



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

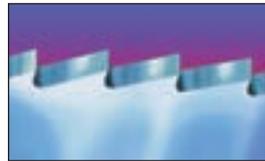
Fine-pitched teeth with small chip-clearance gashes only for shallow cuts and thin-walled workpieces (1 - 5 mm). Particularly suitable for machining brittle, short-chipping materials.

Quality

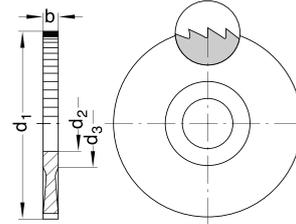
HSS.

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

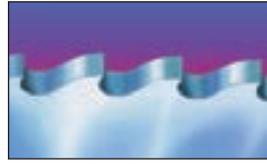
For medium and deep cuts in materials with a minimum thickness of 3mm, for universal use because of the generous size and good design of the chip-clearance gashes.

Quality

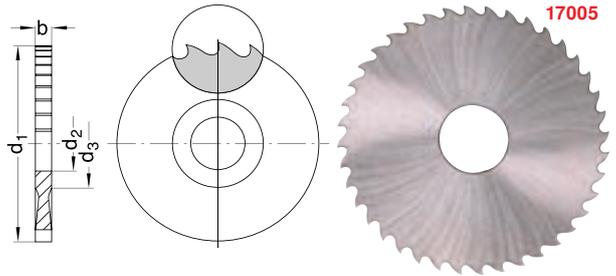
HSS.

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

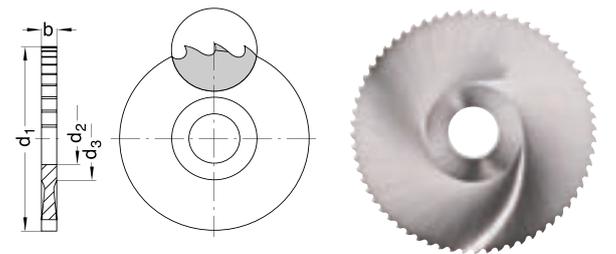
HSS.

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

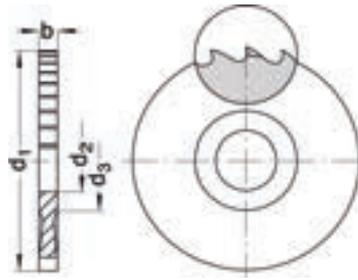
For larger cross-sections and greater cutting depths. Better chip formation than is possible with fine-toothed versions.

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.

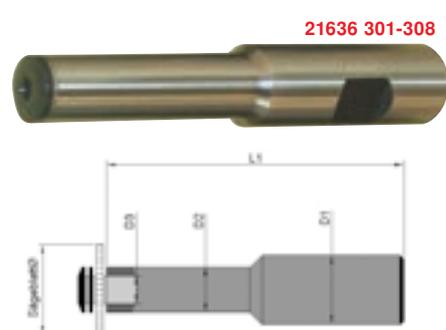
21636 301-308
Type
Single.



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 TRENNJÄGER.

17010

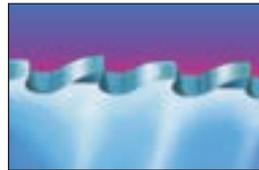
Quality

HSS, steam treated surface.

17011

Quality

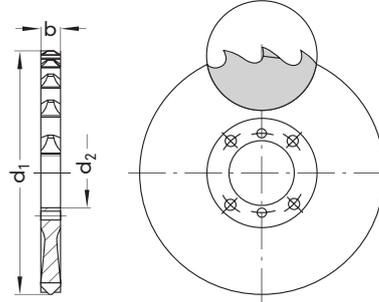
HSS-E, steam-treated.



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.

