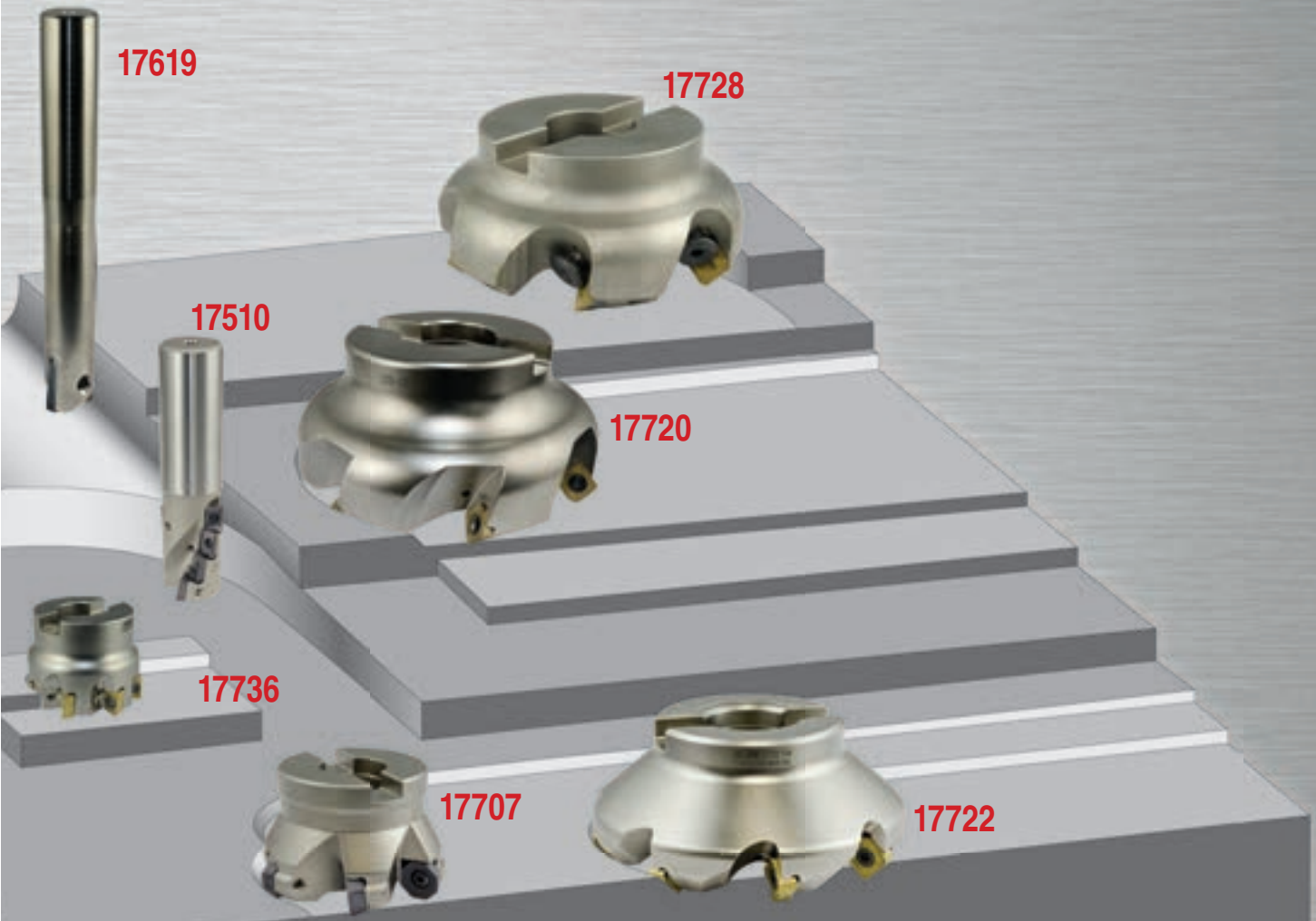


Milling cutt



er selection guide

An overview of the milling
on the sides 17.14 - 17.17

		ATORN®	ATORN®	ATORN®	HFW	GERATITZ	ATORN®	GERATITZ
		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®	HFW	GERATITZ	ATORN®	GERATITZ
		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	NEW						
◐	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								

