 - 40010-3 TOOLS ON REQUEST

PCD REAMERS

POLY 40010-2



POLY 40010-3

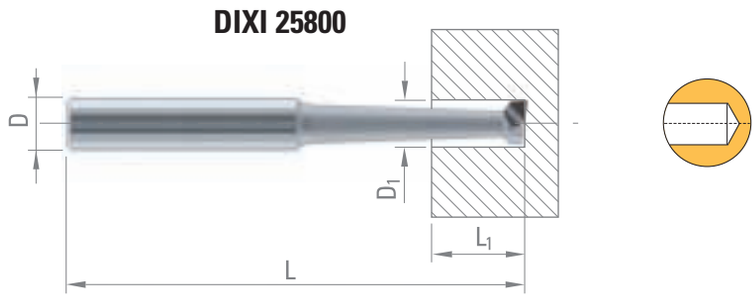


D_1	L_1	L_2	D_{h6}	L	Z	PCD
8.000 - 9.100	7	34	8	64	4	●
9.102 - 10.100	7	44	10	80	4	●
10.101 - 11.100	7	44	10	80	4	●
11.101 - 12.300	7	63	12	108	4	●
12.300 - 13.100	7	63	12	108	4	●
13.101 - 14.500	7	58	16	108	4	●
14.501 - 16.100	7	58	16	108	4	●
16.101 - 18.100	7	58	16	108	4	●
18.101 - 20.500	7	58	20	108	4	●
20.501 - 22.100	7	58	20	108	4	●

