



Tooth shape A
fine tooth pitch



Tooth shape B
hypoid-toothed



Tooth shape BW
hypoid-toothed,
bevelled on
side-bevelled



Tooth shape C
High cutting capacity (HZ) with
roughing and
finishing teeth

17002

Circular metal saw blades DIN 1837 A

HSS



Type

Tooth shape A DIN 1840, fine tooth pitch, concave.

Use

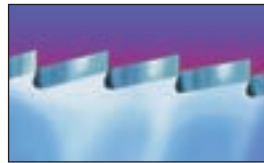
Fine-pitched teeth with small chip-clearance gashes only for shallow cuts and thin-walled workpieces (1 - 5 mm). Particularly suitable for machining brittle, short-chipping materials.

Quality

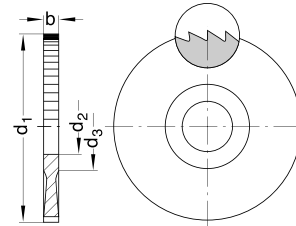
HSS.

Note:

Saw blade tool holders see cat. no. 21636.



Tooth shape A



17002

d ₁ x b x d ₂ mm	Tooth-count	17002	...
20 x 0,20 x 5	80		101
20 x 0,25 x 5	64		102
20 x 0,30 x 5	64		103
20 x 0,40 x 5	64		104
20 x 0,50 x 5	48		105
20 x 0,60 x 5	48		106
20 x 0,80 x 5	48		107
20 x 1,00 x 5	40		108
20 x 1,20 x 5	40		109
20 x 1,60 x 5	40		110
20 x 2,00 x 5	32		111
20 x 3,00 x 5	32		113
25 x 0,20 x 8	80		117
25 x 0,25 x 8	80		118
25 x 0,30 x 8	80		119
25 x 0,40 x 8	64		120
25 x 0,50 x 8	64		121
25 x 1,00 x 8	48		124
25 x 1,20 x 8	48		125
25 x 1,60 x 8	40		126
25 x 2,00 x 8	40		127
25 x 2,50 x 8	40		128
25 x 3,00 x 8	32		129
32 x 0,20 x 8	100		133
32 x 0,25 x 8	100		134
32 x 0,30 x 8	80		135
32 x 0,40 x 8	80		136
32 x 0,50 x 8	80		137
32 x 0,60 x 8	64		138
32 x 0,80 x 8	64		139
32 x 1,00 x 8	64		140
32 x 1,20 x 8	48		141
32 x 1,60 x 8	48		142
32 x 2,00 x 8	48		143
32 x 2,50 x 8	40		144
32 x 3,00 x 8	40		145
40 x 0,20 x 10	128		149
40 x 0,25 x 10	100		150

d ₁ x b x d ₂ mm	Tooth-count	17002	...
40 x 0,30 x 10	100		151
40 x 0,40 x 10	100		152
40 x 0,50 x 10	80		153
40 x 0,60 x 10	80		154
40 x 0,80 x 10	80		155
40 x 1,00 x 10	64		156
40 x 1,20 x 10	64		157
40 x 1,60 x 10	64		158
40 x 2,00 x 10	48		159
40 x 2,50 x 10	48		160
40 x 3,00 x 10	48		161
50 x 0,20 x 13	128		165
50 x 0,25 x 13	128		166
50 x 0,30 x 13	128		167
50 x 0,40 x 13	100		168
50 x 0,50 x 13	100		169
50 x 0,60 x 13	100		170
50 x 0,80 x 13	80		171
50 x 1,00 x 13	80		172
50 x 1,20 x 13	80		173
50 x 1,60 x 13	64		174
50 x 2,00 x 13	64		175
50 x 2,50 x 13	64		176
50 x 3,00 x 13	48		177
63 x 0,30 x 16	128		183
63 x 0,40 x 16	128		184
63 x 0,50 x 16	128		185
63 x 0,80 x 16	100		187
63 x 1,00 x 16	100		188
63 x 1,20 x 16	80		189
63 x 1,60 x 16	80		190
63 x 2,00 x 16	80		191
63 x 2,50 x 16	64		192
63 x 3,00 x 16	64		193
63 x 4,00 x 16	64		194
63 x 6,00 x 16	48		196
80 x 0,30 x 22	160		199
80 x 0,40 x 22	160		200

d ₁ x b x d ₂ mm	Tooth-count	17002	...
80 x 0,50 x 22	128		201
80 x 0,80 x 22	128		203
80 x 1,00 x 22	100		204
80 x 1,20 x 22	100		205
80 x 1,60 x 22	100		206
80 x 2,00 x 22	80		207
80 x 2,50 x 22	80		208
80 x 3,00 x 22	80		209
80 x 4,00 x 22	64		210
80 x 6,00 x 22	64		212
100 x 0,50 x 22	160		217
100 x 0,80 x 22	128		219
100 x 1,00 x 22	128		220
100 x 1,20 x 22	128		221
100 x 1,60 x 22	100		222
100 x 2,00 x 22	100		223
100 x 2,50 x 22	100		224
100 x 3,00 x 22	80		225
100 x 4,00 x 22	80		226
100 x 6,00 x 22	64		228
125 x 0,60 x 22	160		234
125 x 0,80 x 22	160		235
125 x 1,00 x 22	160		236
125 x 1,20 x 22	128		237
125 x 1,60 x 22	128		238
125 x 2,00 x 22	128		239
125 x 2,50 x 22	100		240
125 x 3,00 x 22	100		241
125 x 4,00 x 22	100		242
125 x 6,00 x 22	80		244
160 x 1,00 x 32	160		252
160 x 1,20 x 32	160		253
160 x 1,60 x 32	160		254
160 x 2,00 x 32	128		255
160 x 2,50 x 32	128		256
160 x 3,00 x 32	128		257
160 x 4,00 x 32	100		258

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
-	-	-	45-50	40-45	35-40	30-35	25-30	-	-	-	-	-	25-30	20-25	-	25-40	-

17005

Circular metal saw blades DIN 1838 B

HSS



Type

Tooth shape B DIN 1840, hypoid-toothed, hollow-ground.

Use

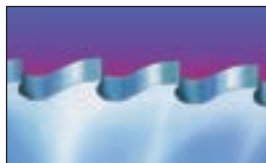
For medium and deep cuts in materials with a minimum thickness of 3mm, for universal use because of the generous size and good design of the chip-clearance gashes.

Quality

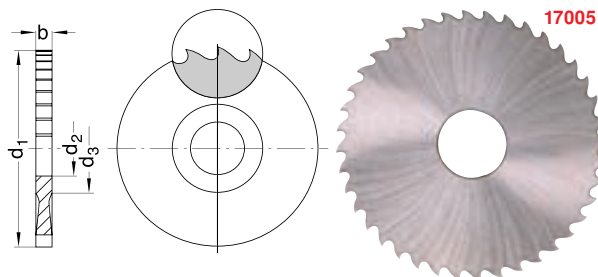
HSS.

Note:

Saw blade tool holders see cat. no. 21636.



Tooth shape B



d ₁ x b x d ₂ mm	Tooth-count	17005	...
50 x 1,0 x 13	40		101
50 x 1,2 x 13	40		102
50 x 1,6 x 13	32		103
50 x 2,0 x 13	32		104
50 x 3,0 x 13	24		106
50 x 4,0 x 13	24		107
63 x 1,0 x 16	48		110
63 x 1,2 x 16	40		111
63 x 1,6 x 16	40		112
63 x 2,0 x 16	40		113
63 x 3,0 x 16	32		115
63 x 4,0 x 16	32		116
63 x 5,0 x 16	24		117
63 x 6,0 x 16	24		118
80 x 1,0 x 22	48		119
80 x 1,2 x 22	48		120
80 x 1,6 x 22	48		121
80 x 2,0 x 22	40		122

d ₁ x b x d ₂ mm	Tooth-count	17005	...
80 x 3,0 x 22	40		124
80 x 4,0 x 22	32		125
80 x 5,0 x 22	32		126
80 x 6,0 x 22	32		127
100 x 1,0 x 22	64		128
100 x 1,2 x 22	64		129
100 x 1,6 x 22	48		130
100 x 2,0 x 22	48		131
100 x 3,0 x 22	40		133
100 x 4,0 x 22	40		134
100 x 5,0 x 22	40		135
100 x 6,0 x 22	32		136
125 x 1,0 x 22	80		137
125 x 1,2 x 22	64		138
125 x 1,6 x 22	64		139
125 x 2,0 x 22	64		140
125 x 3,0 x 22	48		142
125 x 4,0 x 22	48		143

d ₁ x b x d ₂ mm	Tooth-count	17005	...
125 x 5,0 x 22	40		144
160 x 1,0 x 32	80		146
160 x 1,6 x 32	80		148
160 x 2,0 x 32	64		149
160 x 3,0 x 32	64		151
160 x 4,0 x 32	48		152
160 x 5,0 x 32	48		153
200 x 1,0 x 32	100		155
200 x 1,6 x 32	80		157
200 x 2,0 x 32	80		158
200 x 3,0 x 32	64		160
200 x 4,0 x 32	64		161
200 x 5,0 x 32	64		162
250 x 1,6 x 32	100		166
250 x 2,0 x 32	100		167
250 x 3,0 x 32	80		169
250 x 4,0 x 32	80		170
250 x 5,0 x 32	64		171

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
80-140	50-80	30-50	32-35	28-32	25-30	25-28	20-25	15-20	-	-	-	-	25-30	20-25	-	25-40	60-100

17008

Circular metal saw blades DIN 1838 C

HSS



Type

Tooth shape C DIN 1840, concave, high cutting capacity (HZ) with roughing and finishing teeth. Depending on tooth pitch, roughing teeth up to 0,3 higher than finishing teeth; therefore only suitable for through cuts, since otherwise a step is formed at the bottom of the cut by the roughing tooth. Very high cutting capacity because of chip-breaking tooth form.

Use

For medium to hard cuts in material with a minimum thickness of 3mm. Particularly for materials with low and medium strength.

Quality

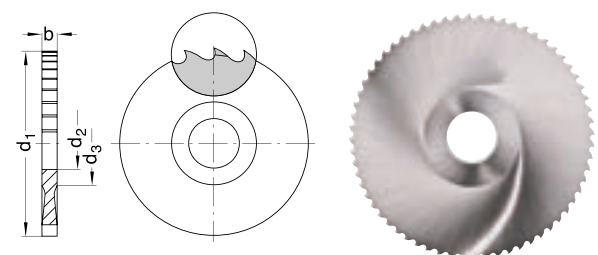
HSS.

Note:

Saw blade tool holders see cat. no. 21636.



Tooth shape C



d ₁ x b x d ₂ mm	Tooth-count	17008	...
50 x 1,0 x 13	40		101
50 x 1,2 x 13	40		102
50 x 1,6 x 13	32		103
50 x 2,0 x 13	32		104
63 x 1,0 x 16	48		110
63 x 1,6 x 16	40		112
63 x 2,0 x 16	40		113
63 x 3,0 x 16	32		115
63 x 4,0 x 16	32		116
80 x 1,0 x 22	48		119
80 x 1,6 x 22	48		121
80 x 2,0 x 22	40		122

d ₁ x b x d ₂ mm	Tooth-count	17008	...
80 x 3,0 x 22	40		124
80 x 4,0 x 22	32		125
100 x 1,0 x 22	64		128
100 x 1,6 x 22	48		130
100 x 2,0 x 22	48		131
100 x 2,5 x 22	48		132
100 x 3,0 x 22	40		133
100 x 4,0 x 22	40		134
125 x 1,0 x 22	80		137
125 x 1,6 x 22	64		139
125 x 2,0 x 22	64		140
125 x 2,5 x 22	48		141

d ₁ x b x d ₂ mm	Tooth-count	17008	...
125 x 3,0 x 22	48		142
125 x 4,0 x 22	48		143
160 x 1,2 x 32	80		147
160 x 1,6 x 32	80		148
160 x 2,0 x 32	64		149
160 x 3,0 x 32	64		151
200 x 1,6 x 32	80		157
200 x 2,0 x 32	80		158
200 x 3,0 x 32	64		160
250 x 1,6 x 32	100		166
250 x 2,0 x 32	100		167
250 x 3,0 x 32	80		169

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
80-140	50-80	30-50	32-35	28-32	-	-	-	-	-	-	-	-	-	-	-	-	60-100



Type

Curved tooth shape B, hypoid-toothed, laterally hollow ground. Bore without wedge groove.

Use

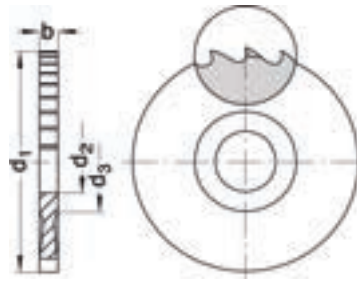
For larger cross-sections and greater cutting depths. Better chip formation than is possible with fine-toothed versions.

Quality

Solid carbide.

Note:

3-5x higher cutting speed than is possible with HSS saw blades. Advantages: quicker processing, longer service life and clean cut surfaces. Prerequisites: stable machine conditions, good clamping of workpiece and coolant feed.

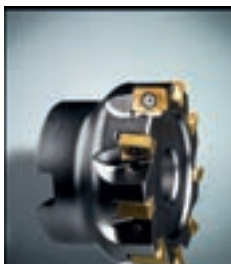


17030

d ₁ x b x d ₂ mm	Tooth-count	17030	...
20 x 0,2 x 5	20		101
20 x 0,3 x 5	20		102
20 x 0,5 x 5	20		104
20 x 0,6 x 5	20		105
20 x 0,8 x 5	20		107
20 x 1,0 x 5	20		108
20 x 1,5 x 5	20		110
20 x 2,0 x 5	20		113
25 x 0,2 x 8	20		119
25 x 0,3 x 8	20		120
25 x 0,5 x 8	20		122
25 x 0,6 x 8	20		123
25 x 0,8 x 8	20		125
25 x 1,0 x 8	20		126
25 x 1,2 x 8	20		127
25 x 1,5 x 8	20		128
25 x 2,0 x 8	20		131
30 x 0,3 x 8	30		138
30 x 0,4 x 8	30		139
30 x 0,5 x 8	30		140
30 x 0,6 x 8	30		141
30 x 0,8 x 8	24		143
30 x 1,0 x 8	24		144
30 x 1,2 x 8	24		145
30 x 1,5 x 8	24		146
30 x 2,0 x 8	24		149
30 x 2,5 x 8	24		150
40 x 0,3 x 10	40		156
40 x 0,4 x 10	40		157
40 x 0,5 x 10	40		158
40 x 0,8 x 10	40		161
40 x 1,0 x 10	32		162
40 x 1,2 x 10	32		163
40 x 1,5 x 10	32		164
40 x 2,0 x 10	32		167
40 x 2,5 x 10	32		168

d ₁ x b x d ₂ mm	Tooth-count	17030	...
40 x 3,0 x 10	32		169
50 x 0,5 x 13	48		174
50 x 0,6 x 13	48		175
50 x 0,8 x 13	40		177
50 x 1,0 x 13	40		178
50 x 1,2 x 13	40		179
50 x 1,5 x 13	32		180
50 x 2,0 x 13	32		183
50 x 2,5 x 13	32		184
50 x 3,0 x 13	24		185
63 x 0,5 x 16	64		190
63 x 0,6 x 16	48		191
63 x 0,8 x 16	48		193
63 x 1,0 x 16	48		194
63 x 1,2 x 16	40		195
63 x 1,5 x 16	40		196
63 x 2,0 x 16	40		199
63 x 2,5 x 16	32		200
63 x 3,0 x 16	32		201
80 x 0,6 x 22	64		205
80 x 0,8 x 22	64		207
80 x 1,0 x 22	48		208
80 x 1,2 x 22	48		209
80 x 1,5 x 22	48		210
80 x 2,0 x 22	40		213
80 x 2,5 x 22	40		214
80 x 3,0 x 22	40		215
100 x 0,6 x 22	80		219
100 x 0,8 x 22	64		221
100 x 1,0 x 22	64		222
100 x 1,2 x 22	64		223
100 x 1,5 x 22	48		224
100 x 2,0 x 22	48		227
100 x 2,5 x 22	48		228
100 x 3,0 x 22	40		229

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
400-1000	400-800	150-600	100-180	100-180	100-180	60-120	40-80	20-60	-	-	-	-	60-160	60-160	20-60	100-150	150-1000



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Performance requires quality.

For example, with the 4-10 Power and 4-15 Power angular milling cutter from ATORN.

- Multi-function milling tool system
- 4 cutting edges on a double-sided indexable insert
- Nickel-plated
- Inner coolant feed

ATORN®
Performance requires quality.



17031

Solid carbide circular saw blades fine-toothed DIN 1837

Type
Double helical tooth shape A, fine-toothed, laterally hollow-ground. Bore without wedge groove.

Use
For thin-walled workpieces and shallow cutting depths.

Quality
Solid carbide.

Note:
3-5x higher cutting speed than is possible with HSS saw blades. Advantages: quicker processing, longer service life and clean cut surfaces. Prerequisites: stable machine conditions, good clamping of workpiece and coolant feed.



17031

Milling Tools

d ₁ x b x d ₂ mm	Tooth-count	17031	...
20 x 0,1 x 5	80	101	
20 x 0,2 x 5	80	102	
20 x 0,3 x 5	64	103	
20 x 0,5 x 5	48	106	
20 x 0,6 x 5	48	107	
20 x 0,8 x 5	48	109	
20 x 1,0 x 5	40	111	
20 x 1,5 x 5	40	116	
20 x 2,0 x 5	32	121	
25 x 0,2 x 8	80	129	
25 x 0,3 x 8	80	130	
25 x 0,5 x 8	64	133	
25 x 0,6 x 8	64	134	
25 x 0,8 x 8	48	136	
25 x 1,0 x 8	48	138	
25 x 1,2 x 8	48	140	
25 x 1,5 x 8	40	143	
25 x 1,5 x 8	40	148	
30 x 0,3 x 8	80	157	
30 x 0,4 x 8	80	158	
30 x 0,5 x 8	80	160	
30 x 0,6 x 8	64	161	
30 x 0,8 x 8	64	163	
30 x 1,0 x 8	64	165	
30 x 1,2 x 8	48	167	

d ₁ x b x d ₂ mm	Tooth-count	17031	...
30 x 1,5 x 8	48	170	
30 x 2,0 x 8	48	175	
30 x 2,5 x 8	40	176	
40 x 0,3 x 10	100	183	
40 x 0,4 x 10	100	184	
40 x 0,5 x 10	80	186	
40 x 0,8 x 10	80	189	
40 x 1,0 x 10	64	191	
40 x 1,2 x 10	64	193	
40 x 1,5 x 10	64	196	
40 x 2,0 x 10	48	201	
40 x 2,5 x 10	48	202	
40 x 3,0 x 10	48	203	
50 x 0,5 x 13	100	212	
50 x 0,6 x 13	100	213	
50 x 0,8 x 13	80	215	
50 x 1,0 x 13	80	217	
50 x 1,2 x 13	80	219	
50 x 1,5 x 13	64	222	
50 x 2,0 x 13	64	227	
50 x 2,5 x 13	64	228	
50 x 3,0 x 13	48	229	
63 x 0,5 x 16	128	238	
63 x 0,6 x 16	100	239	
63 x 0,8 x 16	100	241	

d ₁ x b x d ₂ mm	Tooth-count	17031	...
63 x 1,0 x 16	100	243	
63 x 1,2 x 16	80	245	
63 x 1,5 x 16	80	248	
63 x 2,0 x 16	80	253	
63 x 2,5 x 16	64	254	
63 x 3,0 x 16	64	255	
80 x 0,5 x 22	128	263	
80 x 0,6 x 22	128	264	
80 x 0,8 x 22	128	266	
80 x 1,0 x 22	100	268	
80 x 1,2 x 22	100	270	
80 x 1,5 x 22	100	273	
80 x 2,0 x 22	80	278	
80 x 2,5 x 22	80	279	
80 x 3,0 x 22	80	280	
100 x 0,5 x 22	160	286	
100 x 0,8 x 22	128	289	
100 x 1,0 x 22	128	291	
100 x 1,2 x 22	128	293	
100 x 1,5 x 22	100	296	
100 x 2,0 x 22	100	301	
100 x 2,5 x 22	100	302	
100 x 3,0 x 22	80	303	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
400-1000	400-600	150-600	100-180	100-180	100-180	60-120	40-80	20-60	-	-	-	-	60-160	60-160	20-60	100-150	150-1000

21636

Sawblade Tool holders

Type
With straight shank for mounting in surface chucks, high true-running accuracy.

Use
For mounting saw blades with Ø of 20 - 100 mm and saw blade thicknesses of 0,2 - 6 mm (see cat. no. 17002 - 17008 and 17030 - 17031).

Note:
Delivery without saw blades.

21636 300
Type
Set, 6-part, consists of all sizes of cat. no. 21636 301-306, incl. case.

21636 301-308
Type
Single.



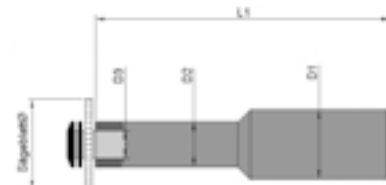
21636 300

Set contents	Mounting hole Ø mm	Set 21636	...
6 part	20 / 25 / 32 / 40 / 50 / 63		300

For saw blade Ø mm	L1 mm	Ø D1 mm	Ø D2 mm	Ø D3 mm	single 21636	...
20	94	20	10.0	5		301
25	104	20	13.0	8		302
32	110	20	16.0	8		303
40	114	20	19.5	10		304
50	141	25	24.5	13		305
63	141	25	24.5	16		306
80	160	25	34.0	22		307
100	160	25	39.5	22		308



21636 301-308





Type

With combined drive holes, steam treated surface prevents lateral material deposition and improves service life.

Tooth shape BW: Bevelled on alternate sides.

Tooth shape C: High cutting capacity (HZ) with roughing and finishing teeth.

Use

For circular sawing machines,

e. g. EISELE, ULMIA- and TRENJÄGER.

17010

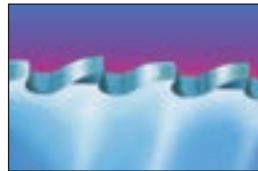
Quality

HSS, steam treated surface.

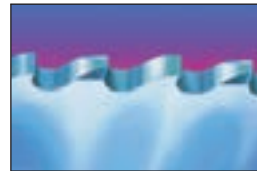
17011

Quality

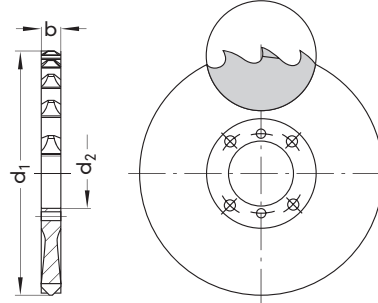
HSS-E, steam-treated.



Tooth shape BW

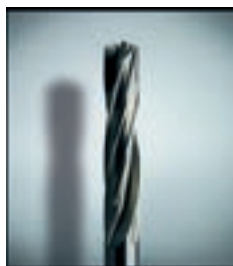


Tooth shape C



17010 - 17011

d ₁ x b x d ₂ mm	Drive holes No. of Ø/pitch circle	No. of teeth	Tooth shape	HSS		HSS-E	
				17010	...	17011	...
225 x 2,0 x 40	2/8/55 + 4/12/64	180	BW		110		
225 x 2,0 x 40	2/8/55 + 4/12/64	120	C		111		
225 x 2,0 x 40	2/8/55 + 4/12/64	90	C		112		
250 x 2,0 x 40	2/8/55 + 4/12/64	200	BW		116		116
250 x 2,0 x 40	2/8/55 + 4/12/64	128	C		117		117
250 x 2,0 x 40	2/8/55 + 4/12/64	100	C		118		118
250 x 2,5 x 40	2/8/55 + 4/12/64	200	BW		120		
250 x 2,5 x 40	2/8/55 + 4/12/64	128	C		121		
250 x 2,5 x 40	2/8/55 + 4/12/64	100	C		122		
275 x 2,0 x 40	2/8/55 + 4/12/64	220	BW		125		125
275 x 2,0 x 40	2/8/55 + 4/12/64	144	C		126		126
275 x 2,0 x 40	2/8/55 + 4/12/64	110	C		127		127
275 x 2,5 x 40	2/8/55 + 4/12/64	220	BW		129		129
275 x 2,5 x 40	2/8/55 + 4/12/64	144	C		130		130
275 x 2,5 x 40	2/8/55 + 4/12/64	110	C		131		131
300 x 2,5 x 40	2/8/55 + 4/12/64	160	C		134		134
300 x 2,5 x 40	2/8/55 + 4/12/64	120	C		135		135
315 x 2,5 x 40	2/8/55 + 4/12/64	250	BW		137		137
315 x 2,5 x 40	2/8/55 + 4/12/64	160	C		138		138
315 x 2,5 x 40	2/8/55 + 4/12/64	120	C		139		139
315 x 3,0 x 40	2/8/55 + 4/12/64	250	BW		141		141
315 x 3,0 x 40	2/8/55 + 4/12/64	160	C		142		142
315 x 3,0 x 40	2/8/55 + 4/12/64	120	C		143		143
350 x 2,5 x 40	2/8/55 + 4/12/64	220	C		145		
350 x 2,5 x 40	2/8/55 + 4/12/64	180	C		146		
350 x 2,5 x 40	2/8/55 + 4/12/64	110	C		147		
350 x 3,0 x 40	2/8/55 + 4/12/64	180	C		149		149
350 x 3,0 x 40	2/8/55 + 4/12/64	140	C		150		150
400 x 3,0 x 40	2/8/55 + 2/15/80 + 4/12/64	200	C		152		
400 x 3,0 x 40	2/8/55 + 2/15/80 + 4/12/64	160	C		153		
425 x 3,5 x 40	2/15/80 + 4/12/64	220	C		155		
425 x 3,5 x 40	2/15/80 + 4/12/64	160	C		156		



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Performance requires quality.

For example, with the solid carbide high-performance ALUSPEED drill, from ATORN.

- 6x guiding section
- Solid carbide Ultra finest grit
- Al-CC-coating
- to 8xD
- Twisted cooling channel

ATORN®

Performance requires quality.

17014

Circular Metal Saw Blades

HSS



Type

With combined driving holes. Steam treated surface prevents lateral material deposition and improves tool life.

Tooth shape BW: Bevelled on alternate sides.

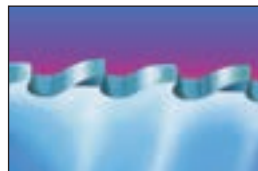
Tooth shape C: High cutting capacity (HZ) with roughing and finishing teeth.

Use

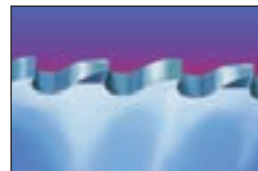
For circular sawing machines with 32 mm hole, e.g. Italian makes.