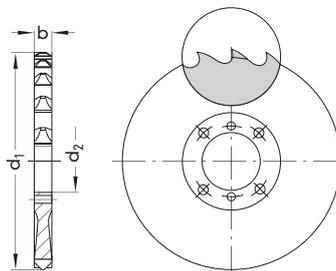
Quality
HSS, steam treated surface



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

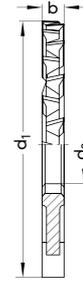
N HSS-E 



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

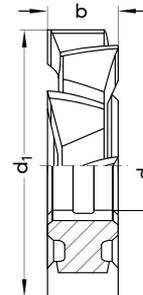
N HSS-E Co5 



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



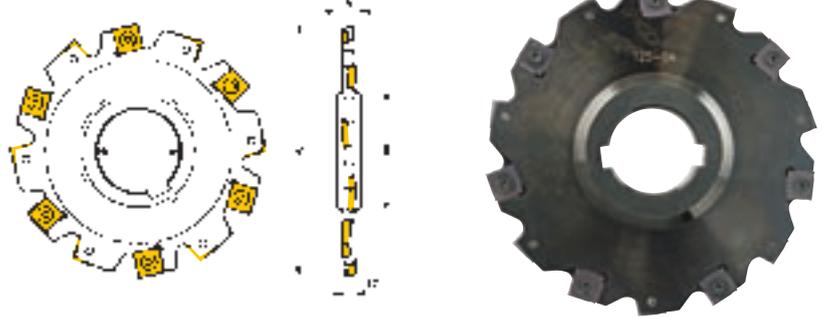
ATORN®

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



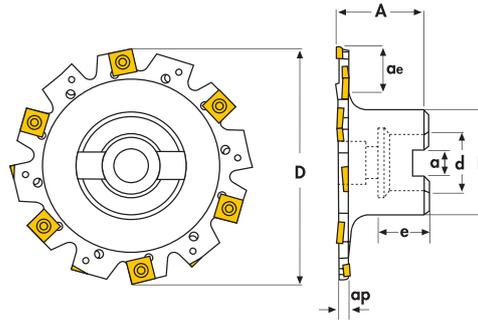
ATORN®

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.



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	101
80	22	4	50	40	10,4	21	8	4	20,2	SNHX 1102T	VTX 3503	104	104
100	27	4	50	48	12,4	23	12	6	24,2	SNHX 1102T	VTX 3503	107	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	102
80	22	5	50	40	10,4	21	8	4	20,2	SNHX 1103T	VTX 3504	105	105
100	27	5	50	48	12,4	23	12	6	24,2	SNHX 1103T	VTX 3504	108	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	103
80	22	6	50	40	10,4	21	8	4	20,2	SNHX 1203T	VTX 405	106	106
100	27	6	50	48	12,4	23	10	5	24,2	SNHX 1203T	VTX 405	109	109
125	40	6	50	70	16,4	30	12	6	23,7	SNHX 1203T	VTX 405	111	111
160	40	6	50	70	16,4	30	16	8	41,2	SNHX 1203T	VTX 405	113	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	110
125	40	10	50	70	16,4	30	12	6	23,7	SNHX 1205T	VTX 408	112	112
160	40	10	50	70	16,4	30	16	8	41,2	SNHX 1205T	VTX 408	114	114

Indexable Inserts and Spare Parts

17785 - 17786

Use Carbide type Coating

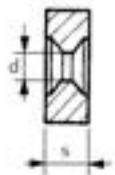
PMK

HC 4630
TiAlN-coated

K

HW 7415
Uncoated

ISO designation	I.C. mm	d mm	s mm		17785	...	17786	...
SNHX 1102T	11,0	4,4	2,3	10 pcs.	101		101	
SNHX 1103T	11,0	4,4	2,7	10 pcs.	102		102	
SNHX 1203T	12,7	5,0	3,2	10 pcs.	103		103	
SNHX 1205T	12,7	5,0	5,4	10 pcs.	105		105	



Clamping screws



Screwdriver

Type	Size	TORX size	17789	...	52529	...
VTX 3503	M 3,5 x 3	9	101		404	
VTX 3504	M 3,5 x 4	9	102		404	
VTX 405	M 4,0 x 5	15	103		406	
VTX 408	M 4,0 x 8	15	104		406	

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	-





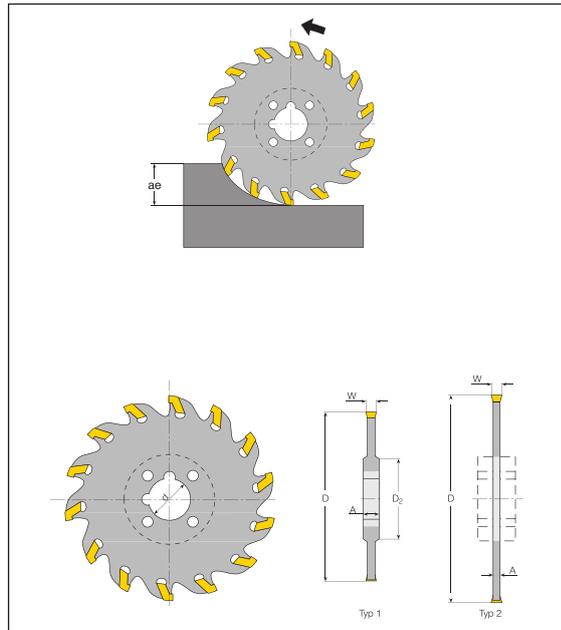
ATORN®

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.

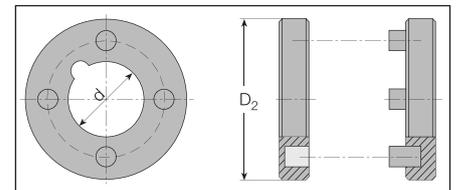


Type 1	D mm	W mm	Z	d mm	A mm	max. depth mm	max. rpm U/min	D2 mm	17793	...
ASC 100 1.6-22A	100	1,6	10	22	2,4	30,5	800	39		101
ASC 125 1.6-27A	125	1,6	12	27	2,4	30,5	640	64		102
ASC 100 2-22A	100	2-2,3	10	22	2,4	30,5	800	39		103

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

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	-