		HFC milling cutters			Al plunge milling cutters			Centring cutter
		17865	17865	17865	17560	17561	17562	17536
●	1. Selection							
●	Alternatives							
◐	Possible under certain circumstances							
◑	Marginally useable							
▽	Roughing							
▽▽	Medium machining							
▽▽▽	Finishing							
Type								
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								● ● ● ● ●

		Copying milling cutter						
		17868	17613 - 17614	17868	17613 - 17615	17707	17868	17614 - 17616
●	1. Selection							
●	Alternatives							
◐	Possible under certain circumstances							
◑	Marginally useable							
▽	Roughing							
▽▽	Medium machining							
▽▽▽	Finishing							
Type								
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		●●●●	●●●●	●●●●				



Milling Tools

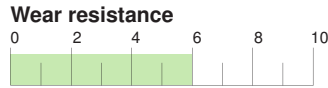
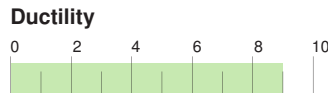
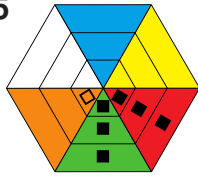
		Application area																																
		P						M						K						N						S						H		
Carbide type		5	10	20	30	40	5	10	20	30	40	5	10	20	30	40	5	10	20	30	40	5	10	20	30	40	5	10	20					
Coated types	H 42																																	
	H 45																																	
	P 25/TiN														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

		ISO P	ISO M	ISO K	ISO N	ISO S	ISO H		
Coated type	H 42	P20-P30	M20-M30	K20-K30				Universal type	medium cutting speed, medium chip section
	H 45		M30-M40	K30-K40				Titanium and titanium alloys, austenitic and martensitic VA-steel, Inconel	Medium cutting speed, milling of VA-steel using coolant, wear-resistant type
	P 25/TiN	P20-P30	M20-M30	K20-K30				Universal type	medium cutting speed, medium chip section
	K 10/TiAlN						K05-K15	Hardened materials	Suitable for dry milling
	HC 4635	P30-P40	M35-M40					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
	HC 4535	P20-P40	M20-M40	K20-K40				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
	HC 4410			K05-K15	N05-N15			Al and aluminium alloys, GG, GGG	high cutting speed and feed
	HC 4540	P20-P40	M20-M40	K20-K40				Steel, alloyed steel, tool steel, GG, GGG, VA-steel	medium cutting speed, milling of VA-steel using coolant
	HC 4620	P15-P30	M15-M30	K10-K30				Steel, cast steel, alloyed steel, tool steel	for difficult milling machining and interrupted cut, longest service life
	P 40/TiAlN	P30-P40						Steel, cast steel, alloyed steel, tool steel	Highly wear-resistant type
	P 25/TiAlN	P20-P30						Steel, cast steel, alloyed steel, tool steel	Ductile types, also for interrupted cut
	M 40		M30-M40					VA-steel	medium cutting speed, medium feed
	P20-P40	P20-P40	M20-M40					Universal type	medium cutting speed, medium chip section
	Uncoated type	H 25				N20-N30			aluminium and aluminium alloys	high cutting speed and feed
H 12		P20-P30	M20-M30					Universal type	medium cutting speed, medium chip section
HW 4415				K05-K20				Aluminium and copper alloys	Easy to medium-difficulty machining
HW 4410				K10-K20	N10-N20	S10-S20	S10-S20	GG over 220 HB, GTW, aluminium and copper alloys, refractory alloys	Easy to medium-difficulty machining
HW 4540		P30-P40						Steel and cast steel, alloyed steel, tool steel	For difficult milling machining and interrupted cut