Quality

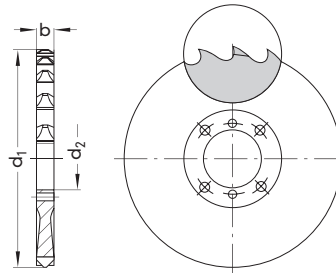
HSS, steam treated surface



Tooth shape BW



Tooth shape C



17014

d ₁ x b x d ₂ mm	Drive holes No. of/Ø/pitch circle	No. of teeth	Tooth shape	17014	...
225 x 2,0 x 32	2/8/45 + 2/9/50 + 2/11/63	180	BW		105
225 x 2,0 x 32	2/8/45 + 2/9/50 + 2/11/63	120	C		106
225 x 2,0 x 32	2/8/45 + 2/9/50 + 2/11/63	90	C		107
250 x 2,0 x 32	2/8/45 + 2/9/50 + 2/11/63	200	BW		110
250 x 2,0 x 32	2/8/45 + 2/9/50 + 2/11/63	128	C		111
250 x 2,0 x 32	2/8/45 + 2/9/50 + 2/11/63	100	C		112
275 x 2,5 x 32	2/8/45 + 2/9/50 + 2/11/63	220	BW		116
275 x 2,5 x 32	2/8/45 + 2/9/50 + 2/11/63	144	C		117
275 x 2,5 x 32	2/8/45 + 2/9/50 + 2/11/63	110	C		118
300 x 2,5 x 32	2/8/45 + 2/9/50 + 2/11/63	240	BW		122
300 x 2,5 x 32	2/8/45 + 2/9/50 + 2/11/63	160	C		123
300 x 2,5 x 32	2/8/45 + 2/9/50 + 2/11/63	120	C		124
315 x 2,5 x 32	2/8/45 + 2/9/50 + 2/11/63	250	BW		125
315 x 2,5 x 32	2/8/45 + 2/9/50 + 2/11/63	160	C		126
315 x 2,5 x 32	2/8/45 + 2/9/50 + 2/11/63	120	C		127
315 x 3,0 x 32	2/8/45 + 2/9/50 + 2/11/63	250	BW		128
315 x 3,0 x 32	2/8/45 + 2/9/50 + 2/11/63	160	C		129
315 x 3,0 x 32	2/8/45 + 2/9/50 + 2/11/63	120	C		130
350 x 2,5 x 32	2/8/45 + 2/11/63 + 2/12/75	220	C		132
350 x 2,5 x 32	2/8/45 + 2/11/63 + 2/12/75	180	C		133
350 x 2,5 x 32	2/8/45 + 2/11/63 + 2/12/75	140	C		134
350 x 3,0 x 32	2/8/45 + 2/11/63 + 2/12/75	220	C		137
350 x 3,0 x 32	2/8/45 + 2/11/63 + 2/12/75	180	C		138
350 x 3,0 x 32	2/8/45 + 2/9/50 + 2/11/63 + 2/12/75	140	C		139

17051

Segmented Circular Metal Saw Blades

HSS

Type

Hypoid tothing, riveted-in tooth segments. Saw disc of alloyed tool steel, hardened approx. 1300 N/mm² strength.

Tooth shape C: The heavy-duty teeth with roughing and finishing teeth (HZ) and the coolant channels ground into the toothed quadrants enable optimum chipping. The saw disc is thinner than the cutting width of the toothed quadrants, therefore preventing the saw blade from seizing.

Quality

Tooth segments HSS (DMO 5).

Note:

The toothed quadrants can easily be replaced in the event of tooth breakage. Segmented circular metal saw blades with medium teeth for thin profiles and segmented circular metal saw blades with other dimensions available on request.



17051

d ₁ x b x d ₂ mm	Drive holes No. of/Ø/pitch circle	No. of teeth	No. of segments	17051	...
360 x 3,6 x 50	4/14/85 + 4/15/80	128	16		214
360 x 3,6 x 50	4/14/85 + 4/15/80	96	16		215
400 x 4,0 x 40	2/15/80 + 4/12/64	128	16		221
400 x 4,0 x 40	2/15/80 + 4/12/64	96	16		222
400 x 4,0 x 50	4/14/85 + 4/15/80	128	16		225
400 x 4,0 x 50	4/14/85 + 4/15/80	96	16		226



17085

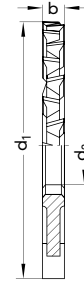
Narrow Side Milling Cutters (Metallic Circular Cutters) DIN 1834 A



Quality
HSS-E.

Type

- Type N
- Cuts on three sides
- Cross-toothed
- With longitudinal slot in compliance with DIN 138.



d ₁ js16 mm	b k11 mm	d ₂ H7 mm	Cutting edges	HSS-E 17085	...
63	1.6	22	28		201
63	2	22	28		202
63	2.5	22	28		203
63	3	22	28		204
63	4	22	28		205
63	5	22	28		206
80	2	27	32		207
80	2.5	27	32		208
80	3	27	32		209
80	4	27	32		210
80	5	27	32		211
80	6	27	32		212
100	2	32	36		213
100	3	32	36		215
100	4	32	36		216

d ₁ js16 mm	b k11 mm	d ₂ H7 mm	Cutting edges	HSS-E 17085	...
100	5	32	36		217
100	6	32	36		218
100	8	32	28		219
125	2	32	40		220
125	3	32	40		222
125	4	32	40		223
125	5	32	40		224
125	6	32	40		225
125	8	32	32		226
125	10	32	32		227
160	2	40	48		228
160	3	40	48		230
160	4	40	48		231
160	5	40	48		232
160	6	40	48		233

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
100-150	50-80	50-80	35-40	32-35	25-28	22-25	-	-	-	-	-	-	20-25	18-22	12-20	25-40	50-60

17241

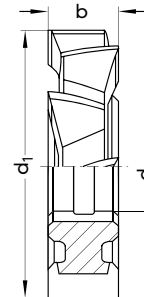
Side Milling Cutters DIN 885 A



Quality
HSS-E (Co5).

Type

- Type N
- Cuts on three sides
- Cross-toothed
- With longitudinal groove in compliance with DIN 138



d ₁ js16 mm	b k11 mm	d ₂ H7 mm	Cutting edges	HSS-E 17241	...
50	5	16	12		201
50	6	16	12		202
50	8	16	12		203
63	6	22	12		205
63	8	22	12		206
63	10	22	12		207
63	12	22	12		208
80	10	27	14		213
80	12	27	14		214
80	16	27	14		216

d ₁ js16 mm	b k11 mm	d ₂ H7 mm	Cutting edges	HSS-E 17241	...
80	20	27	14		218
100	10	32	14		219
100	12	32	14		220
100	16	32	14		222
100	20	32	14		224
125	12	32	16		227
125	14	32	16		228
125	16	32	16		229
125	20	32	16		231
125	25	32	16		233

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
100-150	50-80	50-80	35-40	32-35	25-28	22-25	-	-	-	-	-	-	20-25	18-22	12-20	25-40	50-60

Shell End Milling Cutters

17413

Shell End Milling Cutters

DIN 841

N

HSS-E Co8

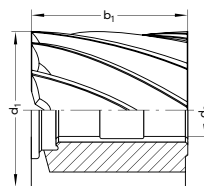
≤ 1000 N/mm²



Quality
HSS-E (Co8).

Type

- Type N
- Right-hand cut,
- Right-hand helix,
- Cutting on circumference and at end
- With longitudinal and transverse groove in compliance with DIN 138



17413

d ₁ k12 mm	b ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E 17413	...
40	40	16	8	☒	204
50	50	22	8	☒	206
60	30	27	8	☒	207
60	60	27	8	☒	208
75	35	27	10	☒	209

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-

17441 - 17443

Shell End Milling Cutters

DIN 1880

N

≤ 1000 N/mm²

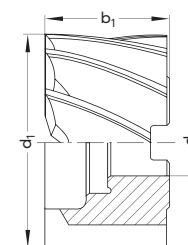


17441
Quality
HSS-E (Co8).

Type

- Type N
- Right-hand cut,
- Right-hand helix,
- Cutting on the circumference and on the end
- With longitudinal and transverse groove in compliance with DIN 138

17443
Quality
HSS-E/TiCN coated.

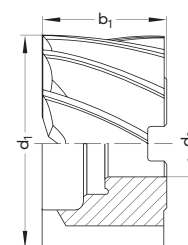


HSS-E Co8



17441

d ₁ k12 mm	b ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E 17441	...	HSS-E/TiCN 17443	...
40	32	16	8	☒	101	☒	101
50	36	22	8	☒	102	☒	102
63	40	27	8	☒	103	☒	103
80	45	27	10	☒	104	☒	104
100	50	32	12	☒	105	☒	105
125	56	40	14	☒	106	☒	106



HSS-E TiCN



17443

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
17441																	
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-
17443																	
70-200	40-150	40-150	75-85	45-55	40-60	20-45	-	-	-	-	-	-	5-28	3-25	3-25	-	-

17445

Shell End Milling Cutters

DIN 1880

W

HSS-E Co8

ALU

≤ 1100 N/mm²



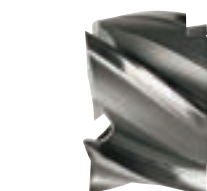
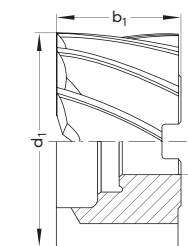
Quality
HSS-E (Co8).

Type

- Type W
- Right-hand cut
- Right-hand helix,
- Cutting on circumference and at end
- With longitudinal and transverse groove in compliance with DIN 138

Use

For materials with a strength of up to approx. 1100 N/mm². For soft, ductile, as well as long-chipping materials.



17445

d ₁ k12 mm	b ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E 17445	...
40	32	16	4	☒	101
50	36	22	4	☒	102
63	40	27	5	☒	103
80	45	27	6	☒	104

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-



17452 - 17453

Shell End Milling Cutters

DIN 841

HSS-E Co8

< 1000 N/mm²



Type

Right-hand cut, right-hand helix, cutting on circumference and at end, profile relief ground with longitudinal and transverse slot in compliance with DIN 138.

Quality

HSS-E (Co8).

17452

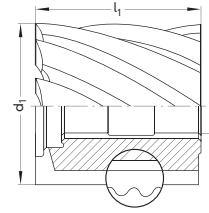
Type NR, with roughing teeth (chip divider with circular profile).

17453

Type NF, with roughing/finishing teeth (chip divider with flat profile).

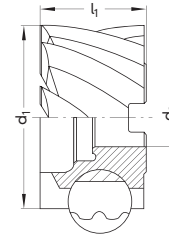
NR

17452



NF

17453



d ₁ k14 mm	l ₁ k16 mm	d ₂ H7 mm	Cutting edges	Type NR		Type NF	
				17452	...	17453	...
40	40	16	6	202		202	
50	50	22	8	204		204	
60	30	27	8	205		205	
60	60	27	8	206		206	
75	35	27	8	207		207	
90	35	27	10	209		209	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-

17475

Shell End Milling Cutters

DIN 1880

NR

HSS-E Co8

< 1000 N/mm²



Type

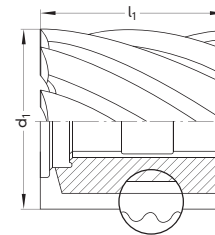
Type NR with roughing tooling.

Right-hand cut, right-hand helix, cutting on circumference and at end, profile relief ground with longitudinal and transverse slot in compliance with DIN 138.

Quality

HSS-E (Co8).

17475



d ₁ k14 mm	l ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E	
				17475	...
40	32	16	6	101	
50	36	22	6	102	
63	40	27	8	103	
80	45	27	8	104	
100	50	32	10	105	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-

17478

Shell End Milling Cutters

DIN 1880

NF

HSS-E Co5

< 1000 N/mm²



Type

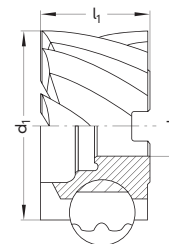
Type NF, with roughing/finishing tooling.

Right-hand cut, right-hand helix, cutting on circumference and at end, profile relief ground with longitudinal and transverse slot in compliance with DIN 138.

Quality

HSS-E (Co5).

17478



d ₁ k14 mm	l ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E	
				17478	...
40	32	16	6	101	
50	36	22	6	102	
63	40	27	8	103	
80	45	27	8	104	
100	50	32	10	105	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-

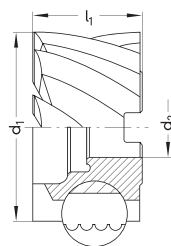
17482 - 17484 Shell End Milling Cutters



Type
Type HR, fine roughing profile. Right-hand cut, right-hand helix, cutting on circumference and at end, profile relief ground with longitudinal and transverse slot in compliance with DIN 138.

17482
Quality
HSS-E.

17484
Quality
HSS-E/TiCN coated.



17482



17484



d ₁ k14 mm	l ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E		HSS-E/TiCN	
				17482	...	17484	...
40	32	16	8	101		101	
50	36	22	8	102		102	
63	40	27	10	103		103	
80	45	27	10	104		104	
100	50	32	12	105		105	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55 HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
17482																	
70-120	40-70	40-70	28-32	25-30	18-25	16-22	12-18	-	-	-	-	-	5-15	3-12	3-12	-	-
17484																	
70-200	40-150	40-150	75-85	45-55	40-60	20-45	15-35	-	-	-	-	-	5-28	3-25	3-25	-	-

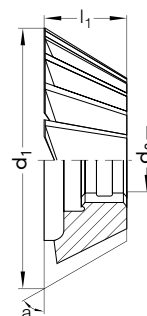
17488 Angle Milling Cutters



Type
Type H, chamfer angle $\alpha = 45^\circ$. Right-hand cut, straight flute, cutting on circumference and at end, with longitudinal keyway in compliance with DIN138.

Quality
HSS-E.

Application
 For milling dovetail guides, etc.



17488



d ₁ js16 mm	l ₁ mm	d ₂ H7 mm	Cutting edges	HSS-E	
				17488	...
50	13	13	16	102	
63	18	16	18	103	
80	22	22	20	104	
100	28	27	22	105	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
100-150	45-90	45-56	40-45	35-40	32-36	26-30	-	-	-	-	-	-	20-28	18-25	10-22	28-45	70-90

17490 - 17492 Double angle milling cutters



Type
 Straight flute, with longitudinal slot in compliance with DIN138.

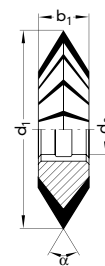
17490
Included angle $\alpha = 45^\circ$.

Use
 For milling Vee-notches etc.

17491
Included angle $\alpha = 60^\circ$.

Quality
HSS-E.

17492
Included angle $\alpha = 90^\circ$.



17490



45° 60° 90°

d ₁ k14 mm	b ₁ mm at included angle (js 16)			d ₂ H7 mm	Cutt. edges			HSS-E		HSS-E/TiCN			
	45°	60°	90°		45°	60°	90°	17490	...	17491	...	17492	...
50	8	10	14	16	16	16	16	201		201		201	
63	10	14	20	22	16	16	16	202		202		202	
80	12	18	22	27	20	18	18	203		203		203	
100	18	25	32	32	20	20	20	204		204		204	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
100-150	45-90	45-56	40-45	35-40	32-36	26-30	-	-	-	-	-	-	20-28	18-25	10-22	28-45	70-90



17493

Convex Milling Cutters

DIN
855

HSS-E

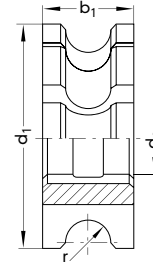
≤
1000
N/mm²**HHW**

Type

Concave milling cutter, relieved.
with longitudinal slot in compliance with DIN 138.

Quality
HSS-E.HSS-E
17493

r h11 mm	d ₁ js16 mm	d ₂ H7 mm	b ₁ mm	Cutting edges	...
2	50	16	9	14	104
3	63	22	12	12	106
4	63	22	16	12	108
5	63	22	20	12	109
6	80	27	24	12	110
8	80	27	32	12	112
10	100	32	36	12	114



17493

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
100-150	45-90	45-56	40-45	35-40	32-36	26-30	-	-	-	-	-	-	20-28	18-25	10-22	28-45	70-90

17494

Convex Milling Cutters

DIN
856

HSS-E

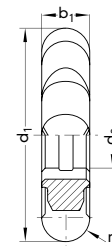
≤
1000
N/mm²**HHW**

Type

Convex, milling cutter, relieved.
with longitudinal slot in compliance with DIN 138.

Quality
HSS-E.HSS-E
17494

r h11 mm	d ₁ js16 mm	d ₂ H7 mm	b ₁ mm	Cutting edges	...
1	50	16	2	14	101
2	50	16	4	14	104
3	63	22	6	12	106
4	63	22	8	12	108
5	63	22	10	12	109
6	80	27	12	12	110
8	80	27	16	12	112
10	100	32	20	12	114



17494

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
100-150	45-90	45-56	40-45	35-40	32-36	26-30	-	-	-	-	-	-	20-28	18-25	10-22	28-45	70-90

DATA MATRIX //DMC ... scan and be done!

■ Select articles

Select your articles from the catalogue in the customary manner, find the associated Data Matrix code in the table.

■ Shopping cart

The data will be automatically transferred into the shopping cart. Close your order by pressing the confirm key.

■ Scan

Scan in the desired article. Entry is confirmed and concluded by the beep tone.

■ OCl / ePos / etc.

Naturally the purchase orders can also be transferred into your OCl-capable enterprise resource planning system.

■ Interface

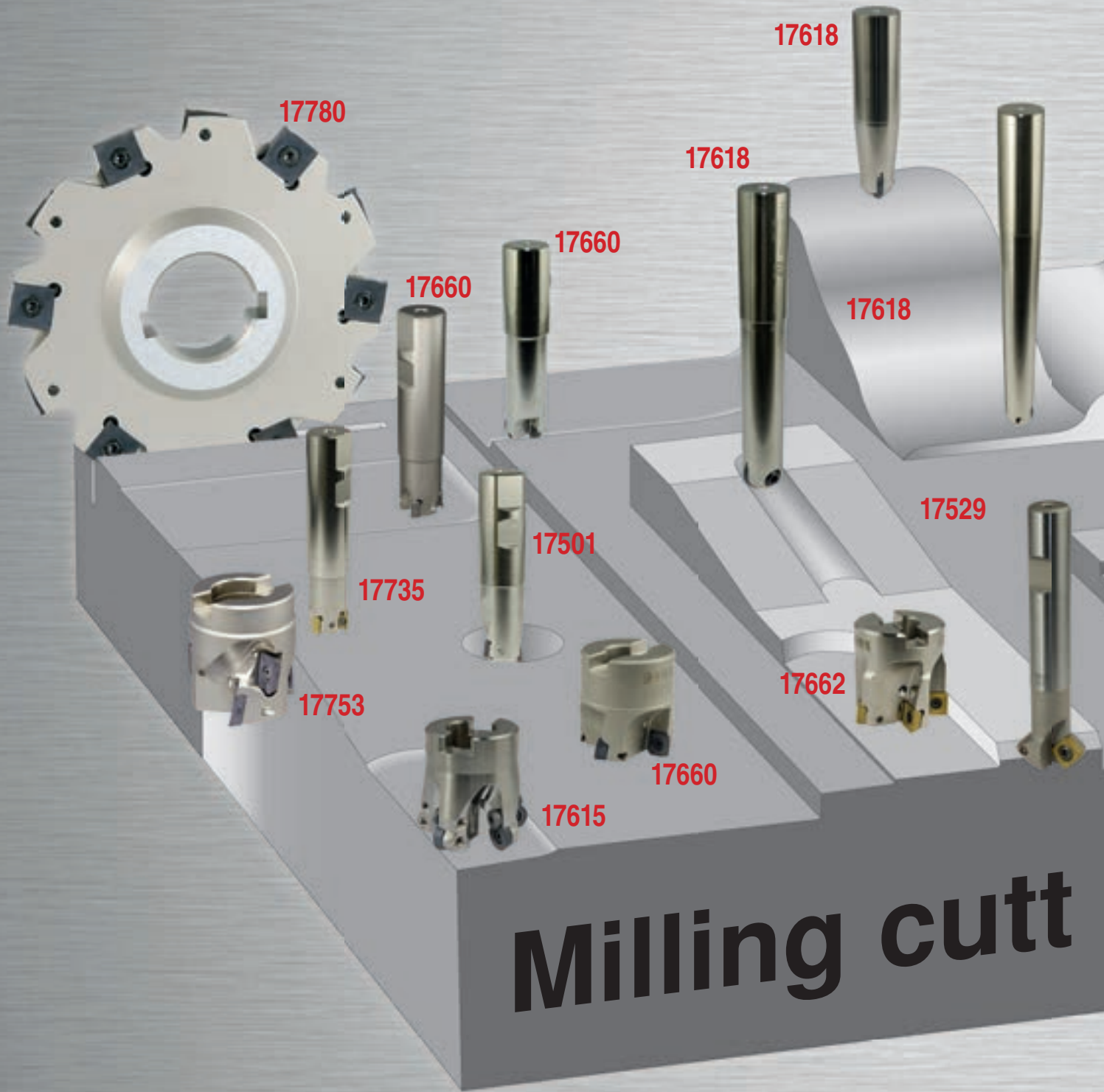
Connect the scanner to a computer and the Internet via the provided docking station. Then confirm the webshop access with your password.

For this additional settings may be required.

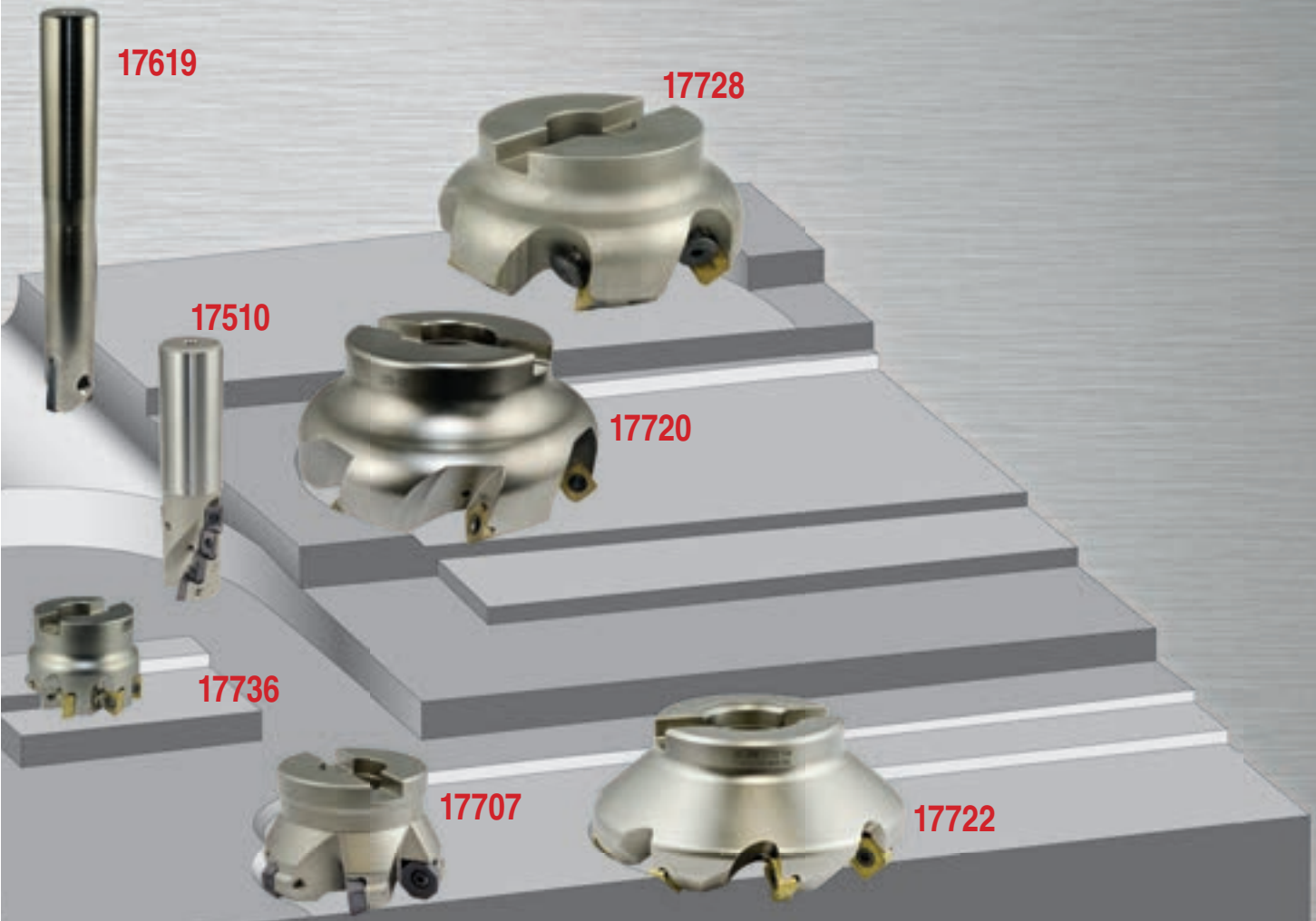
■ Curious?

Schedule a meeting with our regional sales manager.