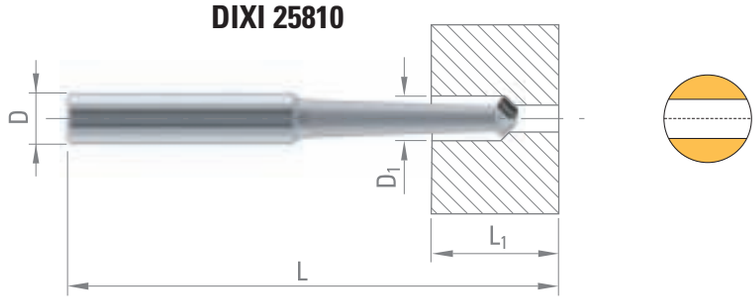
DIXI 25800 - 25810 TOOLS ON REQUEST

BORING TOOLS

DIXI 25800



DIXI 25810

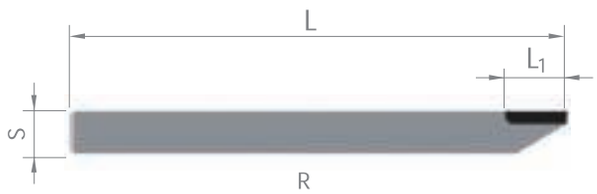


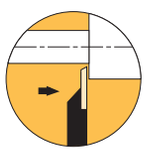
DIXI 20160-20770 TOOLS ON REQUEST

TURNING TOOLS

P. 312

DIXI 20610





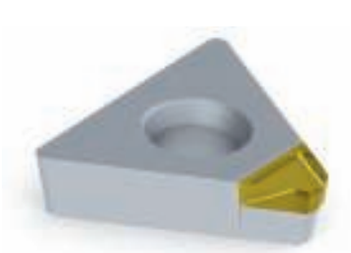
DIXI 20770

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

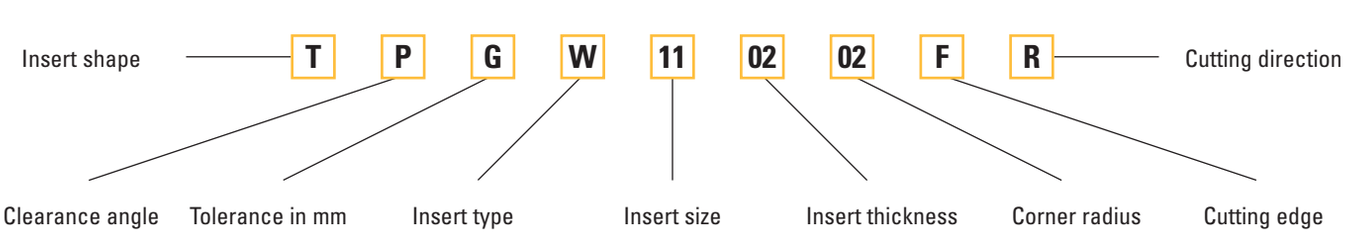
DIXI 264X0 TOOLS ON REQUEST

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**



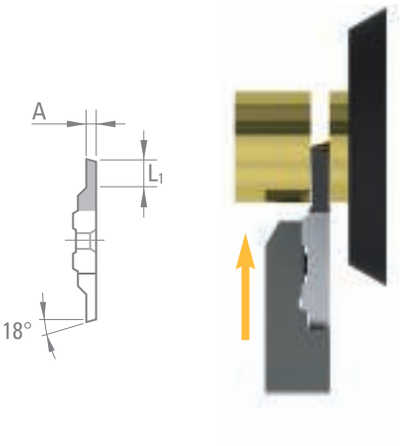
TURNING INSERTS

P. 312

PARTING OFF

ARTDECO 26500 TR

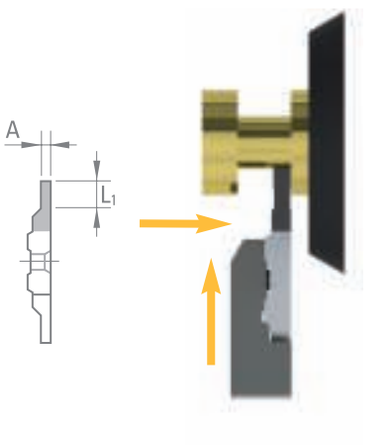
R	L_1	A	L	PCD
TR06R-0.8	3.0	0.8	TR06L-0.8	●
TR06R-1.0	4.0	1.0	TR06L-1.0	●
TR06R-1.2	5.0	1.2	TR06L-1.2	●
TR06R-1.5	5.0	1.5	TR06L-1.5	●
TR06R-1.8	6.0	1.8	TR06L-1.8	●
TR06R-2.0	6.0	2.0	TR06L-2.0	●



PLUNGING / TURNING

ARTDECO 26500 FT

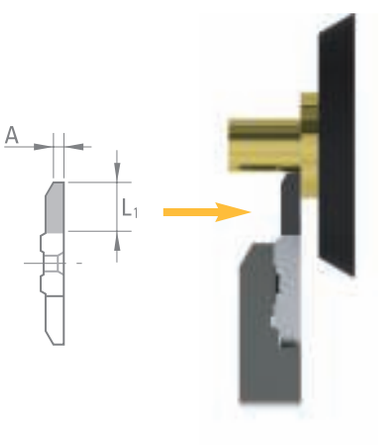
R	L_1	A	L	PCD
FT06R-2.0	4.0	2.0	FT06L-2.0	●



FRONT TURNING

ARTDECO 26500 AV

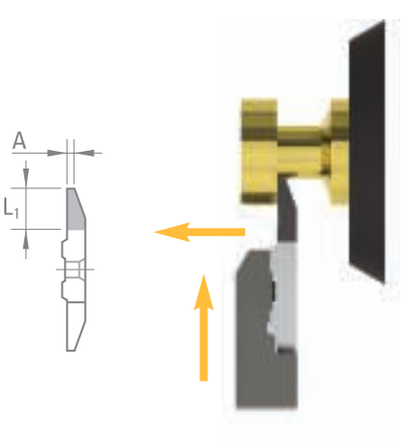
R	L_1	A	L	PCD
AV06R-1.5	5.0	1.5	AV06L-1.5	●



BACK TURNING

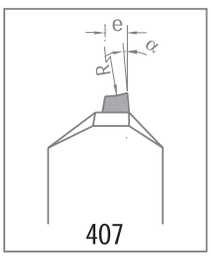
ARTDECO 26500 AR

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



RANGE OF SPECIAL SHAPES

RANGE OF SPECIAL SHAPES



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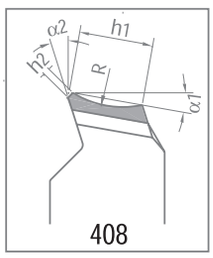

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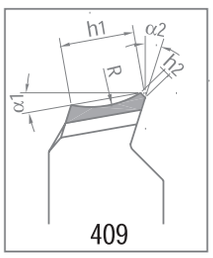

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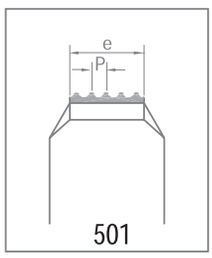
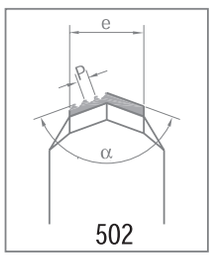


501



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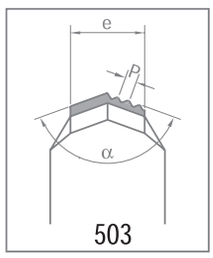

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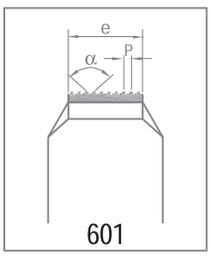