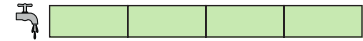




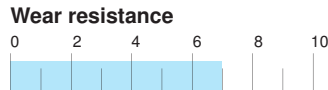
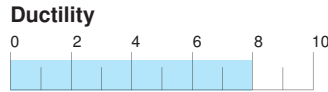
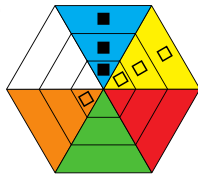
CTW4615
HW-K15



Wet / dry



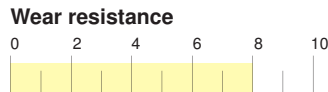
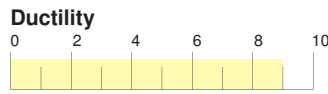
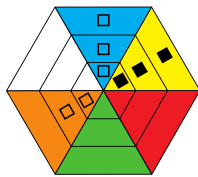
CTP1235
HC-P35
HC-M30



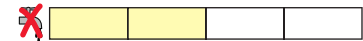
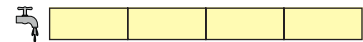
Wet / dry



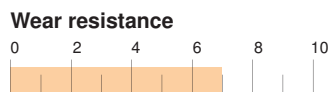
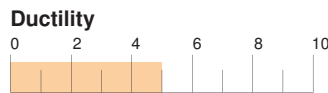
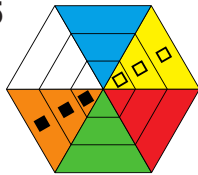
CTP2235
HC-P40
HC-M40