Milling cutt



er selection guide

An overview of the milling
on the sides 17.14 - 17.17

		ATORN®	ATORN®	ATORN®	H/W	ATORN®	ATORN®	
		Shoulder milling cutter						
		17501	17505	17735	17662	17882	17507	17882
●	1. Selection							
●	Alternatives							
◐	Possible under certain circumstances							
◑	Marginally useable							
▽	Roughing							
▽▽	Medium machining							
▽▽▽	Finishing							
Type								
Diameter		20-32	10-40	20-32	20-32	12-40	10-40	20-32
Number of cutting edges		1	1-5	3-4	2-4	1-6	1-5	2-5
Reversible cutting insert		APKT/APHX	APKT/APHX	LN.X	SOMT	XD..	APKT/APHX	XD..
Machining		▽▽	▽▽	▽▽▽▽	▽▽	▽▽▽▽	▽▽	▽▽▽▽
Catalogue page		17.22	17.23	17.31	17.30	17.27	17.23	17.27
ISO code		P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H
Face milling		●●●●	●●●●	●●●●	●●	●●●●	●●●●	●●●●
Shoulder milling		●●●●	●●●●	●●●●	●●	●●●●	●●●●	●●●●
Grooving		●●●●	●●●●	●●●●	●●	●●●●	●●●●	●●●●
Pocket milling								
Contouring								
Chamfering								
Slot milling								
Bore machining		●●●●						

		ATORN®	ATORN®	ATORN®	H/W	ATORN®	ATORN®	
		Shoulder milling cutters				Face milling cutters		
		17755	17736	17742	17662	17882	17534	17876
●	1. Selection							
●	Alternatives							
◐	Possible under certain circumstances							
◑	Marginally useable							
▽	Roughing							
▽▽	Medium machining							
▽▽▽	Finishing							
Type								
Diameter		40-250	40-125	40-125	40-63	40-160	24-40	18,9-32
Number of cutting edges		4-16	5-10	4-9	5-7	4-14	2-4	3-5
Reversible cutting insert		APKT/APHX	LN.X	SDMT	SOMT	XD..	SEHT	OF./SF..
Machining		▽▽	▽▽	▽▽▽▽	▽▽	▽▽▽▽	▽▽	▽▽
Catalogue page		17.24	17.31	17.29	17.30	17.27	17.49	17.47
ISO code		P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H
Face milling		●●●●	●●●●	●●	●●	●●●●	●●●●	●●●●
Shoulder milling		●●●●	●●●●	●●	●●	●●●●		
Grooving		●●●●		●●	●●	●●●●		
Pocket milling							●●	●
Contouring								
Chamfering							●●●●	●●●●
Slot milling								
Bore machining								

		Face milling cutter						
		17873	17876	17710	17720	17722	17728	17876
●	1. Selection							
●	Alternatives							
◐	Possible under certain circumstances							
◑	Marginally useable							
▽	Roughing							
▽▽	Medium machining							
▽▽▽	Finishing							
Type								
Diameter		32 - 40	18,9 - 32	32 - 125	40 - 250	50 - 250	50 - 250	30,7 - 125
Number of cutting edges		3 - 4	3 - 5	3 - 8	3 - 8	4 - 20	4 - 13	4 - 13
Reversible cutting insert		OAKU	OF./SF.	OF.05T3	SEHT	SNEX/SNMX	SEEN	OF./SF.
Machining		▽▽▽	▽▽▽	▽▽▽	▽▽▽	▽▽▽	▽▽▽	▽▽▽
Catalogue page		17.52	17.47	17.44	17.49	17.46	17.50	17.48
ISO code		P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H
Face milling		●●	●●●●●	●●●●	●●●	●●●●●	●●●●	●●●●●
Shoulder milling								
Grooving								
Pocket milling								
Contouring								
Chamfering		●●	●		●●●	●●●●●	●●●●	●●●●●
Slot milling								
Bore machining								

		Face milling cutter		Twist milling cutter (Igel)		HPC milling cutter		
		17873	17739	17510	17753	17660	17660	17660
●	1. Selection							
●	Alternatives							
◐	Possible under certain circumstances							
◑	Marginally useable							
▽	Roughing							
▽▽	Medium machining							
▽▽▽	Finishing							
Type								
Diameter		40 - 125	50 - 100	20 - 40	40 - 100	25 - 32	25 - 40	40 - 80
Number of cutting edges		4 - 12	4 - 8	1 - 3	3 - 6	2	2 - 4	4 - 5
Reversible cutting insert		OAKU	HNGJ	APKT/APHX	APKT/APHX	ZDCW	ZDCW/ZDEW	ZDCW/ZDEW
Machining		▽▽▽	▽▽▽	▽▽	▽▽	▽	▽	▽
Catalogue page		17.52	17.51	17.24	17.25	17.36	17.36	17.36
ISO code		P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H
Face milling		●●	●●●●●			●●	●●●●	●●●●●
Shoulder milling				●●●●	●●●●			
Grooving				●●●●	●●●●			
Pocket milling						●●	●●●●	●●●●●
Contouring								
Chamfering		●●	●					
Slot milling								
Bore machining								

		CERATIZIT			ATORN®			ATORN®	ATORN®	ATORN®	
		HFC milling cutters						Al plunge milling cutters			Centring cutter
		17865		17865		17865		17560	17561	17562	17536
●	1. Selection	NEW		NEW		NEW					
●	Alternatives	NEW		NEW		NEW					
◐	Possible under certain circumstances	NEW		NEW		NEW					
◑	Marginally useable	NEW		NEW		NEW					
▽	Roughing	NEW		NEW		NEW					
▽▽	Medium machining	NEW		NEW		NEW					
▽▽▽	Finishing	NEW		NEW		NEW					
Type		HFC		HFC		HFC		HFC	HFC	HFC	HFC
Diameter		16-32		16-32		32-63		25-32	25-42	42-100	20
Number of cutting edges		2-5		2-5		3-6		2	2-3	3-5	1
Reversible cutting insert		XP.		XP.		XD.		VCGT/VPGT	VCGT/VPGT	VCGT	TCMX
Machining		▽		▽		▽		▽▽▽	▽▽▽	▽▽▽	▽▽▽
Catalogue page		17.37		17.37		17.37		17.32	17.32	17.32	17.43
ISO code		P M K N S H		P M K N S H		P M K N S H		P M K N S H	P M K N S H	P M K N S H	P M K N S H
Face milling		●●●●●		●●●●●		●●●●●		●	●	●	
Shoulder milling								●	●	●	
Grooving								●	●	●	
Pocket milling		●●●●●		●●●●●		●●●●●		●	●	●	
Contouring		●●●●●		●●●●●		●●●●●		●	●	●	
Chamfering											
Slot milling											
Bore machining											●●●●●

		CERATIZIT			ATORN®			CERATIZIT	ATORN®	CERATIZIT		
		Copying milling cutter										
		17868		17613 - 17614		17868		17613 - 17615		17707	17868	17614 - 17616
●	1. Selection	NEW		NEW		NEW		NEW		NEW	NEW	NEW
●	Alternatives	NEW		NEW		NEW		NEW		NEW	NEW	NEW
◐	Possible under certain circumstances	NEW		NEW		NEW		NEW		NEW	NEW	NEW
◑	Marginally useable	NEW		NEW		NEW		NEW		NEW	NEW	NEW
▽	Roughing	NEW		NEW		NEW		NEW		NEW	NEW	NEW
▽▽	Medium machining	NEW		NEW		NEW		NEW		NEW	NEW	NEW
▽▽▽	Finishing	NEW		NEW		NEW		NEW		NEW	NEW	NEW
Type		HFC		HFC		HFC		HFC	HFC	HFC	HFC	HFC
Diameter		10-32		15-20		20-42		15-42	52-125	40-100	42-100	
Number of cutting edges		2-5		2		2-7		2-6	4-8	3-10	4-7	
Reversible cutting insert		RD./RP.		RDHX		RD./RP.		RDHX	OCKX/RCKX/XCKX	RP.	RDHX	
Machining		▽▽▽		▽▽▽		▽▽▽		▽▽▽	▽▽▽	▽▽▽	▽▽▽	
Catalogue page		17.40		17.38		17.40		17.38 - 17.39	17.45	17.41	17.38 - 17.39	
ISO code		P M K N S H		P M K N S H		P M K N S H		P M K N S H	P M K N S H	P M K N S H	P M K N S H	
Face milling		●●●●●		●●●●●		●●●●●		●●●●●	●●●●●	●●●●●	●●●●●	
Shoulder milling												
Grooving												
Pocket milling				●●●●●		●		●●●●●	●		●●●●●	
Contouring		●●●●●		●●●●●		●●●●●		●●●●●	●●●●●	●●●●●	●●●●●	
Chamfering												
Slot milling												
Bore machining												

Milling Tools

		ATORN®	ATORN®	ATORN®	ATORN®	H+W	H+W	ATORN®	
		Consumption milling cutter	Chamfer cutter				Adjustable countersink cutter	T-groove milling cutter	Core drill and countersinking cutter
		17750	17527	17529	17760	17526	17540	17576	
●	1. Selection								
●	Alternatives								
◐	Possible under certain circumstances								
◑	Marginally useable								
▽	Roughing								
▽▽	Medium machining								
▽▽▽	Finishing								
Type									
Diameter		50 - 125	1,2 - 20	10 - 42,3	33 - 90	20 - 25	21 - 50	10 - 33	
Number of cutting edges		3 - 7	1 - 2	1 - 3	6 - 9	1	2 - 4	1	
Reversible cutting insert		APKT/APHX	TCMT	SCMT	APKT/APHX	TCMT/SCMT	SPMT	CC...	
Machining		▽▽▽	▽▽▽	▽▽▽	▽▽	▽▽▽	▽▽	▽▽▽	
Catalogue page		17.26	17.42	17.43	17.25	17.42	17.44	17.34	
ISO code		P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	
Face milling		●●●●							
Shoulder milling									
Grooving							●●●		
Pocket milling									
Contouring									
Chamfering			●●●●	●●●●	●●●●	●●			
Slot milling									
Bore machining				●●●		●●		●●●●	

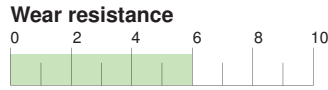
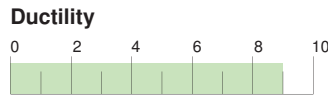
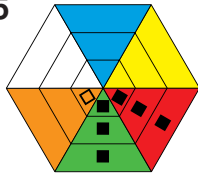
		ATORN®	ATORN®	H+W	ATORN®	ATORN®	ATORN®	
		Core drill and countersinking cutter			Disc milling cutter			
		17577	17578	17570	17780	17782	17793/17794	
●	1. Selection							
●	Alternatives	NEW	NEW					
◐	Possible under certain circumstances							
◑	Marginally useable							
▽	Roughing							
▽▽	Medium machining							
▽▽▽	Finishing							
Type								
Diameter		16 - 42	10 - 45	18 - 76	63 - 250	63 - 160	100 - 160	
Number of cutting edges		2	1	1	3 - 12	3 - 8	6 - 12	
Reversible cutting insert		CC..	CC..	CC..	SNHX	SNHX	A-CUT	
Machining		▽▽▽	▽▽▽	▽▽▽	▽	▽	▽	
Catalogue page		17.34	17.35	17.33	17.53	17.54	17.55	
ISO code		P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H	
Face milling								
Shoulder milling								
Grooving								
Pocket milling								
Contouring								
Chamfering								
Slot milling					●●●	●●●	●●●●	
Bore machining		●●●●	●●●●	●●●●				

Coated types	Carbide type	Application area																																
		P						M						K						N						S						H		
		5	10	20	30	40	5	10	20	30	40	5	10	20	30	40	5	10	20	30	40	5	10	20	30	40	5	10	20					
H 42																																		
H 45																																		
P 25/TiN																																		
K 10/TiAlN																																		
HC 4635																																		
HC 4535																																		
HC 4410																																		
HC 4540																																		
HC 4620																																		
P 40/TiAlN																																		
P 25/TiAlN																																		
M 40																																		
P20-P40																																		
H 55																																		
H 25																																		
H 12																																		
HW 4415																																		
HW 4410																																		
HW 4540																																		

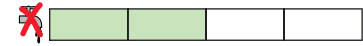
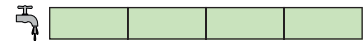
Coated type	H 42	H 45	P 25/TiN	K 10/TiAlN	HC 4635	HC 4535	HC 4410	HC 4540	HC 4620	P 40/TiAlN	P 25/TiAlN	M 40	P20-P40	H 25	H 12	HW 4415	HW 4410	HW 4540	ISO P	ISO M	ISO K	ISO N	ISO S	ISO H	Application area	Notes	
																			P20-P30	M20-M30	K20-K30						
																									Universal type	medium cutting speed, medium chip section	
																									Titanium and titanium alloys, austenitic and martensitic VA-steel, Inconel	Medium cutting speed, milling of VA-steel using coolant, wear-resistant type	
																									Universal type	medium cutting speed, medium chip section	
																								K05-K15	Hardened materials	Suitable for dry milling	
																									Steel, alloyed steel, tool steel, titanium and titanium alloys, austenitic and martensitic VA-steel, Inconel	Medium cutting speed, milling of VA-steel using coolant, high resistance to chipping	
																									Steel, alloyed steel, tool steel, GG, GGG, titanium and titanium alloys, austenitic and martensitic VA-steel, Inconel	Medium cutting speed, milling of VA-steel using coolant, high resistance to chipping	
																									Al and aluminium alloys, GG, GGG	high cutting speed and feed	
																									Steel, alloyed steel, tool steel, GG, GGG, VA-steel	medium cutting speed, milling of VA-steel using coolant	
																									Steel, cast steel, alloyed steel, tool steel	for difficult milling machining and interrupted cut, longest service life	
																									Steel, cast steel, alloyed steel, tool steel	Highly wear-resistant type	
																									Steel, cast steel, alloyed steel, tool steel	Ductile types, also for interrupted cut	
																									VA-steel	medium cutting speed, medium feed	
																									Universal type	medium cutting speed, medium chip section	
																									aluminium and aluminium alloys	high cutting speed and feed	
																									Universal type	medium cutting speed, medium chip section	
																									K05-K20	Aluminium and copper alloys	Easy to medium-difficulty machining
																									K10-K20 N10-N20 S10-S20 S10-S20	GG over 220 HB, GTW, aluminium and copper alloys, refractory alloys	Easy to medium-difficulty machining
																									Steel and cast steel, alloyed steel, tool steel	For difficult milling machining and interrupted cut	



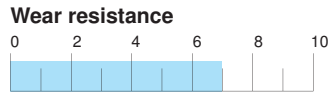
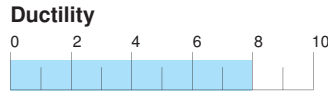
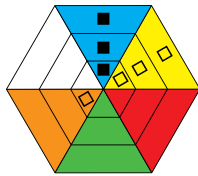
CTW4615
HW-K15



Wet / dry



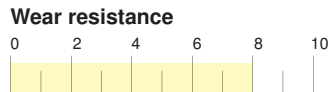
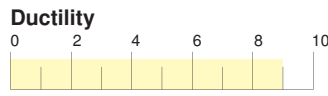
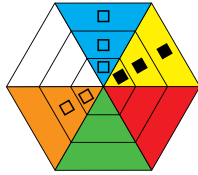
CTP1235
HC-P35
HC-M30



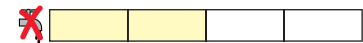
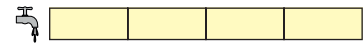
Wet / dry



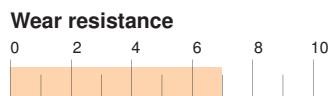
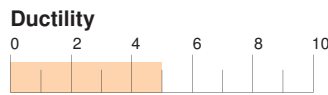
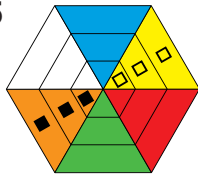
CTP2235
HC-P40
HC-M40



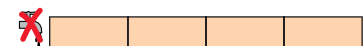
Wet / dry



CTC5235
HC-M35



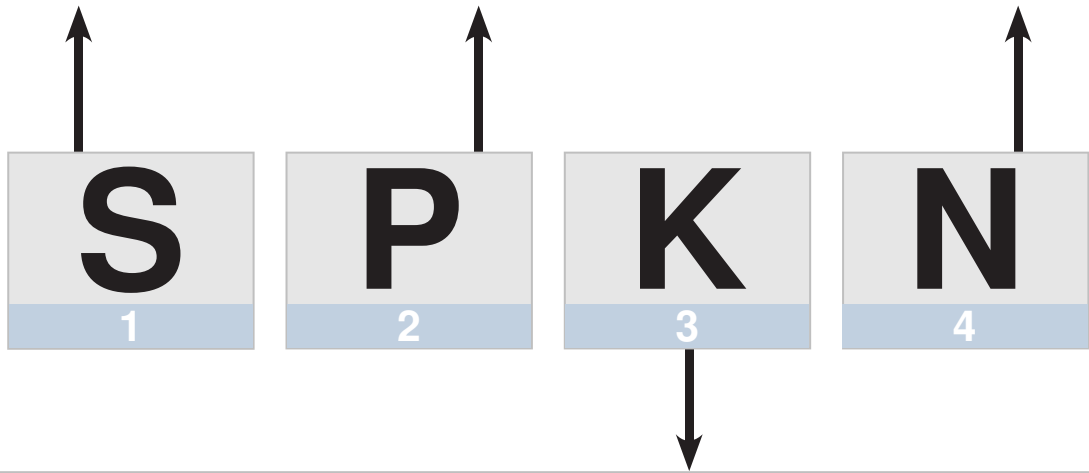
Wet / dry



Chip deflection step overview - milling

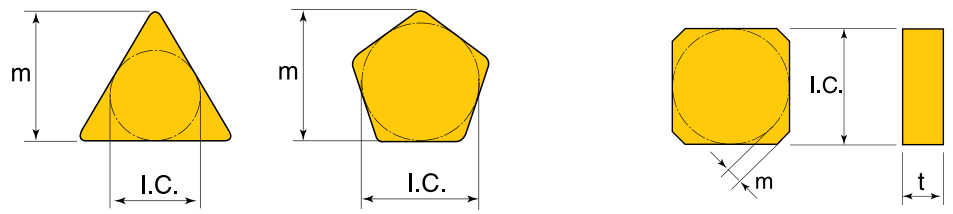


1 CUTTING TOOL SHAPE				2 CLEARANCE ANGLE				4 TOOL TYPE		
A	B	C	H	B	5°	F	25°	A	F	G
				C	7°	G	30°			
L	M	O	P	D	15°	N	0°			Special
				E	20°	P	11°	T	W	X
R	S	T	W							



3 TOLERANCE CLASS

Class	Tolerance (mm)			I.C. Dimensions (mm)					
	m	t	I.C.	6.35	9.525	12.7	15.875	19.05	25.4
A	± 0.005	± 0.025	± 0.025	•	•	•	•	•	•
E	± 0.025	± 0.025	± 0.025	•	•	•	•	•	•
F	± 0.005	± 0.025	± 0.013	•	•	•	•	•	•
G	± 0.025	± 0.13	± 0.025	•	•	•	•	•	•
H	± 0.013	± 0.025	± 0.013	•	•	•	•	•	•
K	± 0.013	± 0.025	± 0.05	•	•				
			± 0.08						
			± 0.10			•	•		
			± 0.13						•
M	± 0.08 ± 0.13 ± 0.15	± 0.13	± 0.05	•	•				
			± 0.08			•			
			± 0.10					•	•
			± 0.13						•



6 TOOL THICKNESS (mm)

01t = 1.59	05t = 5.56
02t = 2.38	06t = 6.35
03t = 3.18	07t = 7.94
T3t = 3.97	09t = 9.52
04t = 4.76	

7 CORNER RADIUS (mm)

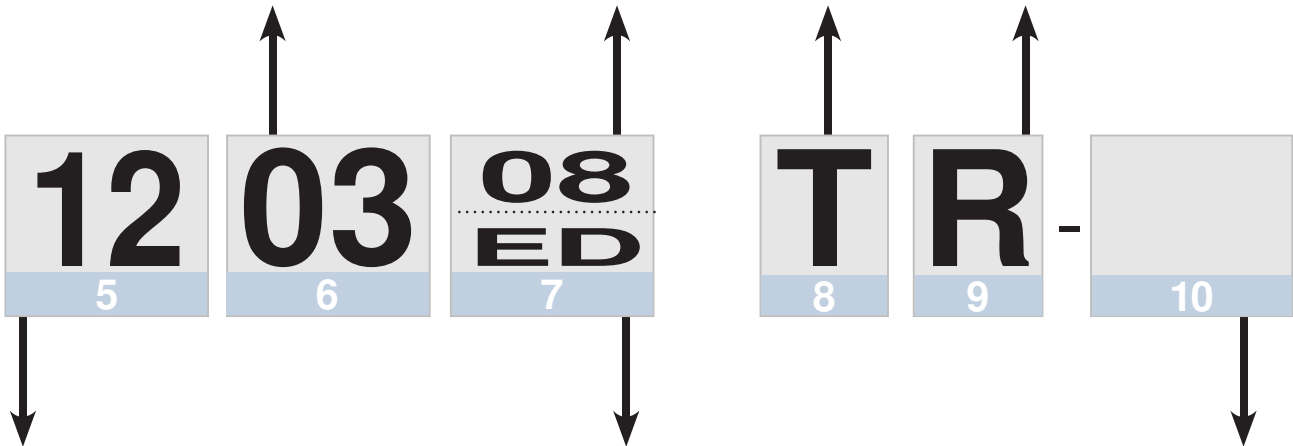
00R = Round	
02R = 0.2	15R = 1.5
04R = 0.4	16R = 1.6
05R = 0.5	24R = 2.4
08R = 0.8	32R = 3.2
10R = 1.0	40R = 4.0
12R = 1.2	

8 TYPE OF CUTTING EDGE

- F Sharp
- E Rounded
- T Chamfered
- S Chamfered and rounded

9 CUTTING DIRECTION

- R
- L
- N



5 CUTTING EDGE LENGTH

I.C	Cutting Tool Shape				
	C	R,S	T	H	O
5.56			09		
6.35	06	06	11		
7.94	08		13		
9.525	09	09	16		
12.7	12	12	22		05
15.875	16	15	27	09	
17.94					07
19.05	19	19	33	10	
25.4	25	25			

L

7 CORNERS

Setting angle face cutting edge

A = 45°
D = 60°
E = 75°
F = 85°
P = 90°
Z = Special

Clearance angle face cutting edge

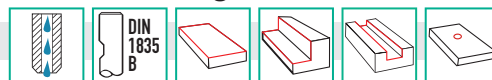
B = 5° F = 25°
C = 7° G = 30°
D = 15° N = 0°
E = 20° P = 11°
Z = Special

10 ADDITIONAL INFORMATION

This information is not a component of the norm and thus is left to the discretion of the supplier. For example – 14 for chip-forming Geometry

17501

Drilling / Countersink milling cutter 90°



ATORN®

Use
For plunging, face milling and circular milling.

- Type**
- Positive
 - Right-hand cut
 - With centre cut
 - Setting angle 90°.
 - Straight shank with driving face in compliance with DIN 1835 B.
 - Without indexable inserts

Note:
Reversible inserts, see cat. no. 17809 - 17811.

17501 102-104



Ø D mm	Ø d h6 mm	H mm	h mm	L mm	Z	Z eff.	Indexable inserts	Short 17501	...
20	20	90	17	35	2	1	AP..1003	102	
25	25	110	19	50	2	1	AP..1003	103	
32	32	130	30	50	2	1	AP..1604	104	

17501 110-111

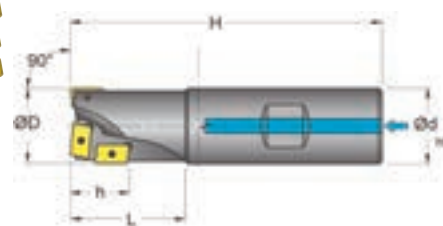


Ø D mm	Ø d h6 mm	H mm	h mm	L mm	Z	Z eff.	Indexable inserts	Long 17501	...
20	20	150	17	30	3	1	AP..1003	110 NEW	
25	25	150	19	50	3	1	AP..1003	111 NEW	

17501 120-122



Ø D mm	Ø d h6 mm	H mm	h mm	L mm	Z	Z eff.	Indexable inserts	Overlong 17501	...
20	20	180	17	30	3	1	AP..1003	120 NEW	
25	25	200	19	50	3	1	AP..1003	121 NEW	
32	32	220	30	50	3	1	AP..1604	122 NEW	



Spare parts	For indexable inserts Size	TORX® size T	Clamping screw 17520	...	Screwdriver 52529	...
AP..1003		8	202		403	
AP..1604		15	205		406	



Performance requires quality.

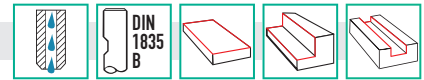
For example, with the 4-10 Power and 4-15 Power angular milling cutter from ATORN.

- Multi-function milling tool system
- 4 cutting edges on a double-sided indexable insert
- Nickel-plated
- Inner coolant feed

ATORN®
Performance requires quality.

17505

End milling cutters 90°



ATORN®

Type

- Straight shank with driving face in compliance with DIN 1835 B
- Positive
- Right-hand cut
- **Without** indexable inserts

Use

For high machining performance, for machining steel and cast materials and high-alloyed steel.

Note:

Reversible inserts, see cat. no. 17809 - 17811.

17505

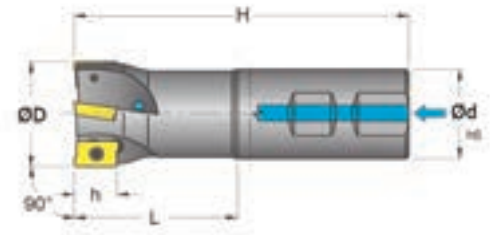


17505 126-127

Without internal coolant feed.



Ø D mm	Ø d mm	H mm	L mm	h mm	Z	Indexable inserts	Short	
							17505	...
10	16	80	24	10	1	AP..1003	101	
11	16	80	24	10	1	AP..1003	110	NEW
12	16	80	24	10	1	AP..1003	103	
13	16	80	24	10	1	AP..1003	118	NEW
14	16	80	26	10	1	AP..1003	105	
15	16	85	25	10	2	AP..1003	120	NEW
15,7	16	85	25	10	2	AP..1003	130	
16	16	85	25	10	2	AP..1003	107	
17	16	85	25	10	2	AP..1003	128	NEW
18	20	85	25	10	2	AP..1003	109	
19,7	20	90	25	10	3	AP..1003	131	
20	20	90	25	10	3	AP..1003	111	
22	20	95	25	10	3	AP..1003	129	NEW
24,7	25	95	25	10	4	AP..1003	132	
25	25	95	25	10	3	AP..1003	133	NEW
25	25	95	25	10	4	AP..1003	113	
28	25	95	25	10	4	AP..1003	134	NEW
30	25	95	25	10	4	AP..1003	135	NEW
32	25	95	25	10	5	AP..1003	115	
25	25	100	43	17	2	AP..1604	117	
32	32	110	50	17	3	AP..1604	119	
40	32	115	55	17	4	AP..1604	121	



Ø D mm	Ø d mm	H mm	L mm	h mm	Z	Indexable inserts	Long	
							17505	...
10	16	150	24	10	1	AP..1003	102	
12	16	150	25	10	1	AP..1003	104	
16	16	150	25	10	2	AP..1003	122	
18	16	150	25	10	2	AP..1003	137	NEW
20	20	150	25	10	3	AP..1003	123	
25	20	150	25	10	4	AP..1003	124	
25	25	200	62	17	2	AP..1604	126	
32	25	150	25	10	5	AP..1003	125	
32	32	200	62	17	3	AP..1604	127	

Spare parts		Clamping screw		Screwdriver	
For indexable inserts size	TORX® size T	17520	...	52529	...
AP..1003	8	202	403		
AP..1604	15	205	406		

17507

Screw-in milling cutter 90°

ATORN®

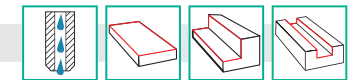
Type

- Soft cutting due to the positive install position of the indexable insert
- High true-running accuracy and axial run-out accuracy of 0.03 mm - **Without** indexable inserts

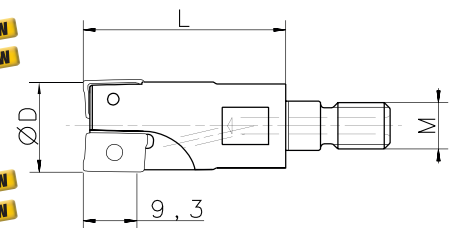
Note:

Milling arbours, see cat. size. 21, cat. no. 17676.
Reversible inserts, see cat. no. 17809 - 17811.

17507



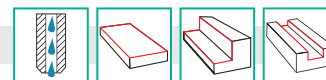
Ø D mm	L mm	M mm	D ₁ mm	Z	Indexable inserts	17507	
						...	NEW
10	20	M 6	6,5	1	AP..1003	101	NEW
12	20	M 6	6,5	1	AP..1003	102	NEW
16	25	M 8	8,5	2	AP..1003	103	
20	30	M 10	10,5	3	AP..1003	104	
25	35	M 12	12,5	4	AP..1003	106	
32	43	M 16	17,0	5	AP..1003	107	NEW
32	46	M 16	17,0	3	AP..1604	108	NEW
40	46	M 16	17,0	4	AP..1604	109	NEW



Spare parts		Clamping screw		Screwdriver	
For indexable inserts Size	TORX® size T	17520	...	52529	...
AP..1003	8	202	403		
AP..1604	15	205	406		

17755

Corner milling cutters 90°



ATORN®

- Type
 - Positive
 - Right-hand cut
 - With internal cooling (except cat. no. 17755 112-114)
 - Without indexable inserts

Use
 For high machining performance.

Note:
 Reversible inserts, see cat. no. 17809 - 17811.

17755

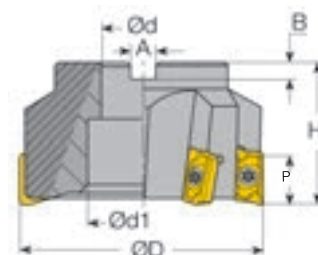


For indexable inserts AP.. 1003

Ø D mm	Ø d1 mm	Ø d H7 mm	H mm	Z	p mm	Indexable inserts	17755	...
40	17	16	40	6	10	AP..1003	101	
50	17	22	40	7	10	AP..1003	102	
63	17	22	40	8	10	AP..1003	103	
80	20	27	50	11	10	AP..1003	109	
100	26	32	50	12	10	AP..1003	110	

For indexable inserts AP.. 1604

Ø D mm	Ø d1 mm	Ø d H7 mm	H mm	Z	p mm	Indexable inserts	17755	...
40	12	16	40	4	17	AP..1604	104	
50	18	22	40	5	17	AP..1604	105	
63	18	22	40	6	17	AP..1604	106	
80	20	27	50	7	17	AP..1604	107	
100	45	32	50	8	17	AP..1604	108	
125	56	40	63	9	17	AP..1604	111	
160	87	40	63	10	17	AP..1604	112	
200	-	60	63	13	17	AP..1604	113	NEW
250	-	60	63	16	17	AP..1604	114	NEW



Spare parts

For indexable inserts size	TORX® size	Clamping screw	Screwdriver
AP..1003	8	17520	52529
AP..1604	15	202	403
		205	406

17510

Twist End Milling Cutters with Shank 90° (Igel)



ATORN®

- Type
 - Positive
 - Right-hand cut
 - Straight shank with driving face in compliance with DIN 1835 B
 - Without indexable inserts

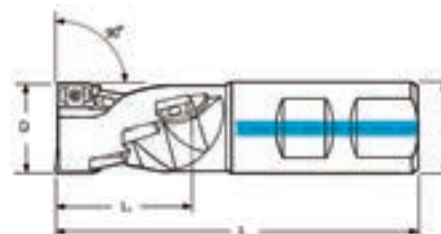
Note:
 Reversible inserts, see cat. no. 17809 - 17811.