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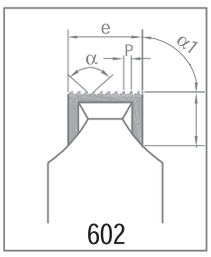

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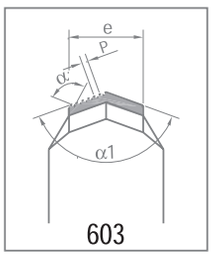

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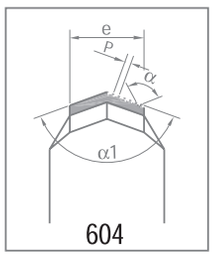

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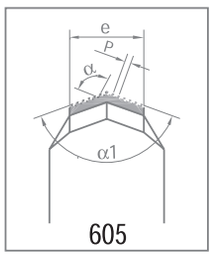

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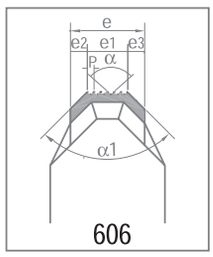

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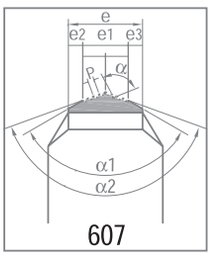

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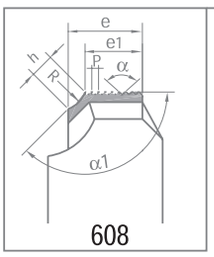

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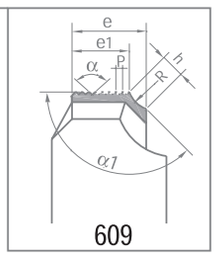

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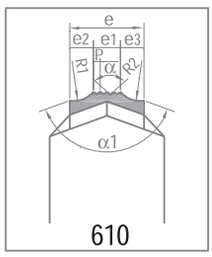

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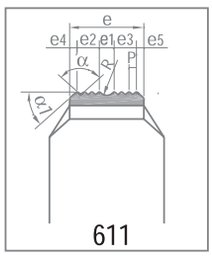

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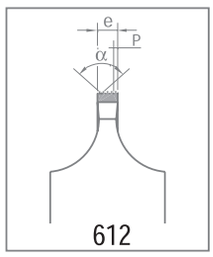

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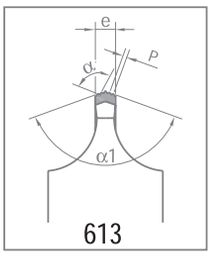

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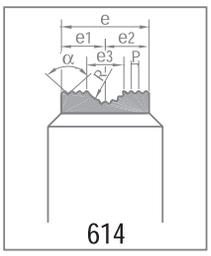

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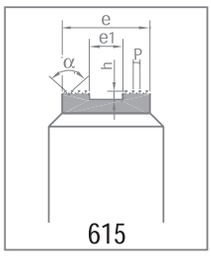

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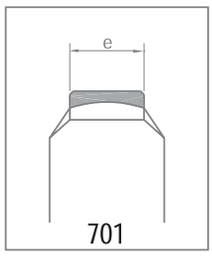

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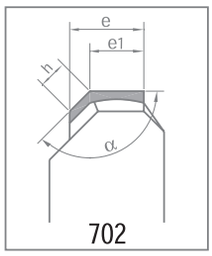

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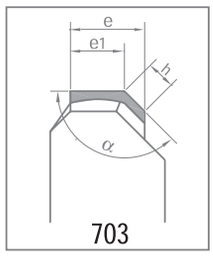

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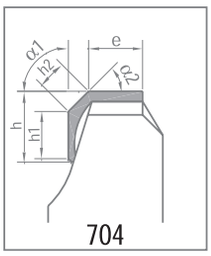

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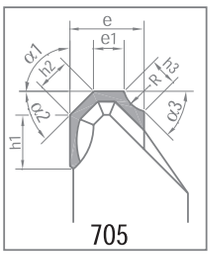
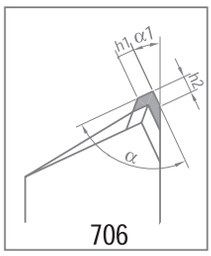


705



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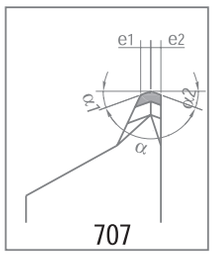
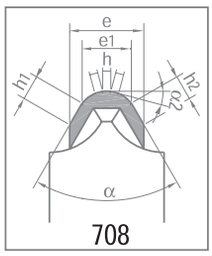