Wet / dry



CTC5235
HC-M35



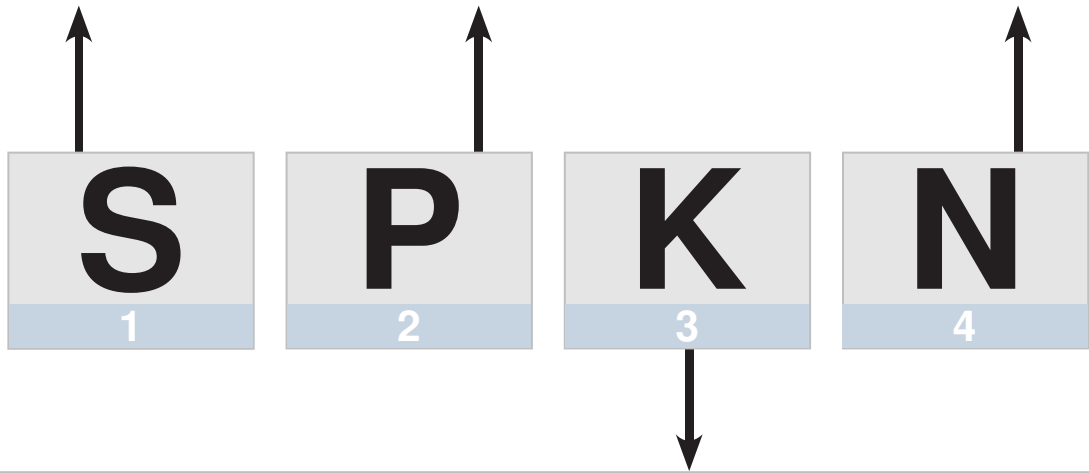
Wet / dry



Chip deflection step overview - milling

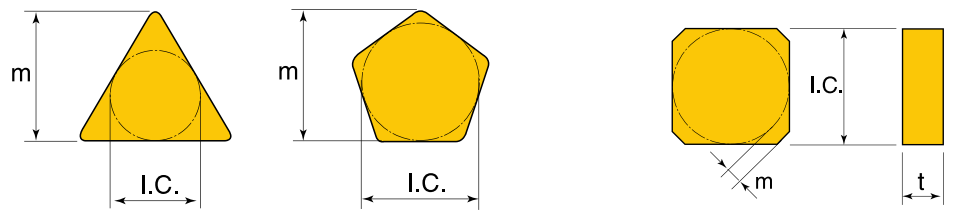


1 CUTTING TOOL SHAPE				2 CLEARANCE ANGLE				4 TOOL TYPE		
A	B	C	H	B	5°	F	25°	A	F	G
				C	7°	G	30°			
L	M	O	P	D	15°	N	0°			Special
				E	20°	P	11°	T	W	X
R	S	T	W							



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

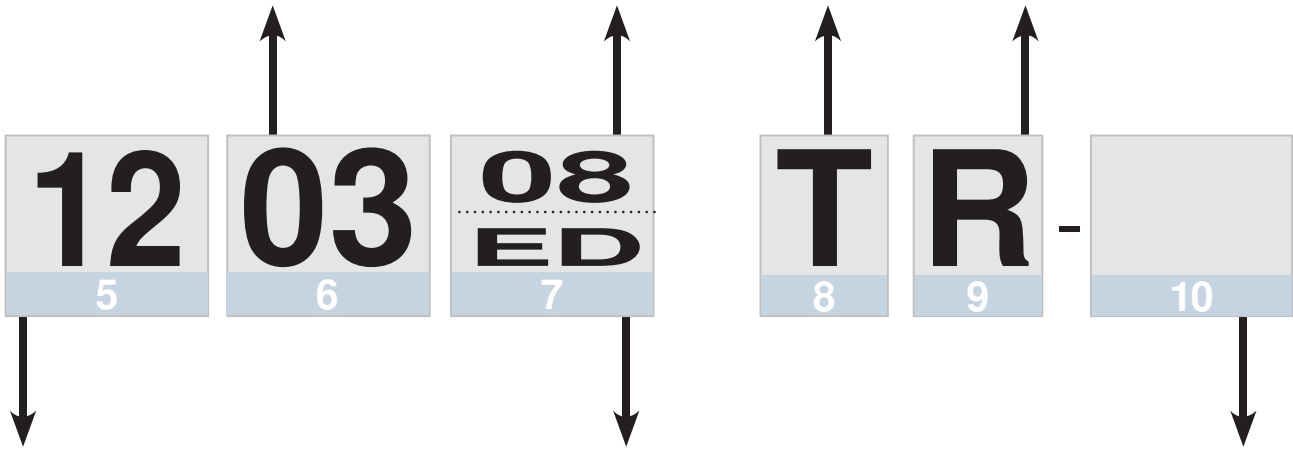
02R = 0.2	15R = 1.5
04R = 0.4	16R = 1.6
05R = 0.5	24R = 2.4
08R = 0.8	32R = 3.2
10R = 1.0	40R = 4.0
12R = 1.2	

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

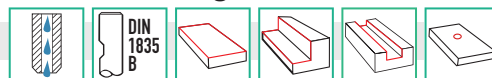
B = 5° F = 25°
C = 7° G = 30°
D = 15° N = 0°
E = 20° P = 11°
Z = Special

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



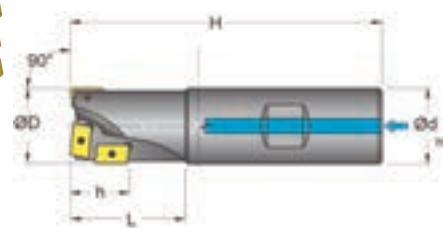
17501 110-111

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	Clamping screw	Screwdriver
For indexable inserts		
Size	17520	52529
AP..1003		
AP..1604		



www.atorn.de

Performance requires quality.

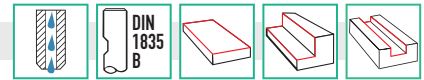
For example, with the 4-10 Power and 4-15 Power angular milling cutter from ATORN.