17510



For indexable inserts AP.. 1003

Ø D mm	d mm	L ₁ mm	L mm	Z	Z Effective	Indexable inserts	17510	...
20	20	28	86	4	1	AP..1003	102	
25	25	37	105	8	2	AP..1003	103	
32	32	46	115	12	2	AP..1003	104	
40	32	54	128	18	3	AP..1003	107	



For indexable inserts AP.. 1604

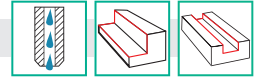
Ø D mm	d mm	L ₁ mm	L mm	Z	Z Effective	Indexable inserts	17510	...
25	25	29	105	2	1	AP..1604	108	
32	32	44	115	6	2	AP..1604	105	
40	32	58	130	8	2	AP..1604	106	

Spare parts

For indexable inserts size	TORX® size	Clamping screw	Screwdriver
AP..1003	8	17520	52529
AP..1604	15	202	403
		205	406

17753

Twist end milling cutters 90° (Igel)



ATORN®

Type

- Positive
- Right-hand cut
- Only one insert type for face cutting edge and circumferential cutting edge
- Arrangement with a high right-hand twist for good chip forming

- Full overlap within a tooth row
- Delivery with clamping screws and key
- **Without** indexable inserts

Note:

Reversible inserts, see cat. no. 17809 - 17811.



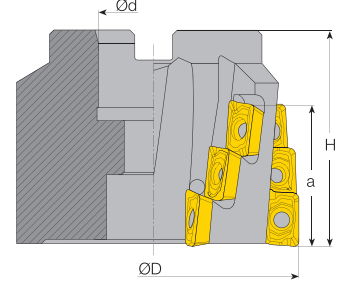
17753

For indexable inserts AP.. 1003

Ø D mm	Ø d mm	a mm	H mm	Indexable inserts	Z	Z eff.	17753	...
40	16	37	50	AP..1003	12	3	098	098
50	22	46	60	AP..1003	15	3	099	099
63	27	46	60	AP..1003	20	4	100	100

For indexable inserts AP.. 1604

Ø D mm	Ø d mm	a mm	H mm	Indexable inserts	Z	Z eff.	17753	...
50	27	30	55	AP..1604	6	3	101	101
63	27	44	60	AP..1604	12	4	102	102
80	32	44	60	AP..1604	15	5	103	103
100	40	44	60	AP..1604	18	6	104	104



Spare parts

For indexable inserts size	TORX® size	Clamping screw	Screwdriver
AP..1003	8	17520	52529
AP..1604	15	202	403
		205	406

17760

Angled cutters



ATORN®

Type

- Milling cutter body with clamping screws and key
- **Without** indexable inserts

Use

For chamfering 15° to 75° diagonals.

Note:

Reversible inserts, see cat. no. 17809 - 17811.



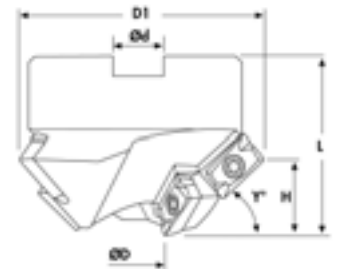
17760

For indexable inserts AP.. 1003

Y	Ø D mm	D1 mm	Ø d mm	L mm	H mm	No. of Tooth rows	Z	17760	...
15°	17	70	22	50	7	3	9	096	096
30°	17	65	22	50	13	3	9	097	097
40°	17	60	22	50	17	3	9	106	106 NEW
45°	17	56	22	50	19	3	9	098	098
60°	17	45	16	50	24	3	9	099	099
75°	19	33	16	60	27	3	9	100	100

For indexable inserts AP.. 1604

Y	Ø D mm	D1 mm	Ø d mm	L mm	H mm	No. of Tooth rows	Z	17760	...
15°	35	90	27	50	8.0	3	6	101	101
30°	35	85	27	50	15.0	3	6	102	102
40°	35	84	27	50	19.0	3	6	107	107 NEW
45°	35	75	27	50	21.5	3	6	103	103
60°	35	62	27	50	26.5	3	6	104	104
75°	35	45	22	60	29.5	3	6	105	105



Spare parts

For indexable inserts Size	TORX® size	Clamping screw	Screwdriver
AP.. 1003	8	17520	52529
AP.. 1604	15	202	403
		205	406

17750

Face milling cutters 75° (consumable milling cutter)

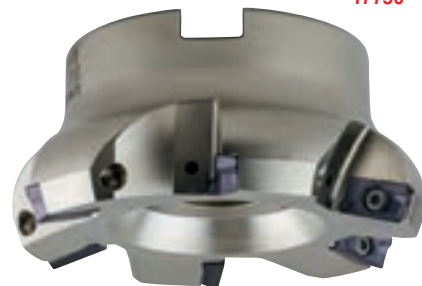


ATORN®

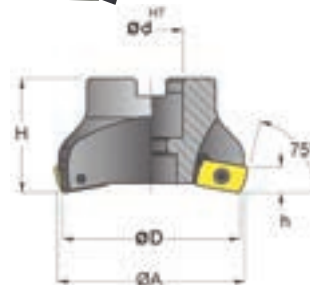
Note:
Reversible inserts, see cat. no. 17809 - 17811.

- Type**
- Positive
- Right-hand cut
- Without indexable inserts

Ø D mm	Ø A mm	Ø d H7 mm	H mm	Z	Indexable inserts	17750	...
50	54	16	40	3	AP..1604		201
63	67	22	40	4	AP..1604		202
80	84	27	50	5	AP..1604		203
100	104	32	50	6	AP..1604		204
125	129	40	63	7	AP..1604		205



17750



Spare parts	Clamping screw	Screwdriver
For indexable inserts	17520	52529
For indexable inserts size	TORX® size	
AP..1003	8	202 / 403
AP..1604	15	205 / 406

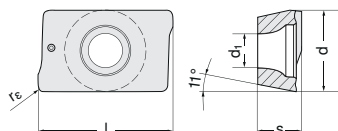
17809

Indexable milling inserts APKT and APHX

ATORN®

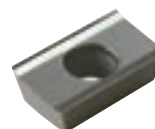
17809 101+104
Type
- Polished

- Type**
- Square
- Positive 11°
- With sintered-in chip deflection step



17809 104

17809 105

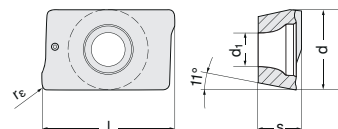


Use	Carbide type	Coating	ISO designation	l mm	d mm	s mm	d ₁ mm	r	17809	...	17809	...	17809	...
APHX100304 FR-ALU	N	HW 4415 Uncoated	APHX100304 FR-ALU	10,5	6,35	3,18	2,85	0,5	10 pcs.		101			
APKT1003 PDER-S	PMK	HC 4635 Uncoated	APKT1003 PDER-S	10,5	6,35	3,18	2,85	0,5	10 pcs.			102		103
APHX160404 FR-ALU	MK	HC 4535 Uncoated	APHX160404 FR-ALU	17,0	9,52	4,76	4,40	0,4	10 pcs.		104			
APKT1604 PDER-S			APKT1604 PDER-S	17,0	9,52	4,76	4,40	0,8	10 pcs.			105		106

17810 - 17811

Reversible cutting inserts for milling APKT

- Type**
- Square
- Positive 11°
- With sintered-in chip deflection step

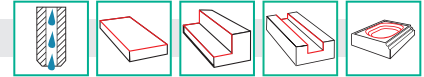


17810

17811



Use	Carbide type	Coating	ISO designation	l mm	d mm	s mm	d ₁ mm	r	17810	...	17811	...
APKT1003	N	H 25/Alu Uncoated	APKT1003	10,5	6,35	3,18	2,85	0,5	10 pcs.		101	
APKT1003 PDFR	PM	H 55 TiAlN+TiN	APKT1003 PDFR	10,5	6,35	3,18	2,85	0,5	10 pcs.			101
APKT1604 PD			APKT1604 PD	17,0	9,52	4,76	4,40	0,8	10 pcs.		104	
APKT1604 PDFR			APKT1604 PDFR	17,0	9,52	4,76	4,40	0,8	10 pcs.			102



17882

Type

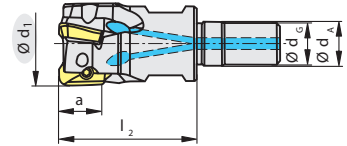
- Stable body of tool steel with hard& tough coating
- Coolant bore also suitable for MQL
- Precise support surfaces and exact positioning of the indexable insert

Advantage:

- Soft cut
- Scope of supply:**
- Body with clamping screws
- **Without** indexable inserts

NEW

17882 101-106

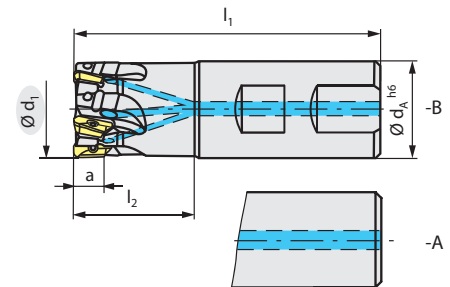


$\varnothing d_1$ mm	Designation	Z	l_2 mm	a mm	$\varnothing d_A$ mm	$\varnothing d_G$ mm	Indexable inserts	With thread	
								17882	...
20	G211.20.R.02-11	2	33	10	10,5	10	XD.. 11..		101
20	G211.20.R.03-11	3	33	10	10,5	10	XD.. 11..		102
25	G211.25.R.03-11	3	34	10	12,5	12	XD.. 11..		103
25	G211.25.R.04-11	4	35	10	12,5	12	XD.. 11..		104
32	G211.32.R.04-11	4	36	10	17,0	16	XD.. 11..		105
32	G211.32.R.05-11	5	37	10	17,0	16	XD.. 11..		106

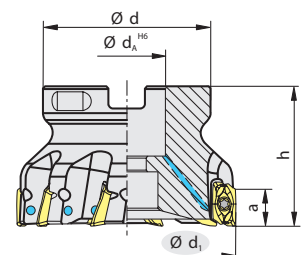
$\varnothing d_1$ mm	Designation	Z	l_1 mm	l_2 mm	$\varnothing d_A$ mm	a mm	Indexable inserts	With shank	
								17882	...
12	C211.12.R.01-11-B-20	1	75	20	16	10	XD.. 11..		201
16	C211.16.R.02-11-A15-32-165	2	165	32	15	10	XD.. 11..		202
16	C211.16.R.02-11-A-25	2	75	25	16	10	XD.. 11..		203
16	C211.16.R.02-11-A-32-165	2	165	32	16	10	XD.. 11..		204
16	C211.16.R.02-11-B-25	2	75	25	16	10	XD.. 11..		205
20	C211.20.R.02-11-A19-40-200	2	200	40	19	10	XD.. 11..		206
20	C211.20.R.02-11-A-25	2	77	25	20	10	XD.. 11..		207
20	C211.20.R.02-11-A-40-200	2	200	40	20	10	XD.. 11..		208
20	C211.20.R.02-11-B-25	2	77	25	20	10	XD.. 11..		209
20	C211.20.R.03-11-A-25	3	77	25	20	10	XD.. 11..		210
20	C211.20.R.03-11-A-32-165	3	165	32	20	10	XD.. 11..		211
20	C211.20.R.03-11-B-25	3	77	25	20	10	XD.. 11..		212
25	C211.25.R.02-11-A-50-225	2	225	50	25	10	XD.. 11..		213
25	C211.25.R.03-11-A24-50-225	3	225	50	24	10	XD.. 11..		214
25	C211.25.R.03-11-A-32	3	90	32	25	10	XD.. 11..		215
25	C211.25.R.03-11-A-50-225	3	225	50	25	10	XD.. 11..		216
25	C211.25.R.03-11-B-32	3	90	32	25	10	XD.. 11..		217
25	C211.25.R.04-11-A-32	4	90	32	25	10	XD.. 11..		218
25	C211.25.R.04-11-A-40-165	4	165	40	25	10	XD.. 11..		219
25	C211.25.R.04-11-B-32	4	90	32	25	10	XD.. 11..		220
32	C211.32.R.04-11-B-40	4	102	40	32	10	XD.. 11..		221
32	C211.32.R.05-11-B25-40	5	102	40	25	10	XD.. 11..		222
32	C211.32.R.05-11-B-40	5	102	40	32	10	XD.. 11..		223
40	C211.40.R.06-11-B-50	6	122	50	40	10	XD.. 11..		224

$\varnothing d_1$ mm	Designation	Z	h mm	$\varnothing d$ mm	$\varnothing d_A$ mm	a mm	Indexable inserts	With bore	
								17882	...
40	A211.40.R.04-11	4	40	38	16	10	XD.. 11..		301
40	A211.40.R.06-11	6	40	38	16	10	XD.. 11..		302
50	A211.50.R.05-11	5	40	43	22	10	XD.. 11..		303
50	A211.50.R.08-11	8	40	43	22	10	XD.. 11..		304
63	A211.63.R.06-11	6	40	48	22	10	XD.. 11..		305
63	A211.63.R.10-11	10	40	48	22	10	XD.. 11..		306
80	A211.80.R.07-11	7	50	58	27	10	XD.. 11..		307
80	A211.80.R.10-11	10	50	58	27	10	XD.. 11..		308
80	A211.80.R.12-11	12	50	58	27	10	XD.. 11..		309
100	A211.100.R.08-11	8	50	78	32	10	XD.. 11..		310
100	A211.100.R.14-11	14	50	78	32	10	XD.. 11..		311
125	A211.125.R.10-11	10	63	88	40	10	XD.. 11..		312
160	A211.160.R.13-11	13	63	98	40	10	XD.. 11..		313

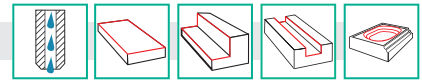
17882 201-224



17882 301-313



Continuation ▶



17882 - 17884 Corner/Slot Milling Cutter MaxiMill 211-11

Continuation ▶

17884

Indexable inserts

Type

The notch makes the difference:

To WP radius 1.6 the notch enables quiet operation and vibration-free work, greater stability when plunging and higher machining capacity. The radial forces when plunging are compensated.

Use

Chip deflection step F20:

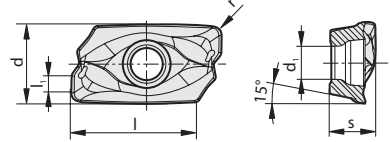
- Excellent cutting efficiency, finishing of NF metals

Chip deflection step F50:

- Chamfered indexable insert, excellent cutting efficiency, finishing of steel, stainless steel and cast iron, even under unstable conditions

Chip deflection step M50:

- Universal implementation, compromise of cutting efficiency and stability, for medium machining of steel, stainless steel and cast iron



17884



N

CTW4615
Uncoated
F20

P

CTP1235
PVD
F50

M

CTP2235
PVD
M50

Use

Carbide type

Coating

Chip deflection step

Designation	d mm	l mm	s mm	l ₁ mm	r mm	d ₁ mm		17884	...	17884	...	17884	...
XDKT 11T304FR-F20	6,8	10,6	3,8	1,8	0,4	2,8	10 pcs.	101					
XDKT 11T308FR-F20	6,8	10,6	3,8	1,4	0,8	2,8	10 pcs.	102					
XDKT 11T3020FR-F20	6,8	10,6	3,8	1,7	2,0	2,8	10 pcs.	103					
XDKT 11T304SR-F50	6,8	10,6	3,8	1,8	0,4	2,8	10 pcs.			104			
XDKT 11T308SR-F50	6,8	10,6	3,8	1,4	0,8	2,8	10 pcs.			105			
XDKT 11T320SR-F50	6,8	10,6	3,8	2,1	2,0	2,8	10 pcs.			106			
XDKT 11T308SR-M50	6,8	10,6	3,8	1,4	0,8	2,8	10 pcs.					107	
XDKT 11T312SR-M50	6,8	10,6	3,8	1,0	1,2	2,8	10 pcs.					108	
XDKT 11T320SR-M50	6,8	10,6	3,8	2,1	2,0	2,8	10 pcs.					109	

Spare parts

For Ø d ₁ mm	Clamping screw	Size T	17999	...	51932	...
12	M 2,5 x 5,0	IP 8			404	
15,7 - 32	M 2,5 x 5,6	IP 8		123	404	
40 - 160	M 2,5 x 7,3	IP 8		124	404	
				125	404	

For milling cutters with bore Ø d ₁ mm	Power screw	17998	...
40	M 8 x 30,0		101
50	M 10 x 31,0		102

Info

MaxiMill 211-11

Operating principle through "the notch" at circular and diagonal plunge: (r < 2,0 mm)



Radial force compensation

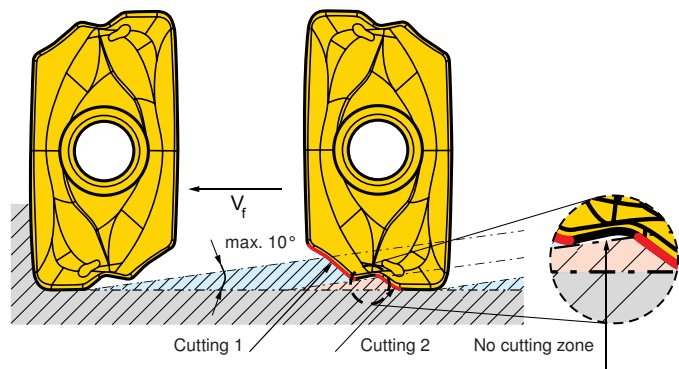
- The notch ensures additional stability when plunging.
- Quiet operation and vibration-free work are thus assured to a high degree.

Chip division

- Low cutting pressure
- Minimal power consumption
- Optimal chip transport
- Minimal vibration
- Excellent chip formation

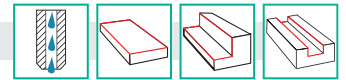
The PLUS for professional machinists:

- Higher machining capacity
- Better surfaces when milling closed grooves and pockets



17742

Corner milling cutters 90°



ATORN®

Type

- Positive
- Right-hand cut
- **Without** indexable inserts
- Insert design with four cutting edges per insert
- Depth of cut to max. 10,5 mm

Use

For carbide indexable inserts SD.T 1205.. For general corner and face milling, implementation near the clamping fixture is possible. Core-drilling by means of circular interpolation.

Note:

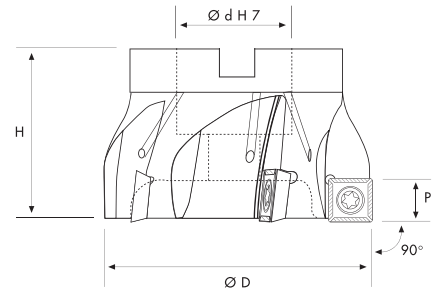
Carbide indexable inserts SD.T 1205.. See cat. no. 17833.

17742



Ø D mm	Ø d H7 mm	H mm	P mm	Z	Indexable inserts	17742	...
40	16	45	10,5	4	SD.T 1205 ..		100
50	22	40	10,5	5	SD.T 1205 ..		101
63	22	40	10,5	6	SD.T 1205 ..		102
80	27	50	10,5	6	SD.T 1205 ..		103
100	32	50	10,5	8	SD.T 1205 ..		104
125	40	63	10,5	9	SD.T 1205 ..		105

Spare parts		Clamping screw		Screwdriver		
For indexable inserts size	Clamping screw Type	TORX® size T	17744	...	52529	
SD.T 1205..	VT 40 710	15		101		406



17833

Indexable milling inserts SDHT/SDMT

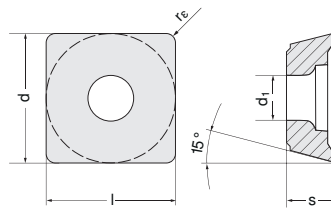
Type

- Square
- Positive 15°

17833 101

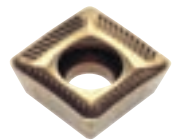
ATORN®

17833 201-203



17833 101

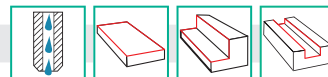
17833 202



Use	N		PM		P	MS	
Carbide type	H216T		P 25		CTP1235	CTP2235	
Coating	Uncoated		TiAlN		PVD	PVD	
ISO designation	17833	...	17833	...	17833	...	17833
SDMT 1205 PDR69	12,7	5,00	4,40	0,8	10 pcs.		101
SDHT 120508FR-27P	12,7	5,00	5,00	0,8	10 pcs.		201 NEW
SDMT 1205ZZSN-29	12,7	5,00	5,00	0,8	10 pcs.		202 NEW
SDHT 120512SR-33	12,7	5,00	5,00	0,8	10 pcs.		203 NEW

17662

Corner milling cutters 90°

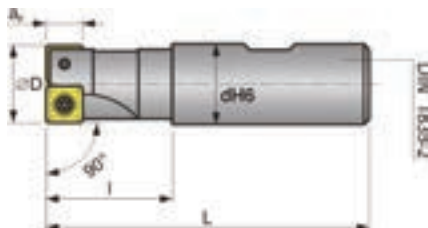


Type

- Nickel-plated milling cutter body of hardened special steel for precise 90° cuts
- Extremely soft cut

Use

Universal implementation for light to medium machining. **Excellent surface** thanks to optimised face-cutting edge. For indexable inserts SOMT 09T304.



17662 101-103

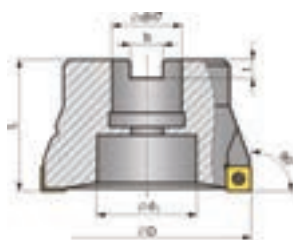


With shank

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Shank Ø mm	Working depth L2 mm	17662	...
20	2	82	20	32		101
25	3	98	25	42		102
32	4	102	32	42		103

With bore

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Mounting hole mm	17662	...
40	5	40	16		120
50	6	40	22		121
63	7	40	22		122

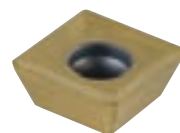


17662 120-122



Indexable Inserts and Spare Parts

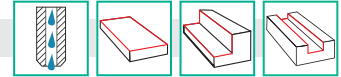
17662 301-304



Indexable inserts Designation	Carbide type/ coating	Steel		Steel roughing		Uniform - soft cut		VA-steel - soft cut	
		17662	...	17662	...	17662	...	17662	...
SOMT 09T304	P30/TiN		301		302		303		304
SOMT 09T304	P40/TiN				302				304

Spare parts

For indexable inserts size	TORX® size	Clamping Screw		Screwdriver	
		17662	...	52529	...
SOMT 09T304	9		200		404



ATORN®

Type

- Internal coolant feed
- For face milling, corner milling, trimming and groove milling
- Multi-functional milling cutting tool system with 4 cutting edges on a double-sided indexable insert
- Long service life due to low machining forces The special chip shape geometry enables low power consumption due to the large rake angle, in spite of the strong cutting edge
- Special chip geometry guarantees uniformly high quantities with the new carbide types.
- Nickel-plated version, thus greater protection against wear and longer service life of the body.

17735
End milling cutters 4-10 Power
Use

For use of ISO indexable milling inserts LN.X 100605 PNR cat. no. 17738.

17736 101-103
Corner milling cutters 4-10 Power
Use

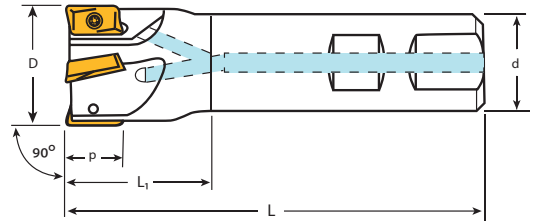
For use of ISO indexable milling inserts LN.X 100605 PNR cat. no. 17738.

17736 105-109
Corner milling cutter 4-15 Power
Use

For use of ISO indexable milling inserts LN.X 151008 PNR cat. no. 17738.

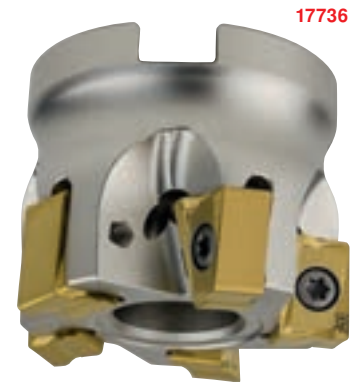


17735

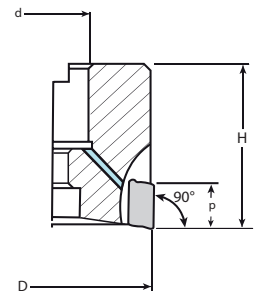


End Milling Cutters							
Ø D	d	L	L ₁	p	Z	Indexable inserts	17735 ...
mm	mm	mm	mm	mm			
20	20	100	30	9	3	LN.X 100605 PNR	101
25	25	115	35	9	3	LN.X 100605 PNR	102
32	25	115	40	9	4	LN.X 100605 PNR	103

Corner Milling Cutters							
Ø D	d	H	p	Z	Indexable inserts	17736 ...	
mm	mm	mm	mm				
40	16	40	9	5	LN.X 100605 PNR	101	
50	22	40	9	7	LN.X 100605 PNR	102	
63	22	40	9	9	LN.X 100605 PNR	103	
50	22	40	14	5	LN.X 151008 PNR	105	
63	22	40	14	6	LN.X 151008 PNR	106	
80	27	50	14	7	LN.X 151008 PNR	107	
100	32	63	14	8	LN.X 151008 PNR	108	
125	40	63	14	10	LN.X 151008 PNR	109	NEW



17736



Indexable Inserts and Spare Parts

17738 101-204

Use

- HW 4310: For Alu machining
- HC 4630: For steel machining
- HC 4410: For cast iron machining
- HC 4535: For stainless steel machining

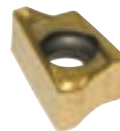
Note:

Cutting edges are marked with points, always use the same points.

17738 101



17738 102



17738 201



17738 202



Use

Carbide type
 Coating

N

HW 4310
 Uncoated

P

HC 4630
 Coating

K

HC 4410
 Coating

M

HC 4535
 Coating

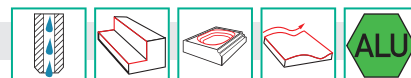
ISO designation		17738 ...	17738 ...	17738 ...	17738 ...
LNEX 100605 PNR-MA	10 pcs.	101			
LNMX 100605 PNR-MM	10 pcs.		102	103	104
LNEX 151008 PNR-MA	10 pcs.	201			
LNMX 151008 PNR-MM	10 pcs.		202	203	204

Spare parts

For indexable inserts size	TORX® size	Clamping screws	Screwdriver
LN.X 100605 PNR	9	17737 ...	52529 ...
LN.X 151008 PNR	15	101	404
		102	406

17560

Plunge Milling Cutters



ATORN®

Note:
Indexable inserts, see cat. no. 17563 ff.

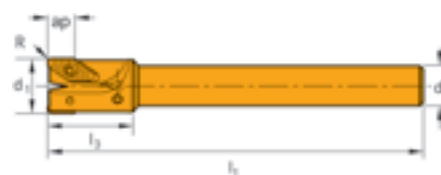
Use
For NF metals and plastics.