707



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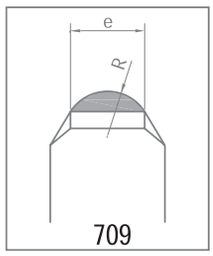

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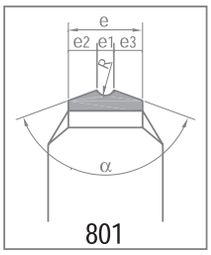
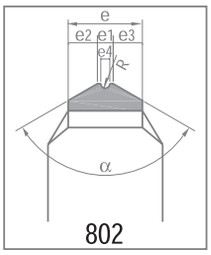


801



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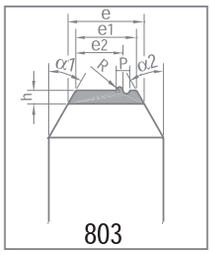

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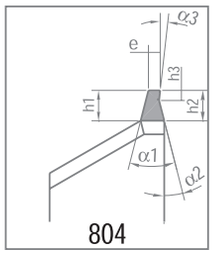

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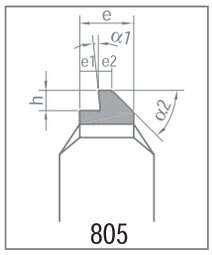

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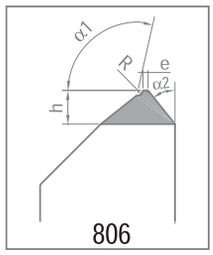

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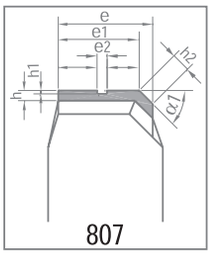

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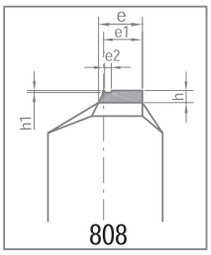

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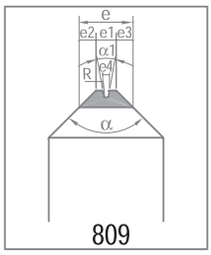
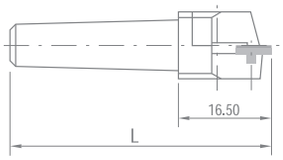


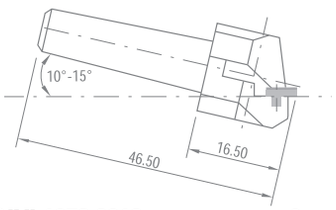
809

DIADIX® WHEEL-DRESSERS

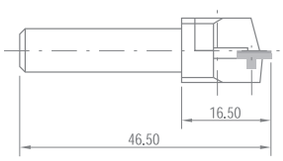
DIADIX® HOLDERS



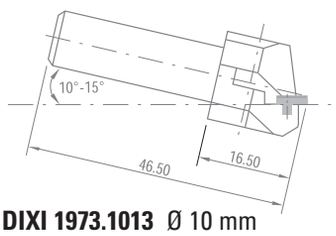
DIXI 1973.0023 morse taper 0 L = 46.5
DIXI 1973.0123 morse taper 1 L = 59.5



DIXI 1973.0013 morse taper 0
DIXI 1973.0113 morse taper 1

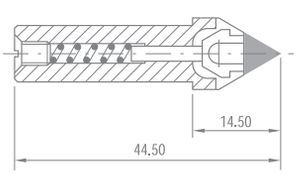


DIXI 1973.0823 Ø 8 mm
DIXI 1973.1023 Ø 10 mm
DIXI 1973.1223 Ø 12 mm



DIXI 1973.1013 Ø 10 mm

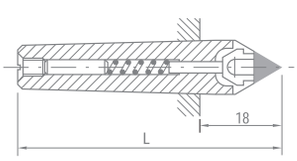
DIADIX® HOLDERS FOR PROFILER



Tool holder for profile dressing
with automatic centering of the insert

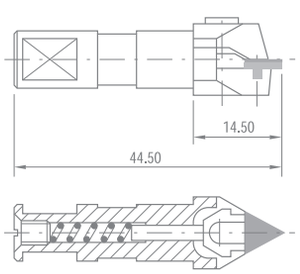
Cylindrical holder

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

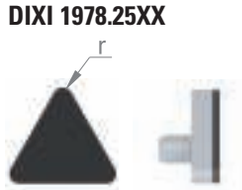
Inserts for profiling devices

DIXI 1978.360°

DIXI 1978.23

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 Vc [m/min]	CVD Vc [m/min]	ND / MDC Vc [m/min]	CBN 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	

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

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

Feed per 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		
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	**max. = 0.05**	
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	Feed	Depth of cut	Feed
(mm)	(mm/rev)	(mm)	(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