- 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

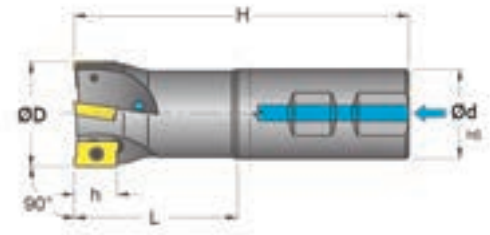


17505 126-127

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

For indexable inserts size	TORX® size
AP.1003	8
AP.1604	15

Clamping screw



17520

Screwdriver



52529

AP.1003	8	202	403
AP.1604	15	205	406

17507

Screw-in milling cutter 90°

ATORN®

Type

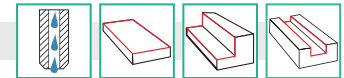
- Soft cutting due to the positive install position of the indexable insert
- High true-running accuracy and axial run-out accuracy of 0.03 mm - **Without** indexable inserts

Note:

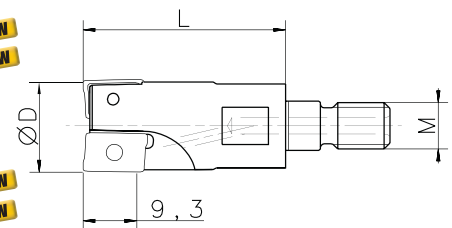
Milling arbours, see cat. size. 21, cat. no. 17676.

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

For indexable inserts Size	TORX® size
AP.1003	8
AP.1604	15

Clamping screw



17520

Screwdriver

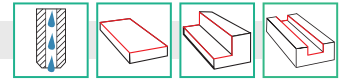


52529

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

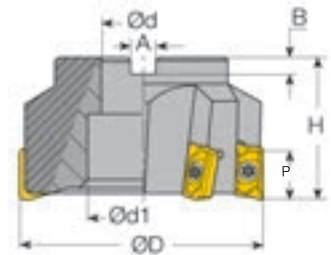


For indexable inserts AP.. 1003

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

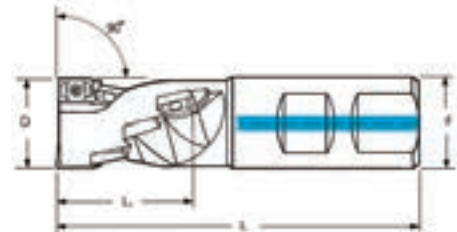


For indexable inserts AP.. 1003

Ø D mm	d mm	L1 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	L1 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	

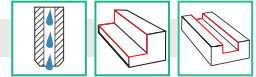


Spare parts

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.



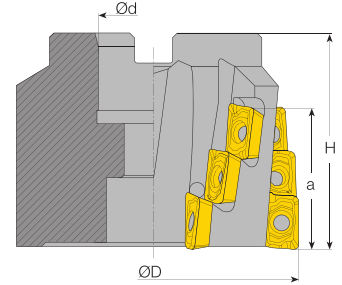
17753

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
50	22	46	60	AP..1003	15	3		099
63	27	46	60	AP..1003	20	4		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
63	27	44	60	AP..1604	12	4		102
80	32	44	60	AP..1604	15	5		103
100	40	44	60	AP..1604	18	6		104



Milling Tools

Spare parts

For indexable inserts size	TORX® size T	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.