17560

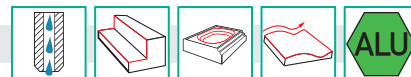
Ø d ₁ mm	Z	R mm	l ₁ mm	l ₃ mm	ap mm	Ø d ₂ mm	Indexable inserts	17560	...
25	2	1,2	200	40	14	20	VPGT 160412-ALM	102	
32	2	3,0	220	50	15	25	VCGT 220530-ALM	103	

Spare parts		Clamping screws		Screwdriver	
For indexable inserts size	Screw	TORX®-size T	17564	...	52529
VPGT 160412-ALM	M 4,0 x 7,5	8	102		403
VCGT 220530-ALM	M 5,0 x 10,0	15	103		406



17561

Screw-On Milling Cutters



ATORN®

Note:
Indexable inserts, see cat. no. 17563 ff.

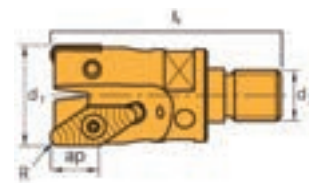
Type THR
Use
For NF metals and plastics.



17561

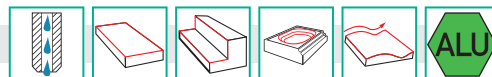
Ø d ₁ mm	Z	R mm	l ₁ mm	ap mm	d ₃ mm	Indexable inserts	17561	...
25	2	1,2	40	14	M 12	VPGT 160412-ALM	102	
32	2	3,0	50	15	M 16	VCGT 220530-ALM	103	
42	3	3,0	50	15	M 16	VCGT 220530-ALM	104	

Spare parts		Clamping screws		Screwdriver	
For indexable inserts size	Screw	TORX®-size T	17564	...	52529
VPGT 160412-ALM	M 4,0 x 7,5	8	102		403
VCGT 220530-ALM	M 5,0 x 10,0	15	103		406



17562

Shell-type milling cutters



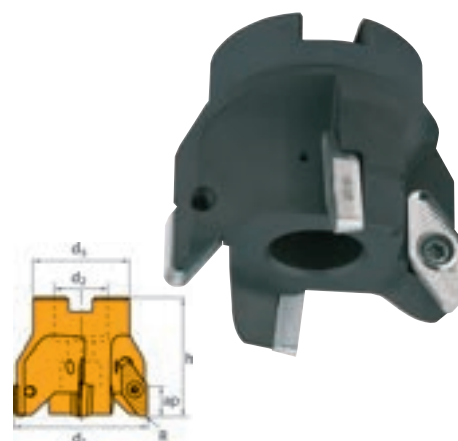
ATORN®

Note:
Indexable inserts, see cat. no. 17563 ff.

Type
For NF metals and plastics.

Ø d ₁ mm	Z	R mm	h mm	ap mm	Ø d ₅ mm	d ₂ mm	Indexable inserts	17562	...
42	3	3,0	55	15	32	16	VCGT 220530-ALM	101	
52	3	3,0	55	15	40	22	VCGT 220530-ALM	102	
66	4	3,0	60	15	48	27	VCGT 220530-ALM	103	
80	4	3,0	60	15	60	27	VCGT 220530-ALM	104	
100	5	3,0	65	15	80	32	VCGT 220530-ALM	105	

Spare parts		Clamping screws		Screwdriver	
For indexable inserts size	Screw	TORX®-size T	17564	...	52529
VCGT 220530-ALM	M 5,0 x 10,0	15	103		406



17562

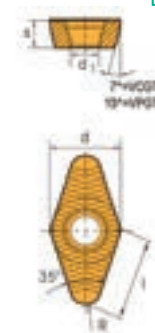
17563

Indexable milling inserts VPGT/VCGT



ATORN®

Indexable inserts Type	l mm	s mm	d mm	d ₁ mm	R mm	10 pcs.	Uncoated K 10		Coated K 10	
							17563	...	17563	...
VPGT 160412-ALM	16,6	4,76	9,52	4,4	1,2	10 pcs.	102		202	
VCGT 220530-ALM	22,1	5,56	12,70	5,5	3,0	10 pcs.	103		203	



17563

17570

Countersink milling cutter for backward operation 180°



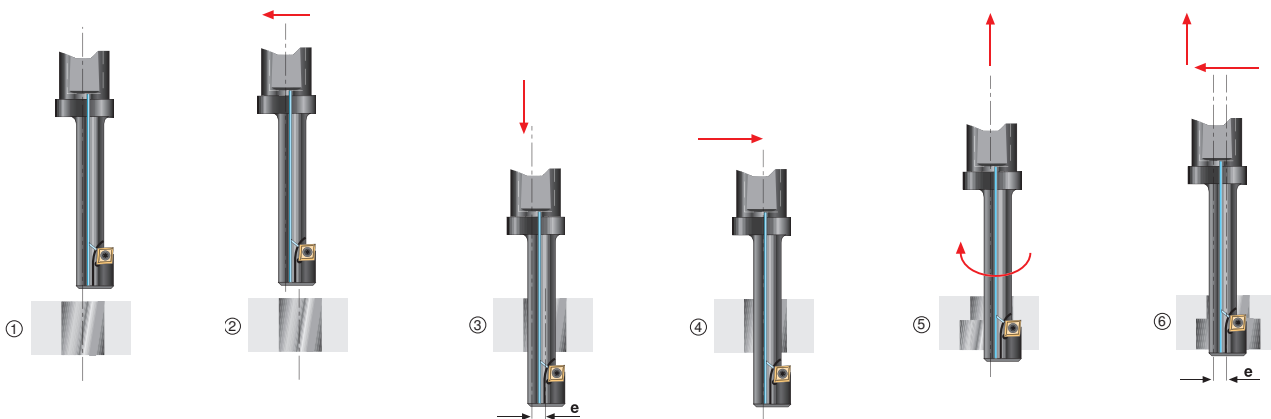
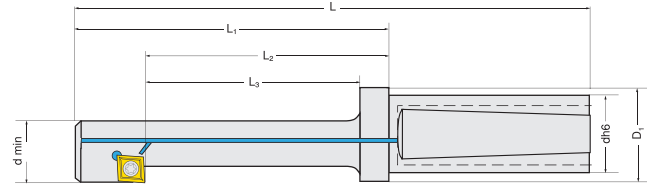
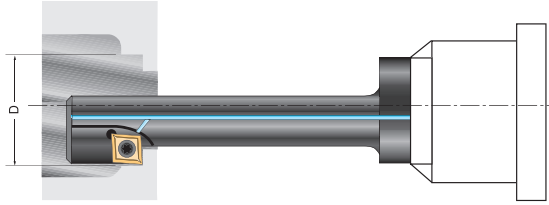
ATORN®

Type
- Delivery **without** indexable inserts
Use
For rearward countersinking of bores.

17570 101
Without internal coolant feed.

Note:
Indexable inserts
see cat. no. 18550 ff.

17570



- 1) Position the tool on the centre of the bore. Orientation of spindle: 0°.
- 2) Offset of the tool by the programming dimension (e).
- 3) Plunging to the position below the lower edge of the workpiece with safety distance.
- 4) Move back to the centre of the bore by the dimension (e), then start spindle.
- 5) Countersink to the desired depth.
- 6) Position at safety distance below the lower edge of the workpiece. Orientation of spindle: 0°. Subsequent offset of the tool by the programming dimension (e) and extension of the milling cutter.

Ø D mm	d min mm	L mm	L1 mm	L2 mm	L3 mm	dh6 mm	D1 mm	e mm	Indexable inserts	17570	...
18	10,5	112	62	47	40	20	25	4,0	CC.. 0602..		101
20	13,0	117	67	52	45	20	25	3,75	CC.. 0602..		102
24	15,0	122	72	57	50	20	25	4,75	CC.. 0602..		103
26	17,0	132	82	67	60	20	25	5,0	CC.. 0602..		104
30	19,0	142	92	77	65	20	25	6,0	CC.. 0602..		105
33	21,0	152	102	82	75	20	25	6,5	CC.. 09T3..		106
36	23,0	173	113	93	85	32	40	7,0	CC.. 09T3..		107 NEW
40	25,0	183	123	103	95	32	40	8,0	CC.. 09T3..		108 NEW
43	30,0	183	123	103	95	32	40	7,0	CC.. 09T3..		109 NEW
48	33,0	223	163	143	135	32	40	8,0	CC.. 09T3..		110 NEW
53	36,0	210	140	40	110	40	-	9,0	CC.. 1204..		111 NEW
57	39,0	220	150	40	120	40	-	9,5	CC.. 1204..		112 NEW
66	45,0	245	165	50	135	50	-	11,0	CC.. 1204..		113 NEW
76	52,0	265	185	50	155	50	-	12,5	CC.. 1204..		114 NEW

Spare parts

For indexable inserts size	TORX® size T	Clamping screw	Screwdriver
CC.. 0602..	8	17528	52529
CC.. 09T3..	15	101	403
CC.. 1204..	20	102	406
		103	407

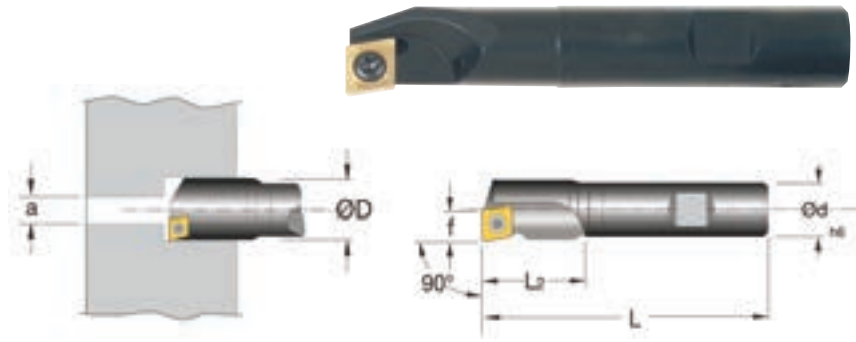
17576 - 17577 Core Drills and Countersinking Cutters



17576
ATORN®

Type
- Single-flute boring bar with internal cooling
- Without indexable inserts
Hole tolerances:
Indexable insert radius 0,2 mm = +0,05 / -0,10 mm
Indexable insert radius 0,4 mm = +0,03 / -0,18 mm
Use
For counterboring and core-drilling.

Note:
Indexable inserts, see cat. no. 18550 ff.



17576

Single cutting

Ø D	Ø d h6	a	f	L	L ₂	Indexable inserts	17576	...
10	12	4	6,0	85	15	CC.. 0602..	101	
11	12	4	6,0	85	16	CC.. 0602..	102	
12	10	4	6,0	85	20	CC.. 0602..	103	
13	12	5	6,5	85	21	CC.. 0602..	104	
14	12	5	7,0	85	21	CC.. 0602..	105	
15	12	5	7,5	85	24	CC.. 0602..	106	
16	12	5	8,0	85	28	CC.. 0602..	107	
17	16	5	8,5	95	40	CC.. 09T3..	108	
18	16	5	9,0	95	40	CC.. 09T3..	109	
19	16	5	9,5	95	40	CC.. 09T3..	110	
20	16	5	10,0	95	40	CC.. 09T3..	111	
21	16	5	10,5	95	33	CC.. 09T3..	112	

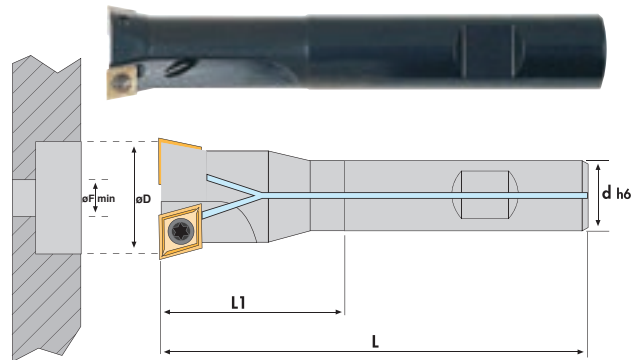
Single cutting

Ø D	Ø d h6	a	f	L	L ₂	Indexable inserts	17576	...
22	16	6	11,0	95	37	CC.. 09T3..	113	
23	16	6	11,5	95	40	CC.. 09T3..	114	
24	16	6	12,0	95	34	CC.. 09T3..	115	
25	16	8	12,5	95	33	CC.. 09T3..	116	
26	20	8	13,0	120	53	CC.. 09T3..	117	
27	20	9	13,5	120	56	CC.. 09T3..	118	
28	20	10	14,0	120	53	CC.. 09T3..	119	
29	20	11	14,5	120	55	CC.. 09T3..	120	
30	20	12	15,0	121	57	CC.. 09T3..	121	
31	20	14	15,5	120	55	CC.. 09T3..	122	
32	20	15	16,0	120	54	CC.. 09T3..	123	
33	20	16	16,5	120	55	CC.. 09T3..	124	

17577
ATORN®

Type
- Double-edged boring bar with internal cooling
- Without indexable inserts
Hole tolerances:
Indexable insert radius 0,2 mm = +0,05 / -0,10 mm
Indexable insert radius 0,4 mm = +0,03 / -0,18 mm
Use
For counterboring and core-drilling.

Note:
Indexable inserts, see cat. no. 18550 ff.



17577

Double edged

Ø D	Ø d h6	Ø F min	L	L ₁	Indexable inserts	17577	...
16	12	5	92	30	CC.. 0602..	101 NEW	
17	16	6	94	32	CC.. 0602..	102 NEW	
18	16	7	97	41	CC.. 0602..	103 NEW	
19	16	8	100	41	CC.. 0602..	104 NEW	
20	16	9	102	41	CC.. 0602..	105 NEW	
21	16	10	105	41	CC.. 0602..	106 NEW	
22	16	11	110	41	CC.. 0602..	107 NEW	
23	16	12	112	41	CC.. 0602..	108 NEW	
24	16	13	115	41	CC.. 0602..	109 NEW	
25	16	8	120	40	CC.. 09T3..	110 NEW	
26	20	9	125	55	CC.. 09T3..	111 NEW	
27	20	10	128	55	CC.. 09T3..	112 NEW	
28	20	11	130	55	CC.. 09T3..	113 NEW	
29	20	12	132	55	CC.. 09T3..	114 NEW	

Double edged

Ø D	Ø d h6	Ø F min	L	L ₁	Indexable inserts	17577	...
30	20	13	134	55	CC.. 09T3..	115 NEW	
31	20	14	136	55	CC.. 09T3..	116 NEW	
32	20	15	138	55	CC.. 09T3..	117 NEW	
33	20	16	140	55	CC.. 09T3..	118 NEW	
34	25	16	140	60	CC.. 09T3..	119 NEW	
35	25	17	140	60	CC.. 09T3..	120 NEW	
36	25	18	140	60	CC.. 09T3..	121 NEW	
37	25	19	140	60	CC.. 09T3..	122 NEW	
38	25	20	140	60	CC.. 09T3..	123 NEW	
39	25	21	140	60	CC.. 09T3..	124 NEW	
40	25	22	140	60	CC.. 09T3..	125 NEW	
41	25	23	140	60	CC.. 09T3..	126 NEW	
42	25	24	140	60	CC.. 09T3..	127 NEW	

Spare parts

For indexable inserts size	TORX® size	Clamping screw	Screwdriver
CC.. 0602..	8	17528	52529
CC.. 09T3..	15	101	406
		102	406



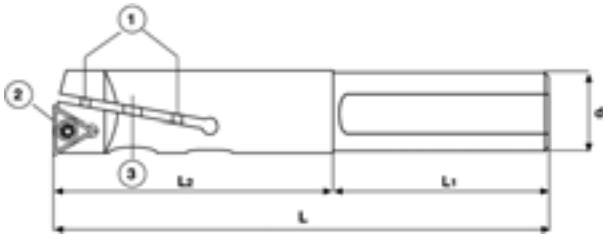
Use
For ISO indexable inserts CCMT and CCGT.

- Type**
- Special steel, nickel-plated
 - Adjustment range 2 - 5 mm
 - **Without** indexable inserts

Advantage:

- Cost-effective alternative to spindle tools

Note:
Indexable inserts, see cat. no. 18550 ff.



1 = Draw bolt,
2 = Clamping screw,
3 = Lock screw



17578

D min mm	D max mm	d mm	L mm	L2 mm	L1 mm	Indexable inserts	Holder		Tension screw		Lock screw	
							17578	...	17578	...	17578	...
10	12	10	100	30	70	CC.. 0602..		101		201		301
12	15	12	105	30	70	CC.. 0602..		102		201		302
15	20	16	110	50	60	CC.. 0602..		103		202		303
20	25	20	120	60	60	CC.. 0602..		104		203		304
25	30	25	140	70	70	CC.. 09T3..		105		204		305
30	35	25	160	90	70	CC.. 09T3..		106		205		306
35	40	32	170	100	70	CC.. 09T3..		107		206		307
40	45	32	190	120	70	CC.. 09T3..		108		207		308
45	50	32	220	160	70	CC.. 09T3..		109		208		309

Spare parts		Clamping screw	Screwdriver
For indexable inserts size	TORX® size T	17528	52529
CC.. 0602..	8		101
CC.. 09T3..	15		102
			403
			406

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ATORN® Performance requires quality.

17660

HPC Milling Cutters For Extreme Feeds



Type

- Nickel-plated shell-and milling cutter for **HPC machining**
- Dynamically acting cutting edge geometry **for the highest feed rates**
- Extremely soft cutting
- Through **reduced cutting force, minimal loading** of the spindle

Use

For face cutting and pocket milling. Milling even for large overhangs.



17660 101-102



With shank

Cutting edge Ø mm	No. of teeth	Overall length mm	Shank Ø mm	Working depth L2 mm	for Indexable insert	17660	...
25	2	140	25	80	ZDCW 09T304		101
32	2	140	32	80	ZDCW 09T304		102

With thread

Cutting edge Ø mm	No. of teeth	Overall length mm	Clamping thread mm	for Indexable insert	17660	...
25	2	54	M 12	ZDCW 09T304		110
32	3	63	M 16	ZDEW 120408		111
40	4	63	M 16	ZDEW 120408		112

17660 110-112



With bore

Cutting edge Ø mm	No. of teeth	Overall length mm	Mounting hole mm	for Indexable insert	17660	...
40	4	40	16	ZDCW 09T304		120
50	4	40	22	ZDEW 120408		121
63	5	40	22	ZDEW 120408		122
80	5	50	27	ZDEW 120408		123

17660 120-123



Indexable Inserts and Spare Parts

17660 304



17660 305



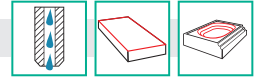
17660 306



Designation	Carbide type/coating	Programmable radius mm	Steel		Steel roughing		Cast iron + hardened	
			17660	...	17660	...	17660	...
ZDCW 09T304	P25/AI203	2,27		301				
ZDCW 09T304	P40/AI203	2,27				302		
ZDCW 09T304	K10/AI203	2,27						303
ZDEW 120408	P25/AI203	3,52		304				
ZDEW 120408	P40/AI203	3,52				305		
ZDEW 120408	K10/AI203	3,52						306

Spare parts

For indexable inserts size	TORX® size	Clamping screw	Screwdriver
ZDCW 09T304	9	17660	52529
ZDEW 120408	15	200	404
		201	406



Type

- Body of special steel
- Dynamically acting and soft cutting edge geometry

Scope of supply:

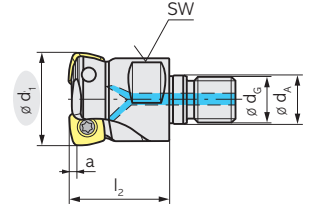
- Body with clamping screws
- **Without** indexable inserts

Advantages:

- Maximum service life thanks to HyperCoat coating
- Optimal quiet operation
- Maximum machining capacity.
- Maximum economy



17865 101-104

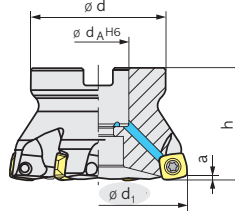
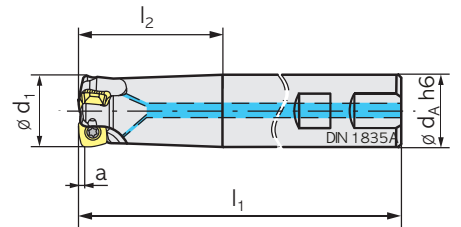


ϕd_1 mm	Designation	Z	l_2 mm	a mm	ϕd_A mm	ϕd_G mm	Indexable inserts	With thread	
								17865	...
16	GHFC.16.R.02-06-27	2	27	0,8	8,5	M 8	XP.. 06		101
20	GHFC.20.R.03-06-33	3	33	0,8	10,5	M 10	XP.. 06		102
25	GHFC.25.R.04-06-35	4	35	0,8	12,5	M 12	XP.. 06		103
32	GHFC.32.R.05-06-35	5	35	0,8	17,0	M 16	XP.. 06		104

17865 201-204



ϕd_1 mm	Designation	Z	l_1 mm	l_2 mm	a mm	ϕd_A mm	Indexable inserts	With shank	
								17865	...
16	CHFC.16.R.02-06-B-40	2	89	40	0,8	16	XP.. 06		201
20	CHFC.20.R.03-06-B-50	3	101	50	0,8	20	XP.. 06		202
25	CHFC.25.R.04-06-B-50	4	107	50	0,8	25	XP.. 06		203
32	CHFC.32.R.05-06-B25-60	5	117	60	0,8	25	XP.. 06		204

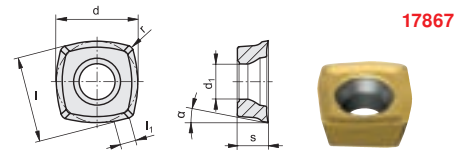


17865 301-304



ϕd_1 mm	Designation	Z	ϕd_A mm	h mm	ϕd mm	a mm	Indexable inserts	With bore	
								17865	...
32	AHFC.32.R.03-09	3	16	40	38	1	XD.. 09..		301
42	AHFC.42.R.05-09	5	16	40	38	1	XD.. 09..		302
52	AHFC.52.R.06-09	6	22	40	43	1	XD.. 09..		303
63	AHFC.63.R.06-09	6	22	40	48	1	XD.. 09..		304

Indexable Inserts and Spare Parts



Use
Carbide type
Coating

M S
CTC5235
CVD

P
CTP1235
PVD

Designation	d mm	l mm	s mm	l_1 mm	r mm	d_1 mm		17867	...	17867	...
XPLX 060305ER-F40	6,35	6,00	2,75	1,0	0,50	2,80	10 pcs.		101		102
XPLX 060305SR-M50	6,35	6,00	2,75	1,0	0,50	2,80	10 pcs.		103		104
XDLX 09T308ER-F40	9,60	9,60	3,97	1,5	0,80	4,40	10 pcs.		115		204
XDLX 09T308SR-M50	9,60	9,60	3,97	1,5	0,80	4,40	10 pcs.		116		207

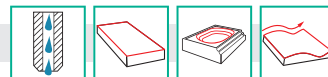
Spare parts

for indexable inserts	Clamping screws	Size T	Clamping screw	Wrench
XP.. 06	M 2,5 x 5,0	T 8	17999	51932
XD.. 09..	M 3,5 x 8,6	T 15	115	204
			116	207

For milling cutters with bore Powers screw

ϕd_1 mm	Powers screw	17998	...
32 - 42	M 8 x 30,0	101	

Face Cutting and Profile Milling Cutters



17613 - 17824 Face Cutting and Profile Milling Cutters

Type
 - Milling cutter body **nickel-plated** of hardened special steel
 - Stable design for quiet operation

- High true-running accuracy and axial run-out accuracy
Use
 For face cutting and profile milling with high rpm and feeds. For **tool and mould construction**.

17613 104



For indexable inserts RDHX 0702

Profiling Milling Cutters With Shank

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Shank Ø mm	Working depth L2 mm	17613	...
15	2	90	16	20		104
15L	2	110	16	20		105
15XL	2	160	20	22		106

Profiling Milling Cutters With Thread

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Clamping thread	17613	...
15	2	23	M 8		110
20	4	30	M 10		111
25	5	35	M 12		112
32	5	42	M 12		113



17613 110-113



Indexable Inserts and Spare Parts

ISO designation	Type/coating	Coat.	Use	s mm	d mm	d1 mm		17824	...
RDHX 0702 MOT	Alu polished	-	N	2,38	7	2,7	10 pcs.		304
RDHX 0702 MOT	K 10/AI203	x	KH	2,38	7	2,7	10 pcs.		305
RDHX 0702 MOT	P 25/AI203	x	P	2,38	7	2,7	10 pcs.		306
RDHX 0702	ABC10T chamfered	-	S	2,38	7	2,7	-		330
RDHX 0702	ABC25T chamfered	-	H	2,38	7	2,7	-		331

Clamping screw Screwdriver

Spare parts	TORX® size	17613	...	52529	...
For indexable insert	T				
RDHX 0702	7		201		402

17824 304

17824 305



17824 306

17824 330-331



For indexable inserts RDHX 1003

Profiling Milling Cutters With Shank

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Shank Ø mm	Working depth L2 mm	17614	...
20	2	90	20	30		101
20L	2	110	25	22		102
20XL	2	160	25	25		103

Profiling Milling Cutters With Thread

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Clamping thread	17614	...
20	2	28	M 10		110
25	3	32	M 12		111
30	4	42	M 16		112
35	5	42	M 16		113
42	6	42	M 16		114

Profiling Milling Cutters With Borehole

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Mounting hole mm	17614	...
42	6	40	16		120
52	7	50	22		121

Indexable Inserts and Spare Parts

ISO designation	Type/coating	Coat.	Use	s mm	d mm	d1 mm		17824	...
RDHX 1003 MOT	Alu polished	-	N	3,18	10	3,1	10 pcs.		309
RDHX 1003 MOT	K 10/AI203	x	KH	3,18	10	3,1	10 pcs.		310
RDHX 1003 MOT	P 25/AI203	x	P	3,18	10	3,1	10 pcs.		311
RDHX 1003 MOT	P 40/AI203	x	P	3,18	10	3,1	10 pcs.		312
RDHX 1003 MOT	M 40/AI203	x	M	3,18	10	3,1	10 pcs.		313
RDHX 1003	ABC10T chamfered	-	S	3,18	10	3,1	-		332
RDHX 1003	ABC25T chamfered	-	H	3,18	10	3,1	-		333

Clamping screw Screwdriver

Spare parts	TORX® size	17614	...	52529	...
For indexable insert	T				
RDHX 1003	15		201		406

17614 101



17614 110-114



17614 120-121



17824 309

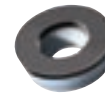
17824 310

17824 311

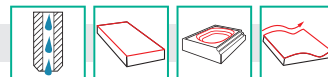


17824 312

17824 332-333



Continuation ▶



Continuation ▶

Type

- Milling cutter body **nickel-plated** of hardened special steel
- Stable design for quiet operation
- High **true-running accuracy** and axial run-out accuracy

Use

For face cutting and profile milling with high rpm and feeds. For **tool and mould construction**.

For reversible cutting inserts RDHX 12T3**Profiling Milling Cutters With Thread**

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Shank Ø mm	17615	...
24	2	35	M 12	110	110
32	3	42	M 16	111	111
35	3	42	M 16	112	112
42	5	42	M 16	113	113

Profiling Milling Cutters With Borehole

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Mounting hole mm	17615	...
42	4	40	16	120	120
52	5	50	22	121	121
66	6	50	27	122	122
80	7	50	27	123	123

Indexable Inserts and Spare Parts

ISO designation	Type/ coating	Coat.	Use	s mm	d mm	d1 mm	17824	...		
RDHX 12T3 MOT	Alu polished	-	N	3,97	12	3,9	10 pcs.	314		
RDHX 12T3 MOT	K 10/AI203	x	KH	3,97	12	3,9	10 pcs.	315		
RDHX 12T3 MOT	P 25/AI203	x	P	3,97	12	3,9	10 pcs.	316		
RDHX 12T3 MOT	P 40/AI203	x	P	3,97	12	3,9	10 pcs.	317		
RDHX 12T3 MOT	M 40/AI203	x	M	3,97	12	3,9	10 pcs.	318		
RDHX 12T3	ABC10T chamfered	-	S	3,97	12	3,9	-	334		
RDHX 12T3	ABC25T chamfered	-	H	3,97	12	3,9	-	335		
			Clamping screw	Clamping claw	Screwdriver					
Spare parts	TORX® size	17615	...	17615	...	52529		
For indexable insert	T							200	201	407
RDHX 12T3	20							200	201	407

For indexable inserts RDHX 1604**Profiling Milling Cutters With Borehole**

Cutting edge Ø mm	No. of cutting edges	Overall length mm	Mounting hole mm	17616	...
52	4	50	22	120	120
66	5	50	27	121	121
80	6	50	27	122	122
100	7	50	32	123	123

Indexable Inserts and Spare Parts

ISO designation	Carbide type/ coating	Coat.	Use	s mm	d mm	d1 mm	17824	...		
RDHX 1604 MOT	Alu polished	-	N	4,76	16	5,0	10 pcs.	319		
RDHX 1604 MOT	K 10/AI203	x	KH	4,76	16	5,0	10 pcs.	320		
RDHX 1604 MOT	P 25/AI203	x	P	4,76	16	5,0	10 pcs.	321		
RDHX 1604 MOT	P 40/AI203	x	P	4,76	16	5,0	10 pcs.	322		
RDHX 1604 MOT	M 40/AI203	x	M	4,76	16	5,0	10 pcs.	323		
			Clamping screw	Clamping claw	Screwdriver					
Spare parts	TORX® size	17616	...	17616	...	52529		
For indexable insert	T							200	201	407
RDHX 1604	20							200	201	407

17615 110-113



17615 120-123



17824 314

17824 315

17824 316



17824 317

17824 334-335

17616 120-123



17824 319

17824 320

17824 321

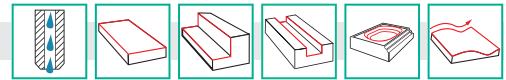
17824 322



Round Tip Milling System

17868 - 17870

Round Tip Milling System 251-RS



Type

- Stable body with hard&tough coating
- Insert seat with indexing aid
- Power screw at Ø 40 and Ø 50 mm

Advantages:

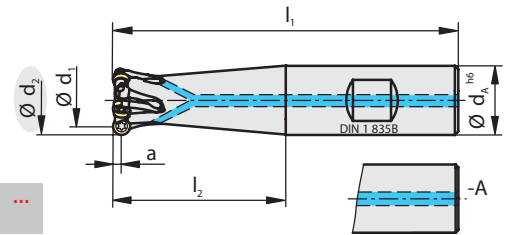
- Soft cutting, low-vibration cutting edge geometry
- Maximum process reliability
- Foreseeable wear behaviour
- Reproducible service life

Scope of supply:

- Body with clamping screws
- Without indexable inserts

NEW

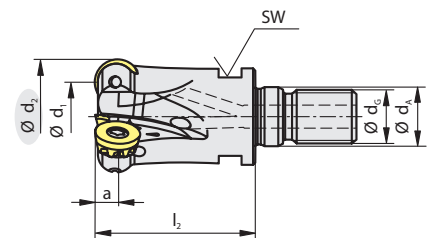
17868 101-126



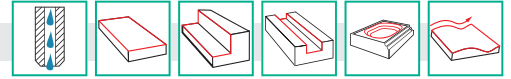
Ø d ₂ mm	Designation	Z	Ø d ₁ mm	l ₁ mm	l ₂ mm	Ø d _A mm	a mm	Indexable inserts	With shank	
									17868	...
10	C251.10.R.02-05-A-25-165-RS	2	5	165	25	10	2,5	RD.. 0501..		101
10	C251.10.R.02-05-B12-20-RS	2	5	67	20	12	2,5	RD.. 0501..		102
12	C251.12.R.03-05-A-32-165-RS	3	7	165	32	12	2,5	RD.. 0501..		103
12	C251.12.R.03-05-B16-25-RS	3	7	75	25	16	2,5	RD.. 0501..		104
16	C251.16.R.04-05-A-40-165-RS	4	11	165	40	16	2,5	RD.. 0501..		105
16	C251.16.R.04-05-B32-RS	4	11	81	32	16	2,5	RD.. 0501..		106
20	C251.20.R.05-05-A-50-165-RS	5	15	165	50	20	2,5	RD.. 0501..		107
20	C251.20.R.05-05-B40-RS	5	15	91	40	20	2,5	RD.. 0501..		108
16	C251.16.R.02-08-A-40-165-RS	2	8	165	40	16	4,0	RD.. 0802..		109
16	C251.16.R.02-08-B32-RS	2	8	81	32	16	4,0	RD.. 0802..		110
20	C251.20.R.03-08-A-50-200-RS	3	12	200	50	20	4,0	RD.. 0802..		111
20	C251.20.R.03-08-A-60-RS	3	12	110	60	20	4,0	RD.. 0802..		113
20	C251.20.R.03-08-B40-RS	3	12	91	40	20	4,0	RD.. 0802..		114
25	C251.25.R.04-08-A-60-RS	4	17	116	60	25	4,0	RD.. 0802..		115
25	C251.25.R.04-08-A-60-225-RS	4	17	225	60	25	4,0	RD.. 0802..		116
25	C251.25.R.04-08-B50-RS	4	17	107	50	25	4	RD.. 0802..		117
20	C251.20.R.02-10-A-50-RS	2	10	102	50	20	5	RP.. 10T3..		118
20	C251.20.R.02-10-A-50-200-RS	2	10	200	50	20	5,0	RP.. 10T3..		119
25	C251.25.R.03-10-A-60-RS	3	15	116	60	25	5,0	RP.. 10T3..		120
25	C251.25.R.03-10-A-60-225-RS	3	15	225	60	25	5,0	RP.. 10T3..		121
25	C251.25.R.03-10-B60-RS	3	15	116	60	25	5,0	RP.. 10T3..		122
32	C251.32.R.04-10-A-70-RS	4	22	130	70	32	5,0	RP.. 10T3..		123
25	C251.25.R.02-12-B30-RS	2	13	86	30	25	6,0	RP.. 1204..		124
32	C251.32.R.03-12-A-40-RS	3	20	100	40	32	6,0	RP.. 1204..		125
32	C251.32.R.03-12-B40-RS	3	20	100	40	32	6,0	RP.. 1204..		126

Ø d ₂ mm	Designation	Z	Ø d ₁ mm	l ₂ mm	a mm	Ø d _A mm	Ø d _G mm	Indexable inserts	With thread	
									17868	...
20	G251.20.R.05-05-RS	5	15	33	2,5	10,5	10	RD.. 0501..		201
25	G251.25.R.06-05-RS	6	20	35	2,5	12,5	12	RD.. 0501..		202
32	G251.32.R.07-05-RS	7	27	35	2,5	17,0	16	RD.. 0501..		203
20	G251.20.R.03-08-RS	3	12	33	4,0	10,5	10	RD.. 0802..		204
25	G251.25.R.04-08-RS	4	17	35	4,0	12,5	12	RD.. 0802..		205
32	G251.32.R.05-08-RS	5	24	35	4,0	17,0	16	RD.. 0802..		206
20	G251.20.R.02-10-RS	2	10	33	5,0	10,5	10	RP.. 10T3..		207
25	G251.25.R.03-10-RS	3	15	35	5,0	12,5	12	RP.. 10T3..		208
32	G251.32.R.04-10-RS	4	22	35	5,0	17	16	RP.. 10T3..		209
25	G251.25.R.02-12-35-RS	2	13	35	6,0	12,5	12	RP.. 1204..		210
32	G251.32.R.03-12-35-RS	3	20	35	6,0	17,0	16	RP.. 1204..		211
35	G251.35.R.03-12-35-RS	3	23	35	6,0	17,0	16	RP.. 1204..		212
42	G251.42.R.04-12-42-RS	4	30	42	6,0	17,0	16	RP.. 1204..		213

17868 201-213



Continuation ▶



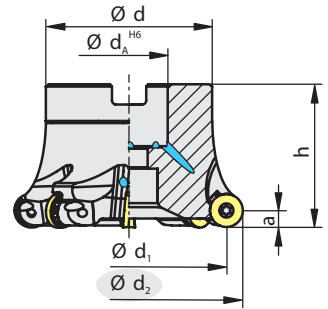
Continuation ▶

With bore

Ø d ₂ mm	Designation	Z	Ø d ₁ mm	h mm	Ø d mm	Ø d _A mm	a mm	Indexable inserts	17868	...
40	A251.40.R.03-10-RS	3	30	40	38	16	5	RP.. 10T3..		301
40	A251.40.R.05-10-RS	5	30	40	38	16	5	RP.. 10T3..		302
42	A251.42.R.06-10-RS	6	32	40	38	16	5	RP.. 10T3..		303
50	A251.50.R.04-10-RS	4	40	40	43	22	5	RP.. 10T3..		304
50	A251.50.R.06-10-RS	6	40	40	43	22	5	RP.. 10T3..		305
52	A251.52.R.06-10-RS	6	42	40	43	22	5	RP.. 10T3..		306
40	A251.40.R.04-12-RS	4	28	40	38	16	6	RP.. 1204..		307
50	A251.50.R.04-12-RS	4	38	40	43	22	6	RP.. 1204..		308
50	A251.50.R.05-12-RS	5	38	40	43	22	6	RP.. 1204..		309
52	A251.52.R.05-12-RS	5	40	40	43	22	6	RP.. 1204..		310
63	A251.63.R.06-12-RS	6	51	40	48	22	6	RP.. 1204..		311
66	A251.66.R.07-12-RS	7	54	40	48	22	6	RP.. 1204..		312
80	A251.80.R.05-12-RS	5	68	50	58	27	6	RP.. 1204..		313
80	A251.80.R.07-12-RS	7	68	50	58	27	6	RP.. 1204..		314
100	A251.100.R.06-12-RS	6	88	50	78	32	6	RP.. 1204..		315
100	A251.100.R.10-12-RS	10	88	50	78	32	6	RP.. 1204..		316
50	A251.50.R.04-16-RS	4	34	40	48	22	8	RP.. 1605..		317
52	A251.52.R.04-16-RS	4	36	40	48	22	8	RP.. 1605..		318
63	A251.63.R.05-16-RS	5	47	40	48	22	8	RP.. 1605..		319
80	A251.80.R.06-16-RS	6	64	50	58	27	8	RP.. 1605..		320
100	A251.100.R.07-16-RS	7	84	50	78	32	8	RP.. 1605..		321

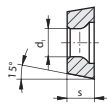
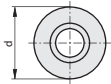
NEW

17868 301-321

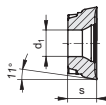
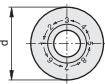


Milling Tools

RDHX ..



RPHX ..



17870 106-107



N
H216T
Uncoated

17870 111-112



PK
SR226+
CVD

17870 113-115



MS
CTC5235
CVD

Use
Carbide type
Coating

Designation	d mm	s mm	d ₁ mm		17870	...	17870	...	17870	...
RDHX 0501MOFN	5	1,59	2,5	10 pcs.		101				
RDHX 0501MOSN	5	1,59	2,5	10 pcs.				106		
RDHX 0501MOEN-M31	5	1,59	2,5	10 pcs.						111
RDHX 0802MOFN	8	2,38	2,8	10 pcs.		102				
RDHX 0802MOSN	8	2,38	2,8	10 pcs.				107		
RDHX 0802MOEN-M31	8	2,38	2,8	10 pcs.						112
RPHX 10T3MOFN-27P	10	3,97	3,4	10 pcs.		103				
RPHX 10T3MOSN	10	3,97	3,4	10 pcs.				108		
RPHX 10T3M8EN-M31	10	3,97	3,4	10 pcs.						113
RPHX 1204MOFN-27P	12	4,76	4,4	10 pcs.		104				
RPHX 1204MOSN	12	4,76	4,4	10 pcs.				109		
RPHX 1204M8EN-M31	12	4,76	4,4	10 pcs.						114
RPHX 1605MOFN-27P	16	5,56	5,5	10 pcs.		105				
RPHX 1605MOSN	16	5,56	5,5	10 pcs.				110		
RPHX 1605M8EN-M31	16	5,56	5,5	10 pcs.						115

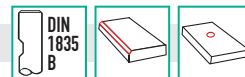
Spare parts

for indexable inserts Size	Clamping screws	Size T	Clamping screw	Wrench
RD.. 0501..	M 2,0 x 3,3	T 6	17999	51932
RD.. 0802..	M 2,5 x 5,0	T 8		
RP.. 10T3..	M 3,0 x 7,3	T 10		
RP.. 1204..	M 3,5 x 8,6	T 15		
RP.. 1605..	M 4,5 x 10,5	T 20		

For milling cutters with bore Ø d ₁ mm	Powers screw	For indexable inserts size	Power screw
40	M 8 x 30,0	RP.. 10T3..	17998
50	M 10 x 31,0	RP.. 1605..	

17526

Countersink Milling Cutters



ATORN®

Type

- Adjustable 10° - 80°
- Straight shank with driving face in compliance with DIN 1835 B
- With an interchangeable box for each of the indexable inserts TCMT16T3... and SCMT1204...

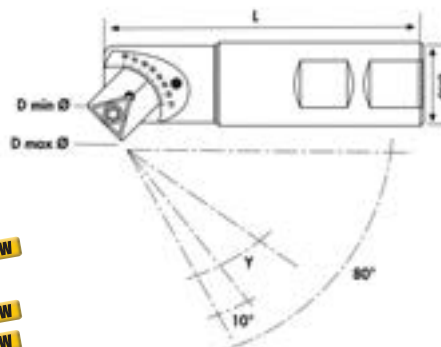
Scope of supply:

Countersink milling cutter with clamping screw and key, **without** indexable inserts.

Use

For chamfering, deburring, and countersinking. Stable, quiet operation.

17526

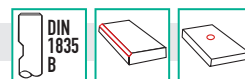


Y	TCMT D min Ø mm	TCMT D max Ø mm	SCMT D min Ø mm	SCMT D max Ø mm
10°	5	32	7.5	30.0
20°	6	33	10.0	32.0
30°	7	34	13.0	32.5
40°	10	33	16.5	33.5
45°	11	33	17.5	33.5
50°	13	32	19.0	33.5
60°	16	31	22.0	33.5
70°	19	29	24.5	33.5
80°	23	27	27.0	31.0

D h6 mm	L mm	17526	...
20	100	100	NEW
25	100	101	
25	150	102	NEW
25	200	103	NEW

17527

Angled cutters 30° / 45° / 60°



ATORN®

Type

- Countersink angles 30°, 45°, 60°, straight shank in compliance with DIN 1835 B, right-hand cut.
- Without indexable inserts.

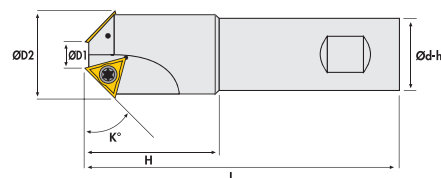
Use

For countersinking for screw heads and deburring of bores and slotted holes.

Note:

Indexable inserts see cat. no. 17856.

17527



K°	Ø D2 mm	Ø D1 mm	Ø d h6 mm	H mm	Z	L mm	Indexable inserts	17527	...
30	32,0	6,0	25	38	2	95	TCMT 16T3	100	NEW
45	16,0	1,2	12	20	1	70	TCMT 1102	101	
45	21,0	6,2	20	35	2	90	TCMT 1102	102	NEW
45	32,5	10,4	25	42	2	95	TCMT 16T3	103	NEW
60	16,0	5,4	12	20	1	70	TCMT 1102	104	
60	26,0	15,8	20	35	2	90	TCMT 1102	105	
60	35,0	20,0	25	39	2	95	TCMT 16T3	106	

Spare parts

For indexable inserts size	Clamping screw	L mm	TORX® size IP	Clamping screws 17528	...	Wrench 51932	...
TCMT 1102	M 2,5 x 0,45	6,3	8	101		404	
TCMT 16T3	M 4,0 x 0,7	8	15	102		407	

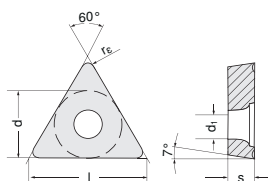
17856

Indexable milling inserts TCMT

HW

Type

- Three-edge
- Positive 7°
- With sintered-in chip deflection step



17856



Use

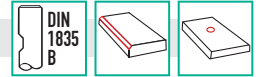
Carbide type
Coating

PM
H 42
TiN
17856

ISO designation	l mm	d mm	d ₁ mm	s mm	r	10 pcs.	...
TCMT 110202	11,0	6,35	2,80	2,38	0,20	10 pcs.	101
TCMT 16T304	16,5	9,52	4,40	3,97	0,40	10 pcs.	102

17529

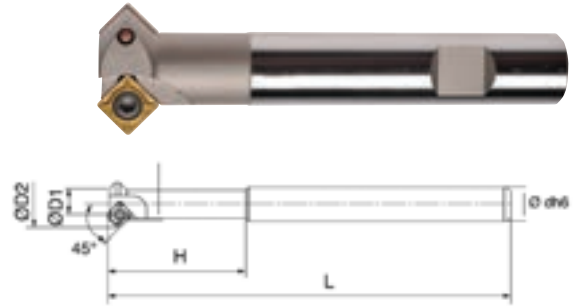
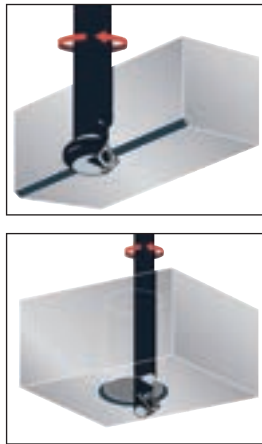
Angled cutters 45°



ATORN®

Type
Angled cutters 45° with Weldon shank.
Use
For chamfer milling starting at Ø 4 mm.

Note:
Indexable inserts see cat. no. 18578 ff.



17529 (Z2+3)

45°							Indexable inserts	17529	...
ØD2 mm	ØD1 mm	L mm	H mm	Ød h6 mm	Z mm				
10,0	4	80	28	12	1	SCMT 0602		101	
20,0	11	80	33	12	2	SCMT 0602		102	
23,7	12	100	37	20	1	SCMT 09T3		103	
28,8	16	100	31	16	2	SCMT 09T3		104	
42,3	30	100	32	20	3	SCMT 09T3		105	
23,7	12 L	200	37	20	1	SCMT 09T3		106	
28,8	16 L	200	32	16	2	SCMT 09T3		107	
42,3	30 L	200	32	20	3	SCMT 09T3		108	

Spare parts				Clamping screws	Wrench
For indexable inserts size	Clamping screw	L mm	TORX® size IP	17528	51932
SCMT 0602	M 2,5 x 0,45	6,3	8		
SCMT 09T3	M 4,0 x 0,7	8	15		

17536 - 17857

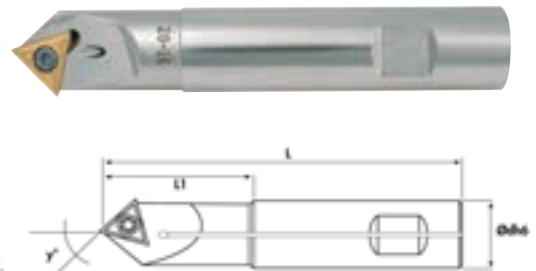
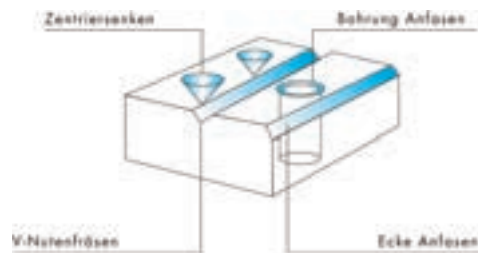
Milling cutter for bevelling and centring



ATORN®

Type
- Indexable insert holder
- Point angle 45°
- With coolant bore
- Without indexable inserts

Use
For NC spot drilling, milling, V-groove milling, engraving.



17536

d1 h6 mm	L mm	L1 mm	y°	Z	D min. mm	D max. mm	17536	...
20	115	40	45	1	0.2	20		101
20	150	60	45	1	0.2	20		102
20	200	80	45	1	0.2	20		103

Indexable Inserts and Spare Parts

Use
Carbide type
Coating

ISO designation 10 pcs.

size TORX® size T 15



17857

P M K
H 42
TiN
17857

Clamping screw		Screwdriver
size	TORX® size	
M 4 x 8	15	



17540 - 17541 T-Slot Milling Cutters



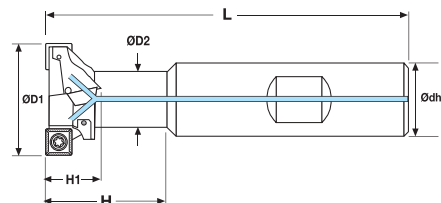
Type
- T-slot milling cutter of special steel with driving face in compliance with DIN 1835 B

Advantage:
For ISO indexable inserts SPMT.

Scope of supply:
- With clamping screw and key
- **Without** indexable inserts
Use
For T-slots in accordance with DIN-UNI 4788-ISO 299.



17540



Ø D1 mm	Ø D2 mm	L mm	H mm	H1 mm	Ø dh6 mm	K mm	Z	Indexable inserts	17540	...
21	11	76	26	9	16	1	2	SPMT 060304		110
25	13	82	31	11	16	2	4	SPMT 060304		111
32	17	88	38	14	20	2	4	SPMT 09T308		112
40	21	108	50	17	25	2	4	SPMT 09T308		113
50	27	120	56	22	32	2	4	SPMT 120408		114

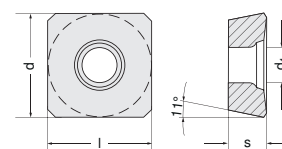
Indexable Inserts and Spare Parts

ISO designation	l mm	d mm	s mm	d ₁ mm	r mm	17541	...
SPMT 060304	6,35	6,35	3,18	2,8	0,4		201
SPMT 09T308	9,52	9,52	3,97	4,5	0,8		202
SPMT 120408	12,70	12,70	4,76	5,5	0,8		203

Spare parts	TORX® size	Clamping screw	Screwdriver
For indexable inserts	T	17520	52529
SPMT 06..	8		403
SPMT 09..	15		406
SPMT 12..	20		407

P M K
HC 4625
TiN

17541



17710 Face milling cutters 43°

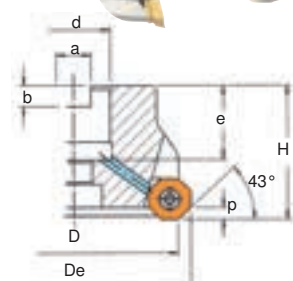


Type
- Nickel-plated body of special steel
- With high strength
- Internal coolant feed.
- Optimised chip spaces for trouble-free chip flow
- Greatest possible stability of the insert seat

Advantage:
- Quiet, soft-cutting, milling behaviour thanks to positive install position of the indexable insert
Scope of supply:
With clamping screws, **without** indexable inserts.
Use
For face milling.



17710 101-107



Ø D mm	De mm	d mm	e mm	a mm	b mm	H mm	p mm	Z	Indexable inserts	17710	...
32	39	16	19	8,4	5,6	40	3,5	3	OF.. 05T3..		101
40	47	16	19	8,4	5,6	40	3,5	3	OF.. 05T3..		102
50	57	22	22	10,4	6,3	40	3,5	4	OF.. 05T3..		103
63	70	22	22	10,4	6,3	40	3,5	5	OF.. 05T3..		104
80	87	27	28	12,4	7	50	3,5	6	OF.. 05T3..		105
100	107	32	31	12,4	8,0	50	3,5	7	OF.. 05T3..		106
125	132	40	41	16,4	9,0	63	3,5	8	OF.. 05T3..		107

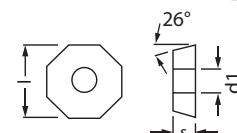
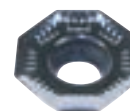
Indexable Inserts and Spare Parts

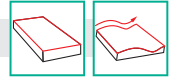
ISO designation	l mm	d1 mm	s mm	17710	...	17710	...	17710	...
OFEX 05T305	12,7	4,5	3,97		401				
OFMT 05T305	12,7	4,5	3,97		402		402		403

Spare parts	TORX® size	Clamping screw	Screwdriver
For indexable inserts	T	17710	52529
OF.. 05T3..	15		406

17710 401

17710 403





ATORN®

Type

- High feed rates and quiet operation
- Wide pitch, thus minimal power requirement
- Well suited for low-power machines
- Axial and oblique plunging possible, well suited for excavating and pocket milling
- **Without** indexable inserts

Use

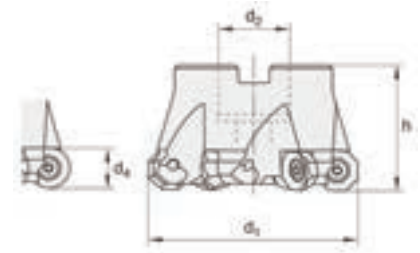
Universeller Einsatz im broad spectrum of materials. For face milling with 8-edge, 12-edge or round indexable inserts **OCKX, RCKX or XCKX**.



17707

Face Cutting and Profile Milling Cutters

d ₁ mm	d ₂ mm	h mm	d ₄ mm	Z	17707	...
52	22	40	16	4		101
66	27	50	16	5		102
80	27	50	16	6		103
100	32	50	16	7		104
125	40	63	16	8		105



Indexable Inserts and Spare Parts

17817

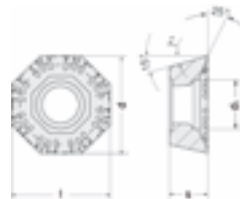
Type

- TRT with wide cutting edge chamfer

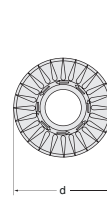
Use

HW/HC 4410 = aluminium/non-ferrous metals.
HC 4540 = roughing.

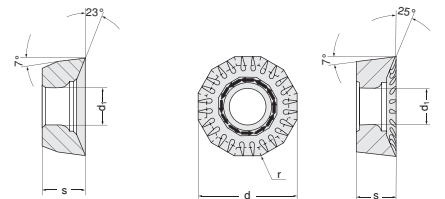
OCKX



RCKX



XCKX



17817

Use

Carbide type

Coating

ISO designation	s mm	l mm	d mm	d ₁ mm	r mm		N HW 4410 Uncoated 17817	...	PMK HC 4540 Coated 17817	...	KN HC 4410 Coated 17817	...
OCKX 0606 AD-TR	6,35	16	16	5,8	0,5	10 pcs.		101		115		105
RCKX 1606 MO-TR	6,35	-	16	5,8	-	10 pcs.				117		107
RCKX 1606 MO-TRT	6,35	-	16	5,8	-	10 pcs.						108
XCKX 1606 ZDR-TR	6,35	-	16	5,8	-	10 pcs.				119		

Clamping screw

17708

Screwdriver

52529

size	TORX® size
M 5 x 12	20

101

407

Info

The HHW colour-code system

With the **HHW** colour-code system you can identify the materials for which the tool is suitable at first glance. In most catalogue areas the **HHW** colour code system additionally informs you of the application data for the respective tool. The **HHW** colour code system is logically structured based on the Key to Steel. Thus you can find the appropriate tools before processing and save time and money.