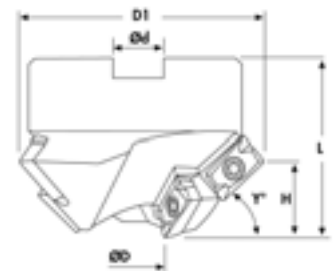
17760

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
30°	17	65	22	50	13	3	9		097
40°	17	60	22	50	17	3	9		106 NEW
45°	17	56	22	50	19	3	9		098
60°	17	45	16	50	24	3	9		099
75°	19	33	16	60	27	3	9		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
30°	35	85	27	50	15.0	3	6		102
40°	35	84	27	50	19.0	3	6		107 NEW
45°	35	75	27	50	21.5	3	6		103
60°	35	62	27	50	26.5	3	6		104
75°	35	45	22	60	29.5	3	6		105



Spare parts

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

17750

Face milling cutters 75° (consumable milling cutter)

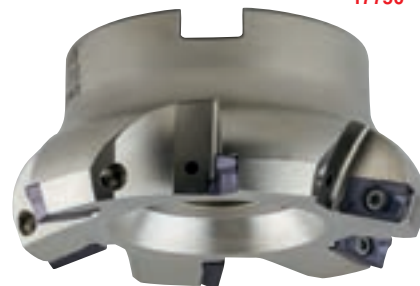


ATORN®

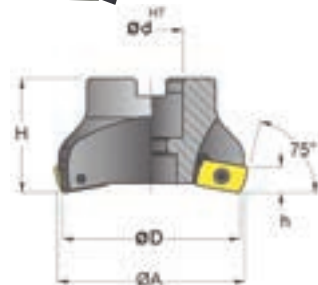
Note:
Reversible inserts, see cat. no. 17809 - 17811.

- 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 size TORX® size	17520	52529
AP..1003	8	202 403
AP..1604	15	205 406

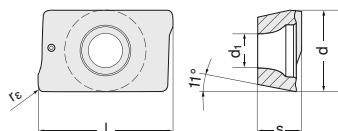
17809

Indexable milling inserts APKT and APHX

ATORN®

17809 101+104
Type
- Polished

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



17809 104

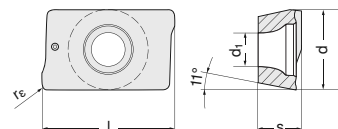
17809 105

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

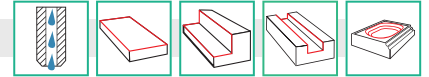
- Type**
- Square
- Positive 11°
- With sintered-in chip deflection step



17810

17811

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



17882

Type

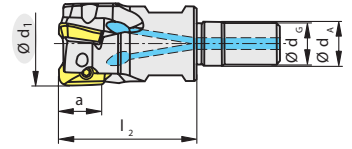
- Stable body of tool steel with hard& tough coating
- Coolant bore also suitable for MQL
- Precise support surfaces and exact positioning of the indexable insert

Advantage:

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

NEW

17882 101-106

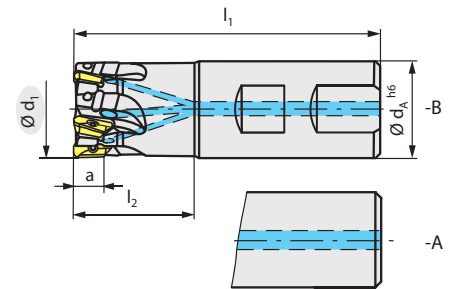


Ø d ₁ mm	Designation	Z	l ₂ mm	a mm	Ø d _A mm	Ø d _G mm	Indexable inserts	With thread	
								17882	...
20	G211.20.R.02-11	2	33	10	10,5	10	XD.. 11..		101
20	G211.20.R.03-11	3	33	10	10,5	10	XD.. 11..		102
25	G211.25.R.03-11	3	34	10	12,5	12	XD.. 11..		103
25	G211.25.R.04-11	4	35	10	12,5	12	XD.. 11..		104
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