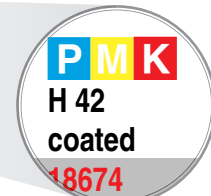
St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloys	GG(G)	plastics
40-50	35-40	-	-	-	-	35-45	35-45	-	80-120	-



Use
Solid carbide types
Coating

Designation	W ^{+0,1} mm	R ^{+0,05} mm		PMK H 42 coated 18674	...
GTN-2	2,2	0,16	10 pcs.		113
GTN-3	3,1	0,20	10 pcs.		114

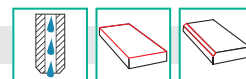
PMK
H 42
coated
18674



Face Milling Cutters

17722 - 17847

Face milling cutters 45°



ATORN®

Type

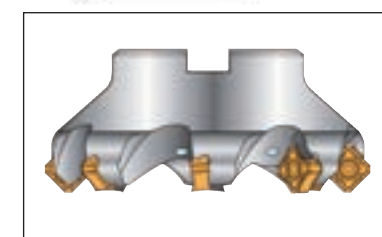
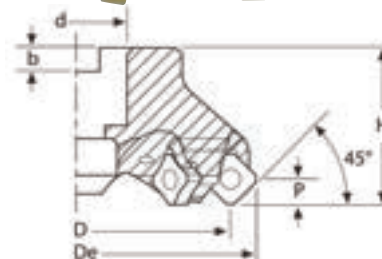
- Double-sided indexable inserts
- Large clamping angle
- Eight cutting edges
- Cut with minimal machining force and excellent surface finish
- With internal cooling (except cat. no. 17722 107-108)

Use

For universal implementation.

Note:

Incl. of clamping screw and key.



Ø D mm	Ø De mm	d mm	b mm	H mm	p mm	Z	Narrow pitch 17722	...
50	63	22	6.3	40	6	4		101
63	76	22	6.3	40	6	6		102
80	93	27	7.0	50	6	7		103
100	113	32	8.0	50	6	8		104
125	138	40	9.0	63	6	10		105
160	173	40	9.0	63	6	12		106
200	213	60	13.5	63	6	14		107 NEW
250	263	60	13.5	63	6	16		108 NEW

Ø D mm	Ø De mm	d mm	b mm	H mm	p mm	Z	Extra narrow pitch 17722	...
50	63	22	6.3	40	6	6		110 NEW
63	76	22	6.3	40	6	8		111 NEW
80	93	27	7.0	50	6	10		112 NEW
100	113	32	8.0	50	6	12		113 NEW
125	138	40	9.0	63	6	16		114 NEW
160	173	40	9.0	63	6	20		115 NEW

Indexable Inserts and Spare Parts



Use

Carbide type
Coating

N

HW 4310
Uncoated

P

HC 4630
Coated

M

HC 4535
Coated

K

HC 4410
Coated

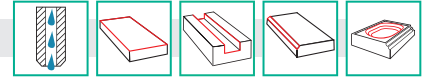
ISO designation	...	17847	...	17847	...	17847	...	17847	...
SNEX 1206 ANN-MA	10 pcs.		101						
SNMX 1206 ANN-MM	10 pcs.				103		102		104

Spare parts

For indexable inserts size	Screw	TORX® size T	Clamping screw	Screwdriver
SN.X 1206	M 4,0 x 11,0	15	17723	52529

SAFETY FIRST! The current PSA catalogues





Type

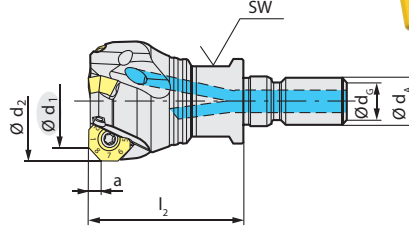
- Stable body
- Extremely positive install position of the indexable insert
- Patented screw clamping

Advantages:

- Soft cut
- Minimal power requirements
- 8 useable cutting edges

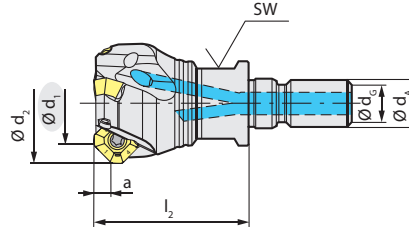
Scope of supply:

- Body with clamping screws
- **Without** indexable inserts



NEW

17876 101-103
(with indexable insert OF..)

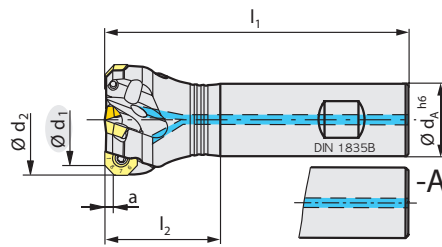


17876 101-103
(with indexable insert SF..)

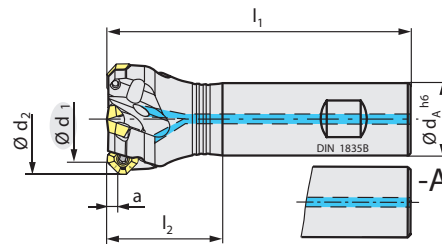


$\varnothing d_1$ mm	Designation	Z	$\varnothing d_2$ mm	l_2 mm	a mm	$\varnothing d_A$ mm	$\varnothing d_G$ mm	Indexable inserts	With thread	
									17876	...
20 (18,9)	G274.20.R.03-09	3	25,6 (27,4)	35 (35,7)	2,5 (3,8)	12,5	12	OF.. 04.. / SF.. 09..		101
25 (23,8)	G274.25.R.04-09	4	30,6 (32,5)	35 (35,7)	2,5 (3,8)	12,5	12	OF.. 04.. / SF.. 09..		102
32 (30,7)	G274.32.R.05-09	5	37,7 (39,5)	35 (35,7)	2,5 (3,8)	17,0	16	OF.. 04.. / SF.. 09..		103

(*) Dimensions for indexable insert SF



17876 201-206
(with indexable insert OF..)



17876 201-206
(with indexable insert SF..)

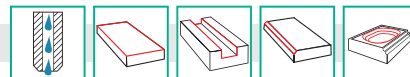


$\varnothing d_1$ mm	Designation	Z	$\varnothing d_2$ mm	l_1 mm	l_2 mm	a mm	$\varnothing d_A$ mm	Indexable inserts	With shank	
									17876	...
20 (18,9)	C274.20.R.03-09-A-25	3	25,6 (27,4)	77 (77,7)	25 (25,7)	2,5 (3,8)	20	OF.. 04.. / SF.. 09..		201
20 (18,9)	C274.20.R.03-09-B-25	3	25,6 (27,4)	77 (77,7)	25 (25,7)	2,5 (3,8)	20	OF.. 04.. / SF.. 09..		202
25 (23,8)	C274.25.R.04-09-A-20-32	4	30,7 (32,5)	84 (84,7)	32 (32,7)	2,5 (3,8)	20	OF.. 04.. / SF.. 09..		203
25 (23,8)	C274.25.R.04-09-B-20-32	4	30,7 (32,5)	84 (84,7)	32 (32,7)	2,5 (3,8)	20	OF.. 04.. / SF.. 09..		204
32 (30,7)	C274.32.R.05-09-A-25-40	5	37,7 (39,5)	98 (98,7)	40 (40,7)	2,5 (3,8)	25	OF.. 04.. / SF.. 09..		205
32 (30,7)	C274.32.R.05-09-B-25-40	5	37,7 (39,5)	98 (98,7)	40 (40,7)	2,5 (3,8)	25	OF.. 04.. / SF.. 09..		206

(*) Dimensions for indexable insert SF

Continuation ►

17876 - 17877 Face Milling System 274



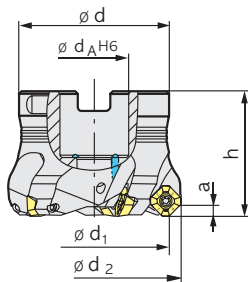
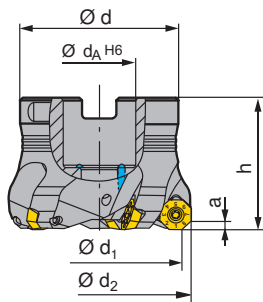
Continuation ▶



- Type**
- Stable body
 - Extremely positive install position of the indexable insert
 - Patented screw clamping

- Advantages:**
- Soft cut
 - Minimal power requirements
 - 8 useable cutting edges

- Scope of supply:**
- Body with clamping screws
 - **Without** indexable inserts



NEW



17876 301-312
(with indexable insert OF..)

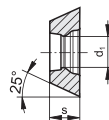
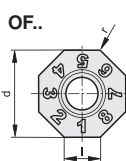
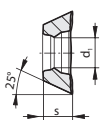
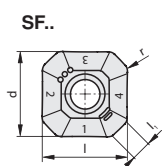


17876 301-312
(with indexable insert SF..)

With bore

Ø d ₁ mm	Designation	Z	Ø d ₂ mm	h mm	Ø d mm	Ø d _A mm	a mm	Indexable inserts	17876	...
32 (30,7)	A274.32.R.05-09	5	37,7 (39,2)	40 (40,7)	38	16	2,5 (3,8)	OF.. 04.. / SF.. 09..		301
40 (38,7)	A274.40.R.04-09	4	45,7 (47,6)	40 (40,7)	38	16	2,5 (3,8)	OF.. 04.. / SF.. 09..		302
40 (38,7)	A274.40.R.06-09	6	45,7 (47,6)	40 (40,7)	38	16	2,5 (3,8)	OF.. 04.. / SF.. 09..		303
50 (48,7)	A274.50.R.05-09	5	55,7 (57,6)	40 (40,7)	48	22	2,5 (3,8)	OF.. 04.. / SF.. 09..		304
50 (48,7)	A274.50.R.07-09	7	55,7 (57,6)	40 (40,7)	48	22	2,5 (3,8)	OF.. 04.. / SF.. 09..		305
63 (61,7)	A274.63.R.06-09	6	68,7 (70,5)	40 (40,7)	48	22	2,5 (3,8)	OF.. 04.. / SF.. 09..		306
63 (61,7)	A274.63.R.09-09	9	68,7 (70,5)	40 (40,7)	48	22	2,5 (3,8)	OF.. 04.. / SF.. 09..		307
80 (78,7)	A274.80.R.07-09	7	85,7 (87,5)	50 (50,7)	58	27	2,5 (3,8)	OF.. 04.. / SF.. 09..		308
80 (78,7)	A274.80.R.11-09	11	85,7 (87,5)	50 (50,7)	58	27	2,5 (3,8)	OF.. 04.. / SF.. 09..		309
100 (98,7)	A274.100.R.09-09	9	105,7 (107,5)	50 (50,7)	78	32	2,5 (3,8)	OF.. 04.. / SF.. 09..		310
100 (98,7)	A274.100.R.13-09	13	105,7 (107,5)	50 (50,7)	78	32	2,5 (3,8)	OF.. 04.. / SF.. 09..		311
125 (123,7)	A274.125.R.12-09	12	130,7 (132,5)	63 (63,7)	88	40	2,5 (3,8)	OF.. 04.. / SF.. 09..		312

(*) Dimensions for indexable insert SF



MS
CTC5235
CVD

17877 ...



P
CTP1235
PVD

17877 ...

Use
Carbide type
Coating

Designation	d mm	l mm	s mm	l ₁ mm	r mm	d ₁ mm	10 pcs.	17877	...	17877	...	17877	...
SFHT 0903AFFR-F10	9,52	9,52	3,18	1,73	1,0	3,35	10 pcs.		101				
SFHT 0903AFSR-F50	9,52	9,52	3,18	1,73	1,0	3,35	10 pcs.				102		
SFHT 0903AFSR-M50	9,52	9,52	3,18	1,73	1,0	3,35	10 pcs.						103
OFHT 040305FN-F10	9,52	3,94	3,18	-	0,5	3,35	10 pcs.		104				
OFHT 040305SN-F50	9,52	3,94	3,18	-	0,5	3,35	10 pcs.				105		
OFHT 040305SN-M50	9,52	3,94	3,18	-	0,5	3,35	10 pcs.						106

Spare parts

for indexable inserts	Clamping screws	Size T	Clamping screw	Wrench
OF.. 04.. / SF.. 09..	M 2,5 x 7,6	IP 8	17999 ...	51932 ...
			122	404

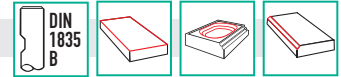
For milling cutters with bore	For indexable inserts size	Power screw
Ø d ₁ mm	OF.. 04.. / SF.. 09..	Power screw 17998 ...
32 (30,7) - 40 (38,7)		101

(*) Dimensions for indexable insert SF



17534

Angled cutters 45°



ATORN®

Type

- Positive
- Right-hand cut
- Combination shank with straight shank in accordance with DIN 1835 HB
- Without indexable inserts

Use

For chamfering, face milling and circular milling

Note:

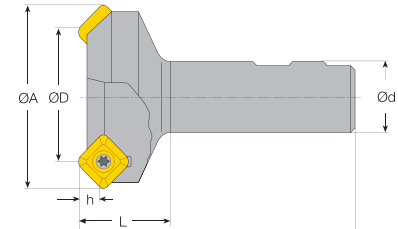
Reversible cutting inserts see cat. no. 17838 and 17845.



Ø D mm	Ø d h6 mm	L mm	Z	Indexable inserts	17534	...
24	25	100	2	SE.T 1204..		102
32	25	110	3	SE.T 1204..		103
40	32	115	4	SE.T 1204..		104

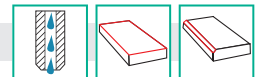
Spare parts

For indexable inserts size	Clamping screw	Length mm	TORX® size T	Clamping screw	Screwdriver
SE.T 1204..	M 5,0 x 0,8	11	20	17721	52529
				101	407



17720

Face milling cutters 45°



ATORN®

Type

- Positive
- Right-hand cut
- Without indexable inserts
- With internal cooling (except cat. no. 17720 214-215)

Use

For square indexable inserts SE.T 1204.. cat. no. 17838 and 17845.

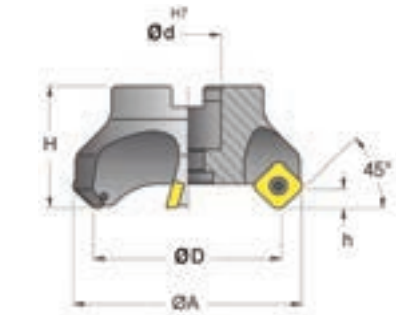


Ø D mm	Ø d H7 mm	H mm	Ø A mm	h mm	Z	Indexable inserts	Narrow pitch 17720	...
40	16	45	53	6	3	SE.T 1204..		200
50	22	48	63	6	4	SE.T 1204..		201
63	22	40	76	6	5	SE.T 1204..		202
80	27	50	93	6	6	SE.T 1204..		203
100	32	50	113	6	6	SE.T 1204..		204
125	40	63	138	6	7	SE.T 1204..		205
160	40	63	173	6	8	SE.T 1204..		206
200	60	63	213	6	12	SE.T 1204..		214 NEW
250	60	63	263	6	16	SE.T 1204..		215 NEW

Ø D mm	Ø d H7 mm	H mm	Ø A mm	h mm	Z	Indexable inserts	Extra narrow pitch 17720	...
40	16	45	53	6	4	SE.T 1204..		207 NEW
50	22	48	63	6	5	SE.T 1204..		208
63	22	40	76	6	6	SE.T 1204..		209
80	27	50	93	6	7	SE.T 1204..		210
100	32	50	113	6	8	SE.T 1204..		211
125	40	63	138	6	9	SE.T 1204..		212 NEW
160	40	63	173	6	10	SE.T 1204..		213 NEW

Spare parts

For indexable inserts size	Clamping screw	Length mm	TORX® size T	Clamping screw	Screwdriver
SE.T 1204..	M 5,0 x 0,8	11	20	17721	52529
				101	407

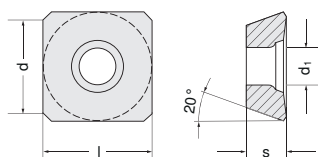


17838

Indexable milling inserts SEHT

Type

- Square
- Positive 20°
- with chip deflection step



Use
Carbide type
Coating

ISO designation	d+l mm	d ₁ mm	s mm	Use	17838	...
SEHT 1204 AF	12,7	5,50	4,76	10 pcs.		202
SEHT 1204 AF-AL	12,7	5,50	4,76	10 pcs.		203

17838 203

17838 202



N
H 25/Alu
Uncoated
17838

P M
H 42
TiN
17838

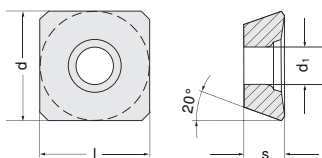
17845

Indexable milling inserts SEET



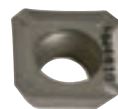
Type
- Square
- Positive 20°
- with chip deflection step

Tolerance classes compared:
SEET +/- 0,025 mm,
SEKT +/- 0,130 mm.



17845 101

17845 102-103



Use
Carbide type
Coating

N
HW 4410
Uncoated

P M K
HC 4540
Coated

M K
HC 4620
Coated

ISO designation	d+l mm	d ₁ mm	s mm		17845	...	17845	...	17845	...
SEET 1204 AF SN	12,7	5,50	4,76	10 pcs.		101		103		102

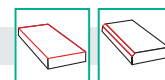
17728 - 17729

Face milling cutters 45°

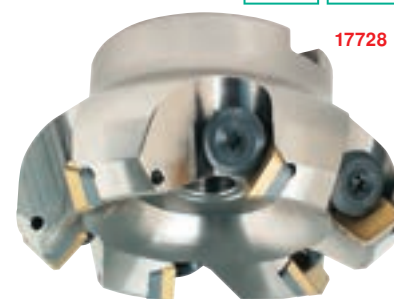


Type
- Positive
- Right-hand cut
- Without indexable inserts

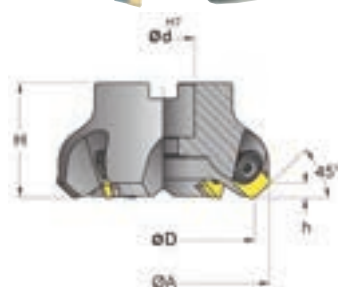
Use
For square indexable inserts SEE. 1203,
cat. no. 17841 + 17843.



Ø D mm	Ø d mm	H mm	Ø A mm	h mm	Z	Indexable inserts	17728	...
50	22	48	63	6	4	SEE. 1203		101
63	22	40	76	6	5	SEE. 1203		102
80	27	50	93	6	6	SEE. 1203		103
100	32	50	113	6	6	SEE. 1203		104
125	40	63	138	6	7	SEE. 1203		105
160	40	63	173	6	8	SEE. 1203		106
200	60	63	213	6	10	SEE. 1203		107
250	60	63	263	6	13	SEE. 1203		108



17728



Spare parts

		17729	...
	Support plate	-	
	Screw for support plate	10 pcs.	
	Clamping screw	10 pcs.	

17729 101

17729 102

17729 103



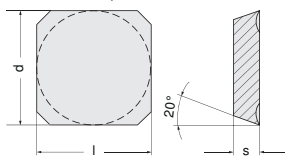
17841

Indexable milling inserts SEEN



Type
- Square
- Positive 20°
- Without chip deflection step

Tolerance classes compared:
SEEN +/- 0,025 mm,
SEKN +/- 0,130 mm.



17841 103



Use
Carbide type
Coating

P
HW 4640
Uncoated

P M K
HC 4540
Coated

M K
HC 4620
Coated

ISO designation	d+l mm	s mm		17841	...	17841	...	17841	...
SEEN 1203 AF FN	12,7	3,18	10 pcs.		103		107		106
SEEN 1203 AF SN	12,7	3,18	10 pcs.		105		107		106

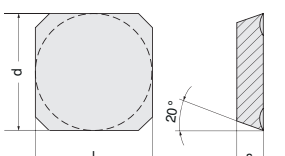
17843

Indexable milling inserts SEER



Type
- Square
- Positive 20°
- with chip deflection step

Tolerance classes compared:
SEER +/- 0,025 mm,
SEKR +/- 0,130 mm.



17843 102

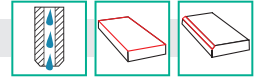


Use
Carbide type
Coating

P M K
HC 4540
Coated

M K
HC 4620
Coated

ISO designation	d+l mm	s mm		17843	...	17843	...
SEER 1203 AF SN	12,7	3,18	10 pcs.		102		101



Type

- Indexable insert tool for roughing and for medium machining
- Unequal pitch for quiet operation
- New material technology and hardening technology for maximum tool accuracy
- Special surface treatment for optimum corrosion resistance and longer service life.

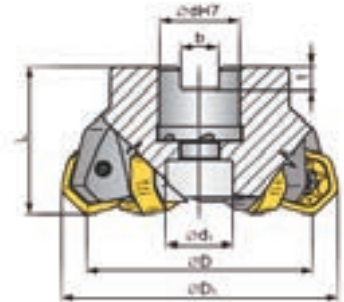
Use

For face milling, chamfering, oblique plunging.
HNGJ09-M indexable insert for medium machining
HNGJ09-R indexable insert for roughing

Advantage:

Favourable cutting costs due to 12 cutting edge///
 Indexable insert

17739 101-105



Ø D mm	Ø d H7 mm	d ₁ mm	L mm	D ₁ mm	Z	17739	...
50	22	18	40	61.7	4		101
63	22	19	41	74.7	6		102
80	27	38	50	91.7	6		103
80	27	39	51	91.7	8		104
100	32	45	52	111.7	8		105

Indexable Inserts and Spare Parts

Use

Carbide type
 Coating

P M

P 40
 Coated

P K

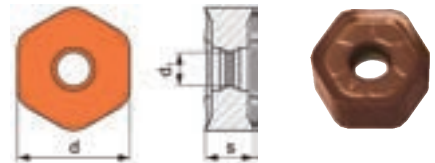
P 30
 Coated

P K

K 15
 Coated

Designation	d mm	s mm	d ₁ mm	17739	...	17739	...	17739	...
HNGJ09-M	16,5	6,35	4,9		201		202		203
HNGJ09-R	16,5	6,35	4,9				204		203

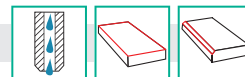
17739 201-204



Spare parts

Indexable insert	Size	Clamping screw
HNGJ09	M4	17739 ... 301





17873 - 17874

Face Milling System 273-6

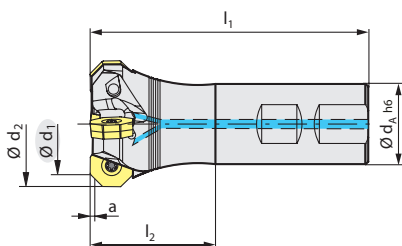


- Type**
- Stable body with hard&tough coating
 - Maximum number of cutting edges
- Advantages:**
- Extremely economical
 - Reduced power requirement
 - High stability and quiet operation

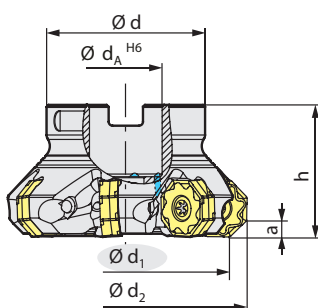
Scope of supply:

- Body with clamping screws
- **Without** indexable inserts

NEW

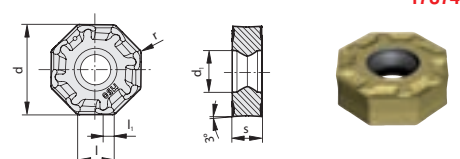


Ø d ₁ mm	Designation	Z	Ø d ₂ mm	l ₁ mm	l ₂ mm	Ø d _A mm	a mm	Indexable inserts	With shank	
									17873	...
32	C273.32.R.03-06-B-40	3	42,2	101	40	32	3,5	OAKU 06..		101
40	C273.40.R.04-06-B32-50	4	50,2	111	50	32	3,5	OAKU 06..		102



Ø d ₁ mm	Designation	Z	Ø d ₂ mm	h mm	Ø d mm	Ø d _A mm	a mm	Indexable inserts	With bore	
									17873	...
40	A273.40.R.04-06	4	50,2	40	38	16	3,5	OAKU 06..		201
50	A273.50.R.05-06	5	60,2	40	48	22	3,5	OAKU 06..		202
63	A273.63.R.07-06	7	73,2	40	48	22	3,5	OAKU 06..		203
80	A273.80.R.08-06	8	90,2	50	58	27	3,5	OAKU 06..		204
100	A273.100.R.10-06	10	110,2	50	78	32	3,5	OAKU 06..		205
125	A273.125.R.12-06	12	135,2	63	88	40	3,5	OAKU 06..		206

Indexable Inserts and Spare Parts



17874

Use
Carbide type
Coating

M S
CTC5235
CVD

P
CTP1235
PVD

Designation	d mm	l mm	s mm	l ₁ mm	r mm	d ₁ mm		17874	...	17874	...
OAKU 060508ER-F40	17,18	6,00	5,56	2,0	0,8	5,8	10 pcs.		101		
OAKU 060508SR-M50	17,18	6,00	5,56	2,0	0,8	5,8	10 pcs.		102		

Spare parts

Clamping screw 17999 ... Wrench 51932 ...

for indexable inserts	Clamping screws	Size	17999	...	51932	...
OAKU 06..	M 5,0 x 14,0	T 20		121		208

Power screw 17998 ...

For milling cutters with bore	Powers screw	For indexable inserts	17998	...
Ø d ₁ mm		size		
40	M 8 x 30,0	OAKU 06..		101
50	M 10 x 31,0	OAKU 06..		102



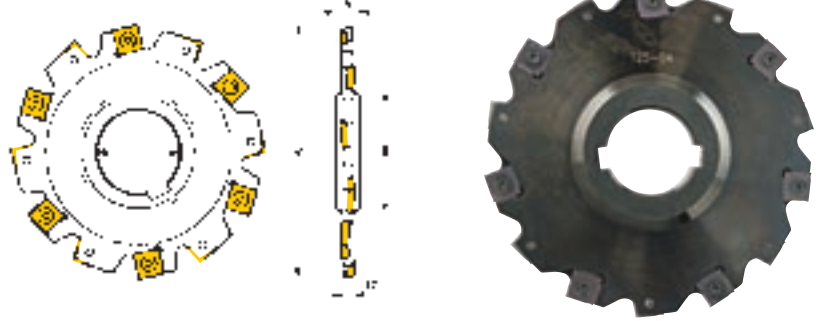
ATORN®

Type

Cutting on three sides, fixed width. Creates slight roof shape on the bottom of the keyway. Delivery including clamping screws.

Use

For bolted indexable inserts (see cat. no. 17785 - 17786). For slotting, cutting and keyway milling.



17780

For indexable inserts SNHX 1102T

D mm	d mm	ap mm	A mm	B mm	Z	Z eff.	Cutting depth ae max. mm	Indexable inserts	Clamping screws	17780	...
63	22	4	8	34	8	4	14	SNHX 1102T	VTX 3503		101
80	22	4	8	34	10	5	22	SNHX 1102T	VTX 3503		104
100	27	4	12	45	12	6	24	SNHX 1102T	VTX 3503		107
125	40	4	12	58	14	7	33	SNHX 1102T	VTX 3503		114
160	40	4	12	68	18	9	45	SNHX 1102T	VTX 3503		122
200	50	4	12	72	18	9	62	SNHX 1102T	VTX 3503		131

For indexable inserts SNHX 1103T

D mm	d mm	ap mm	A mm	B mm	Z	Z eff.	Cutting depth ae max. mm	Indexable inserts	Clamping screws	17780	...
63	22	5	8	34	8	4	14	SNHX 1103T	VTX 3504		102
80	22	5	8	34	10	5	22	SNHX 1103T	VTX 3504		105
100	27	5	12	45	12	6	24	SNHX 1103T	VTX 3504		108
125	40	5	12	58	14	7	33	SNHX 1103T	VTX 3504		115
160	40	5	12	68	18	9	45	SNHX 1103T	VTX 3504		123
200	50	5	12	72	18	9	62	SNHX 1103T	VTX 3504		132

For indexable inserts SNHX 1203T

D mm	d mm	ap mm	A mm	B mm	Z	Z eff.	Cutting depth ae max. mm	Indexable inserts	Clamping screws	17780	...
63	22	6	8	34	6	3	14	SNHX 1203T	VTX 405		103
80	22	6	8	34	8	4	22	SNHX 1203T	VTX 405		106
100	27	6	12	45	10	5	24	SNHX 1203T	VTX 405		109
125	40	6	12	58	12	6	33	SNHX 1203T	VTX 405		116
160	40	6	12	68	16	8	45	SNHX 1203T	VTX 405		124
200	50	6	12	72	18	9	62	SNHX 1203T	VTX 405		133

For indexable inserts SNHX 1205T

D mm	d mm	ap mm	A mm	B mm	Z	Z eff.	Cutting depth ae max. mm	Indexable inserts	Clamping screws	17780	...
100	27	10	12	45	10	5	24	SNHX 1205T	VTX 408		113
125	40	10	12	58	12	6	33	SNHX 1205T	VTX 408		120
160	40	10	12	68	16	8	45	SNHX 1205T	VTX 408		128
160	40	14	14	68	15	5	45	SNHX 1205T	VTX 408		130
200	50	10	12	72	18	9	62	SNHX 1205T	VTX 408		135
200	50	14	14	72	18	6	62	SNHX 1205T	VTX 408		137
250	50	10	12	72	24	12	88	SNHX 1205T	VTX 408		139

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
300-350	300-350	-	140-200	140-200	140-200	120-150	120-150	120-150	-	-	-	-	130-160	130-160	-	100-140	-

Side Milling Cutters

17782 - 17789

Side Milling Cutters With Collar



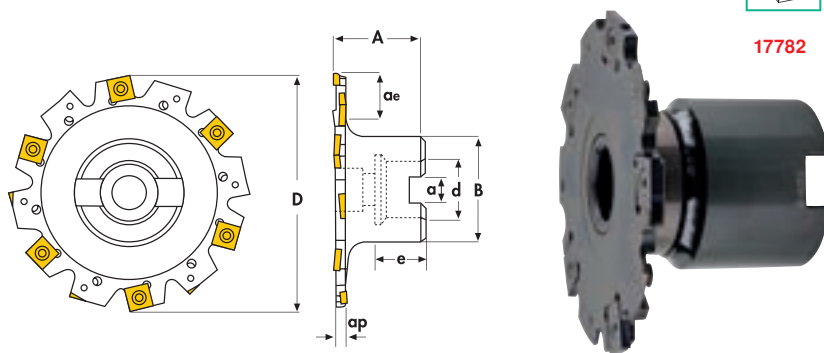
ATORN®

Type

With collar Cutting on three sides, fixed width. Creates slight roof shape on the bottom of the keyway. Delivery including clamping screws.

Use

For bolted indexable inserts. For slotting, cutting and keyway milling.



17782

For indexable inserts SNHX 1102T

D mm	d mm	ap mm	A mm	B mm	a mm	e mm	Z	Z eff.	Cutting depth ae max. mm	Indexable inserts	Clamping screws	17782	...
63	22	4	50	40	10,4	21	6	3	10,5	SNHX 1102T	VTX 3503		101
80	22	4	50	40	10,4	21	8	4	20,2	SNHX 1102T	VTX 3503		104
100	27	4	50	48	12,4	23	12	6	24,2	SNHX 1102T	VTX 3503		107

For indexable inserts SNHX 1103T

D mm	d mm	ap mm	A mm	B mm	a mm	e mm	Z	Z eff.	Cutting depth ae max. mm	Indexable inserts	Clamping screws	17782	...
63	22	5	50	40	10,4	21	6	3	10,5	SNHX 1103T	VTX 3504		102
80	22	5	50	40	10,4	21	8	4	20,2	SNHX 1103T	VTX 3504		105
100	27	5	50	48	12,4	23	12	6	24,2	SNHX 1103T	VTX 3504		108

For indexable inserts SNHX 1203T

D mm	d mm	ap mm	A mm	B mm	a mm	e mm	Z	Z eff.	Cutting depth ae max. mm	Indexable inserts	Clamping screws	17782	...
63	22	6	50	40	10,4	21	6	3	10,5	SNHX 1203T	VTX 405		103
80	22	6	50	40	10,4	21	8	4	20,2	SNHX 1203T	VTX 405		106
100	27	6	50	48	12,4	23	10	5	24,2	SNHX 1203T	VTX 405		109
125	40	6	50	70	16,4	30	12	6	23,7	SNHX 1203T	VTX 405		111
160	40	6	50	70	16,4	30	16	8	41,2	SNHX 1203T	VTX 405		113

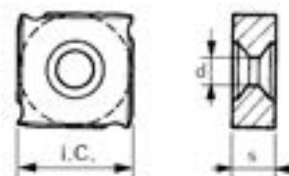
For indexable inserts SNHX 1205T

D mm	d mm	ap mm	A mm	B mm	a mm	e mm	Z	Z eff.	Cutting depth ae max. mm	Indexable inserts	Clamping screws	17782	...
100	27	10	50	48	12,4	23	10	5	24,2	SNHX 1205T	VTX 408		110
125	40	10	50	70	16,4	30	12	6	23,7	SNHX 1205T	VTX 408		112
160	40	10	50	70	16,4	30	16	8	41,2	SNHX 1205T	VTX 408		114

Indexable Inserts and Spare Parts

17785 - 17786

ISO designation	I.C. mm	d mm	s mm	Use Carbide type Coating		17785	...	17786	...
				PMK HC 4630 TiAlN-coated	K HW 7415 Uncoated				
SNHX 1102T	11,0	4,4	2,3		101		101		101
SNHX 1103T	11,0	4,4	2,7		102		102		102
SNHX 1203T	12,7	5,0	3,2		103		103		103
SNHX 1205T	12,7	5,0	5,4		105		105		105



Type	Size	TORX size	Clamping screws	Screwdriver
VTX 3503	M 3,5 x 3	9	101	52529
VTX 3504	M 3,5 x 4	9	102	52529
VTX 405	M 4,0 x 5	15	103	52529
VTX 408	M 4,0 x 8	15	104	52529

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
300-350	300-350	-	140-200	140-200	140-200	120-150	120-150	120-150	-	-	-	-	130-160	130-160	-	100-140	-





ATORN®

17793 - 17794

Use

Side milling cutters for mounting cutting insert AIMC, AIMJ or AIPV. Ejector included, **cutting inserts** not included .

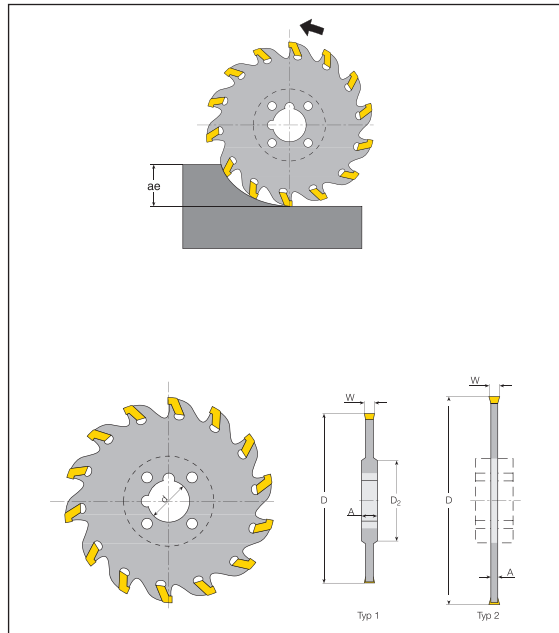
Note:

The maximum rpm must not be exceeded.
For precision keyways use cutting insert AIPV.
Cutting inserts see cat. no. 18687 - 18695.

17794

Note:

Must only be used with drive tang sets
Drive tang sets, see cat. no. 17795.



17793 - 17794



Type 1	D mm	W mm	Z	d mm	A mm	max. depth mm	max. rpm U/min	D2 mm	17793	...
ASC 100 1.6-22A	100	1,6	10	22	2,4	30,5	800	39		101
ASC 125 1.6-27A	125	1,6	12	27	2,4	30,5	640	64		102
ASC 100 2-22A	100	2-2,3	10	22	2,4	30,5	800	39		103

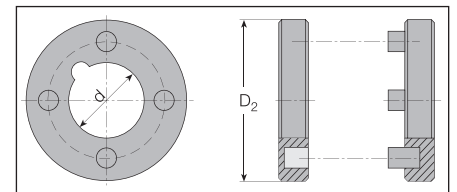
Type 2	D mm	W mm	Z	d mm	A mm	max. depth mm	max. rpm U/min	Driver- set	17794	...
ASC 100 3-22K	100	2,8 - 3,53	6	22	2,4	27,0	800	AR22 - 46		101
ASC 125 3-32K	125	2,8 - 3,53	8	32	2,4	35,0	640	AR32 - 55		102
ASC 160 3-40K	160	2,8 - 3,53	10	40	2,4	40,0	500	AR40 - 80		103
ASC 100 4-22K	100	3,54 - 4,52	6	22	3,2	27,0	800	AR22 - 46		104
ASC 125 4-32K	125	3,54 - 4,52	8	32	3,2	22,5	640	AR32 - 55		105
ASC 160 4-40K	160	3,54 - 4,52	10	40	3,2	40,0	500	AR40 - 80		106

17795

Drive tang sets

17795

Type	D ₂ mm	d mm	17795	...
AR22-46	46	22		101
AR32-55	55	32		102
AR40-80	80	40		103



Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloy	GG(G)	Plastics
150-300	150-300	-	120-260	120-160	90-195	70-125	55-110	55-110	-	-	-	-	115-175	115-175	-	50-110	-

Tool System for Drilling Machining

17580 - 17593

Tool System for Drilling Machining MINI-MILL



ATORN®

17580

Tool holder type ZH22

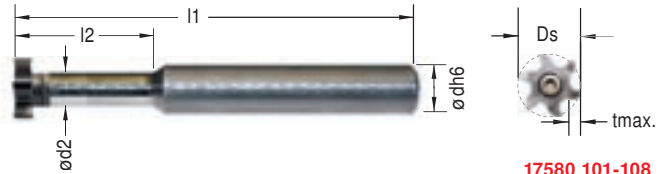
Type

- With internal coolant flow.
- 3-rib toothing

Use

For producing grooves, Seeger circlip grooves, metric ISO thread, Whitworth pipe threads, full-radius grooves and for chamfering and deburring.

NEW



17580 101-108
Solid carbide shank DIN 6535 HA

Designation	Ø d2 h6 mm	Ø d1 mm	l1 mm	l2 mm	Cutting circle Ø DS mm	t max. mm	Clamping screw	TORX® wrench	17580	...
ZH22.1212.42.A.HM	12	-	100	42	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		101
ZH22.1212.60.A.HM	12	-	130	60	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		102
ZH22.1611.30.A.HM	16	11,5	90	30	21,7	3,9	M5 (17581 101)	T 20 (51932 208)		103
ZH22.1612.42.A.HM	16	12,0	100	42	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		104
ZH22.1612.60.A.HM	16	12,0	130	60	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		105
ZH22.1612.85.A.HM	16	12,0	160	85	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		106
ZH22.2016.45.A.HM	20	16,0	110	45	21,7	2,5	M5 (17581 101)	T 20 (51932 208)		107
ZH22.2016.65.A.HM	20	16,0	130	65	21,7	2,5	M5 (17581 101)	T 20 (51932 208)		108

17580 201-203
Steel shank DIN 1835 A

Designation	Ø d2 h6 mm	Ø d1 mm	l1 mm	l2 mm	Cutting circle Ø DS mm	t max. mm	Clamping screw	TORX® wrench	17580	...
ZH22.1011.10.A.ST	10	11,3	60	10,7	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		201
ZH22.1311.25.A.ST	13	11,3	70	25,7	21,7	4,0	M5 (17581 101)	T 20 (51932 208)		202
ZH22.1612.24.A.ST	16	12,0	80	24,0	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		203

17580 301-308
Solid carbide shank DIN 6535 HB

Designation	Ø d2 h6 mm	Ø d1 mm	l1 mm	l2 mm	Cutting circle Ø DS mm	t max. mm	Clamping screw	TORX® wrench	17580	...
ZH22.1212.42.B.HM	12	-	100	42	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		301
ZH22.1212.60.B.HM	12	-	130	60	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		302
ZH22.1611.30.B.HM	16	11,5	90	30	21,7	3,9	M5 (17581 101)	T 20 (51932 208)		303
ZH22.1612.42.B.HM	16	12,0	100	42	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		304
ZH22.1612.60.B.HM	16	12,0	130	60	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		305
ZH22.1612.85.B.HM	16	12,0	160	85	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		306
ZH22.2016.45.B.HM	20	16,0	110	45	21,7	2,5	M5 (17581 101)	T 20 (51932 208)		307
ZH22.2016.65.B.HM	20	16,0	130	65	21,7	2,5	M5 (17581 101)	T 20 (51932 208)		308

17580 401
Steel shank DIN 1835 B

Designation	Ø d2 h6 mm	Ø d1 mm	l1 mm	l2 mm	Cutting circle Ø DS mm	t max. mm	Clamping screw	TORX® wrench	17580	...
ZH22.1612.24.B.ST	16	12	80	24	21,7	4,5	M5 (17581 101)	T 20 (51932 208)		401

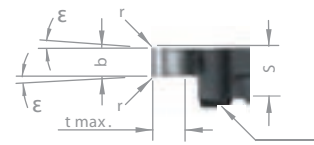
Spare parts		Clamping screw	TORX® wrench
Clamping screw	TORX® size	17581	51932
M5	T 20		101

Continuation ▶

Continuation ▶

17582
ATORN®

- Cutting inserts for **Seeger circlip grooves** DIN 471/472 and **slot milling in general**
- Carbide/HC 8620 TiAlN-coated



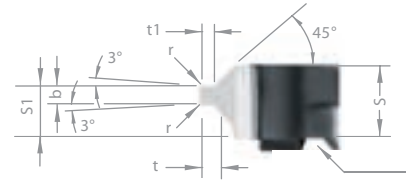
Fräseschaft
shank face

17582

Designation	Groove width mm	S mm	Relief angle Epsilon	r mm	b -0,02 mm	t max. mm	17582	...
Z22.0070.00	0,7	5,7	1°	-	0,74	1,5		101
Z22.0080.00	0,8	5,7	1°	-	0,84	1,7		102
Z22.0090.00	0,9	5,7	1°	-	0,94	1,9		103
Z22.0100.00	1,0	5,7	1°	-	1,04	2,1		104
Z22.0110.00	1,1	5,7	1°	-	1,21	2,5		105
Z22.0130.00	1,3	5,7	3°	0,1	1,41	4,5		106
Z22.0160.00	1,6	5,7	3°	0,1	1,71	4,5		107
Z22.0185.02	1,85	5,7	3°	0,15	1,96	4,5		108
Z22.0215.02	2,15	5,7	3°	0,15	2,26	4,5		109
Z22.0265.02	2,65	5,7	3°	0,15	2,76	4,5		110
Z22.0315.02	3,15	5,7	3°	0,15	3,26	4,5		111
Z22.0415.02	4,15	5,7	3°	0,15	4,26	4,5		112
Z22.0515.02	5,15	5,7	3°	0,15	5,26	4,5		113

17583
ATORN®

- Cutting inserts slot outer edge chamfering **Seeger circlip grooves** DIN 471/472
- Carbide/HC 8620 TiAlN-coated



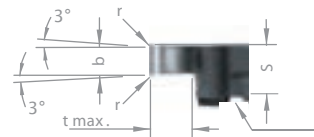
Fräseschaft
shank face

17583

Designation	Groove width mm	S mm	S1 mm	r mm	b -0,02 mm	Groove depth t mm	Forming depth t1 -0,04 mm	17583	...
Z22.1105.30	1,1	5,85	5,07	-	1,21	0,50	0,49		101
Z22.1307.30	1,3	5,85	5,17	-	1,41	0,70	0,67		102
Z22.1308.30	1,3	5,85	5,17	-	1,41	0,85	0,83		103
Z22.1609.35	1,6	5,85	5,07	-	1,71	0,85	0,83		104
Z22.1610.35	1,6	5,85	5,07	-	1,71	1,00	0,97		105
Z22.1812.35	1,85	5,85	5,19	0,15	1,96	1,25	1,23		106
Z22.2215.35	2,15	5,85	5,34	0,15	2,26	1,50	1,47		107
Z22.2616.45	2,65	5,85	5,09	0,15	2,76	1,50	1,47		108
Z22.2617.45	2,65	5,85	5,09	0,15	2,76	1,75	1,72		109
Z22.3118.45	3,15	5,85	5,34	0,20	3,26	1,75	1,72		110
Z22.4120.55	4,15	5,85	5,34	0,20	4,26	2,00	1,97		111
Z22.4125.55	4,15	5,85	5,34	0,20	4,26	2,50	2,47		112

17584
ATORN®

- Cutting inserts for **slot milling in general**
- Carbide/HC 8620 TiAlN-coated



Fräseschaft
shank face

17584

Designation	S mm	r mm	b +0,02 mm	t max. mm	17584	...
Z22.0150.02	5,7	0,2	1,5	4,5		101
Z22.0200.02	5,7	0,2	2,0	4,5		102
Z22.0250.02	5,7	0,2	2,5	4,5		103
Z22.0300.02	5,7	0,2	3,0	4,5		104
Z22.0400.02	5,7	0,2	4,0	4,5		105

Continuation ▶

Tool System for Drilling Machining

17580 - 17593 Tool System for Drilling Machining MINI-MILL

Continuation ▶

17585 ATORN®

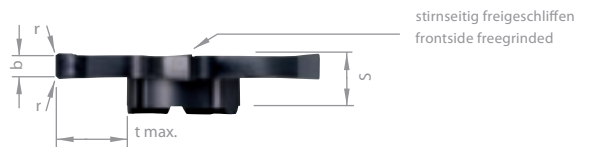
- Cutting inserts for **slot milling in general with 6 teeth**
- Carbide/HC 8620 TiAlN-coated



Designation	S mm	r mm	b +0,02 mm	t max. mm	17585	...
Z622.0150.01	6,2	0,1	1,5	4,5	101	
Z622.0200.02	6,2	0,2	2,0	4,5	102	
Z622.0250.02	6,2	0,2	2,5	4,5	103	
Z622.0300.02	6,2	0,2	3,0	4,5	104	
Z622.0400.02	6,2	0,2	4,0	4,5	105	

17586 ATORN®

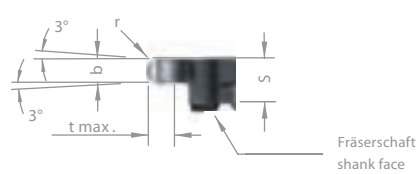
- Cutting inserts for **slot milling in general with 6 teeth**
- t max. 12 mm only in conjunction with holder ZH22
- Carbide/HC 8620 TiAlN-coated



Designation	S mm	r mm	b +0,02 mm	b +0,05 mm	t max. mm	D min. mm	17586	...
Z637.0050.00	5,85	-	-	0,5	12	37	101	
Z637.0100.01	5,85	0,1	1,0	-	12	37	102	
Z637.0150.01	5,85	0,1	1,5	-	12	37	103	

17587 ATORN®

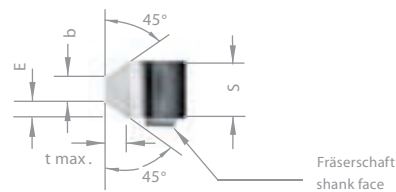
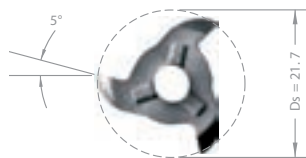
- Cutting inserts for **full radius grooves**
- Carbide/HC 8620 TiAlN-coated



Designation	S mm	r mm	b +0,03 mm	t max. mm	17587	...
Z22.0005.10	5,75	0,5	1,0	4,5	101	
Z22.0010.20	5,75	1,0	2,0	4,5	102	
Z22.0014.28	5,75	1,4	2,8	4,5	103	
Z22.0015.30	5,75	1,5	3,0	4,5	104	
Z22.0020.40	5,75	2	4	4,5	105	

17588 ATORN®

- Cutting inserts for **milling bores, forward chamfering and backward chamfering**
- Carbide/HC 8620 TiAlN-coated



Designation	S mm	E mm	b +0,03 mm	t max. mm	17588	...
Z22.4545.58	5,85	2,00	2,0	1,7	101	
Z22.4545.94	9,40	3,25	3,0	3,0	102	

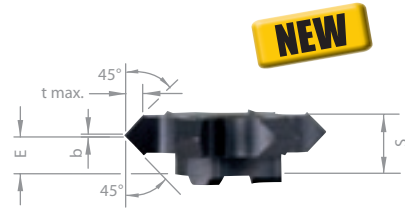
Continuation ▶

Continuation ▶

17589

ATORN®

- Cutting inserts for **milling bores, forward and backward chamfering with 6 teeth**
- Carbide/HC 8620 TiAlN-coated



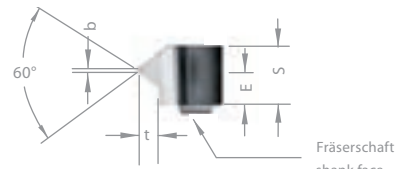
17589

Designation	S mm	E mm	b mm	t max. mm	17589	...
Z622.4545.63	6,2	3,65	0,2	1,9		101

17590

ATORN®

- Cutting inserts for **metric ISO thread partial profile**
- Carbide/HC 8620 TiAlN-coated



17590

Designation	S mm	Pitch P mm	E mm	b mm	t max. mm	17590	...
Z22.0720.01	5,85	1,0 - 2,0	4,6	0,12	1,19		101
Z22.2545.01	5,85	2,0 - 4,5	3,7	0,31	2,71		102
Z22.0815.01	5,85	1,5 - 2,75	4,8	0,18	1,62		103
Z22.1020.01	5,85	2,0 - 3,75	4,6	0,25	2,22		104
Z22.1630.01	5,85	2,5 - 5,0	4,0	0,37	2,98		105

17591

ATORN®

- Cutting inserts for **metric ISO thread inner partial profile with 6 teeth**
- Carbide/HC 8620 TiAlN-coated



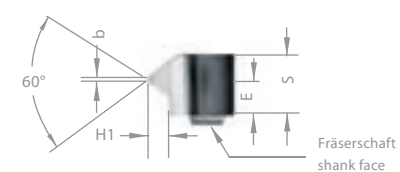
17591

Designation	S mm	Pitch P mm	E mm	min. Thread size	t max. mm	17591	...
Z622.0720.01	6,20	1,0 - 2,0	5,1	M 27	1,19		101
Z622.2545.01	6,05	2,0 - 4,5	4,3	M 27	2,71		102

17592

ATORN®

- Cutting inserts for **metric ISO thread full profile**
- Carbide/HC 8620 TiAlN-coated



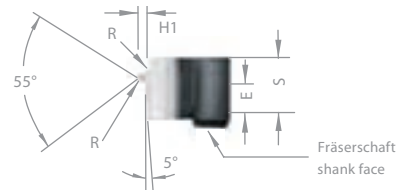
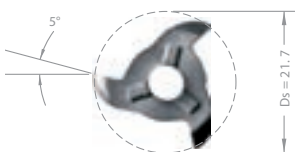
17592

Designation	S mm	Pitch P mm	E mm	b mm	H1 mm	17592	...
Z22.0815.02	5,85	1,5	4,8	0,19	0,81		101
Z22.0917.02	5,85	1,75	4,7	0,22	0,95		102
Z22.1020.02	5,85	2,0	4,6	0,25	1,08		103
Z22.1630.02	5,85	3,0	4,3	0,37	1,62		104
Z22.1835.02	5,85	3,5	4,1	0,43	1,89		105
Z22.2140.02	5,85	4,0	3,9	0,50	2,16		106
Z22.2445.02	5,85	4,5	3,7	0,56	2,43		107

17593

ATORN®

- Cutting inserts for **Whitworth pipe thread DIN ISO 228(259) and 2999 full profile**
- Carbide/HC 8620 TiAlN-coated



17593

Designation	S mm	Pitch tpi/inch	E mm	R mm	H1 mm	17593	...
Z22.5506.02	5,85	6 (4,23)	3,1	0,58	2,71		101
Z22.5508.02	5,85	8 (3,17)	3,5	0,43	2,03		102
Z22.5511.02	5,85	11 (2,30)	4,0	0,31	1,48		103

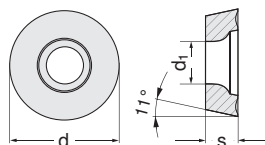
Milling Indexable Inserts

17826

Reversible cutting inserts for milling RPMT

Type

- Round
- Positive 11°
- With sintered-in chip deflection step



17826



P M K
H 42
TiN

17826 ...

Use

Carbide type
Coating

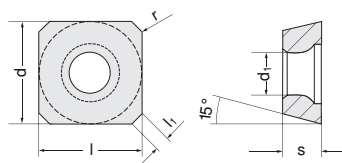
ISO designation	d mm	s mm	d ₁ mm		
RPMT 1204 MOSN	12	4,76	4,40	10 pcs.	102

17834

Indexable milling inserts SDHT/SDNT

Type

- Square
- Positive 14°
- With chip deflection step



17834



N
H 25/Alu
Uncoated

P M
H 42
TiN

17834 ... 17834 ...

Use

Carbide type
Coating

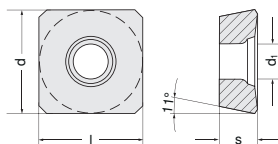
ISO designation	d+l mm	d ₁ mm	s mm	l ₁ mm	r		
SDHT 0903 AE	9,52	3,40	3,18	1,68	1,0	10 pcs.	102
SDNT 0903 AESN	9,52	3,40	3,18	1,68	1,0	10 pcs.	101

17852

Indexable milling insert SPET

Type

- Square
- Positive 11°
- With ground-in chip deflection step



17852



P M
H 42
TiN

17852 ...

Use

Carbide type
Coating

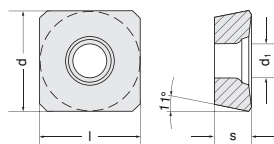
ISO designation	d+l mm	d ₁ mm	s mm		
SPET 1204 AD	12,7	5,50	4,76	10 pcs.	103

17850

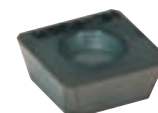
Indexable milling inserts SPEW

Type

- Square
- Positive 11°
- Ground



17850



P M
H 42
TiN

17850 ...

Use

Carbide type
Coating

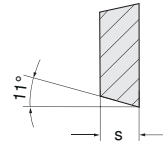
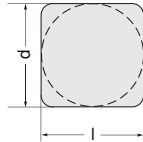
ISO designation	d+l mm	d ₁ mm	s mm		
SPEW 1204 ED	12,7	5,50	4,76	10 pcs.	103

17849

Indexable milling inserts SPKN

ATORN®

- Type
 - Square
 - Positive 11°
 - Without chip deflection step
 - With milling chamfer



17849

Use
 Carbide type
 Coating

P M K
 HC 4540
 Coated

M K
 HC 4620
 Coated

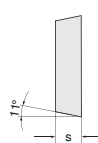
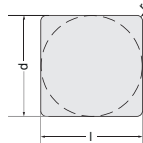
ISO designation	d+l mm	s mm				
SPKN 1203 ED SR	12,7	3,18	10 pcs.		 103	 102

17855

Reversible cutting inserts for milling SPUN

ATORN®


- Type
 - Square
 - Positive 11°



17855

Use
 Carbide type
 Coating

P
 HW 4640
 Uncoated

ISO designation	d+l mm	s mm	r			
SPUN 120308	12,7	3,18	0,4	10 pcs.		 101

Milling Tools







Take advantage of the technology partnership with **CERATIZIT**. The carbide expert with high material and application competence. Perfect interaction with the revised selection of machining tools. Now at **Hommel Hercules**.