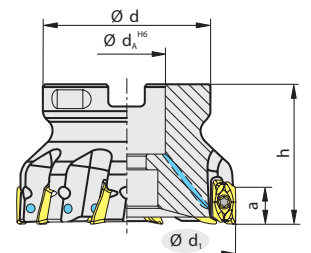
Ø d ₁ mm	Designation	Z	l ₁ mm	l ₂ mm	Ø d _A mm	a mm	Indexable inserts	With shank	
								17882	...
12	C211.12.R.01-11-B-20	1	75	20	16	10	XD.. 11..		201
16	C211.16.R.02-11-A15-32-165	2	165	32	15	10	XD.. 11..		202
16	C211.16.R.02-11-A-25	2	75	25	16	10	XD.. 11..		203
16	C211.16.R.02-11-A-32-165	2	165	32	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

Ø d ₁ mm	Designation	Z	h mm	Ø d mm	Ø 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

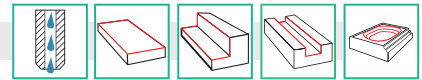
17882 201-224



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:

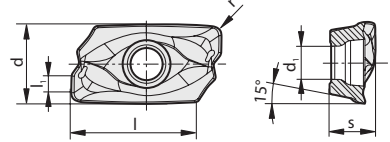
- Excellent cutting efficiency, finishing of NF metals

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

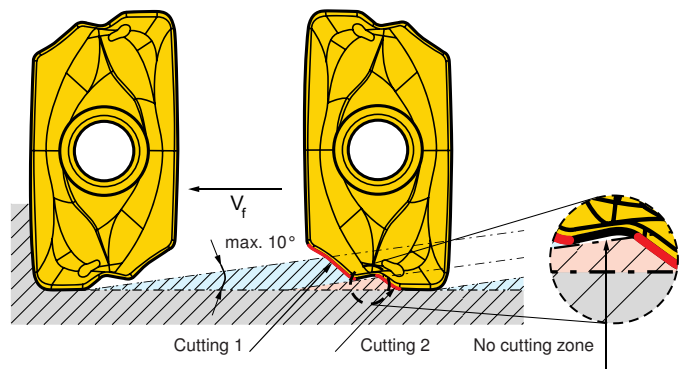
- The notch ensures additional stability when plunging.
- Quiet operation and vibration-free work are thus assured to a high degree.

Chip division

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

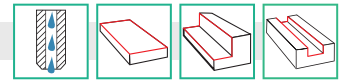
The PLUS for professional machinists:

- 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:

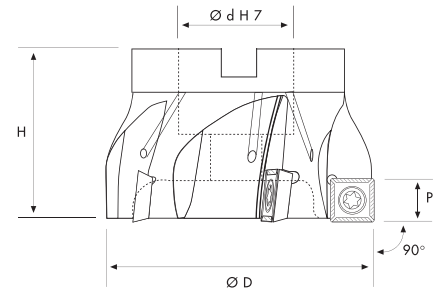
Carbide indexable inserts SD.T 1205.. See cat. no. 17833.

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

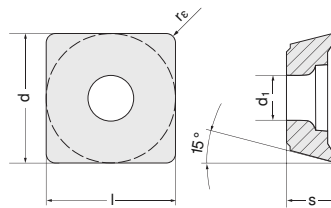
Type

- Square
- Positive 15°

17833 101

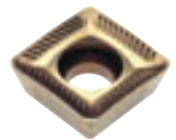
ATORN®

17833 201-203



17833 101

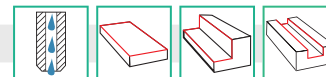
17833 202



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°

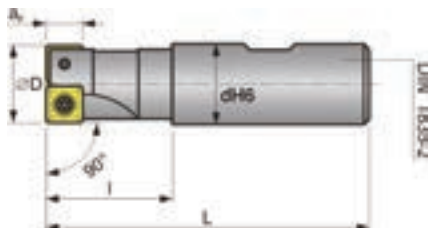


Type

- 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

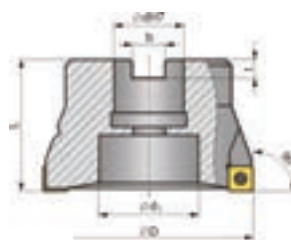


With shank

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

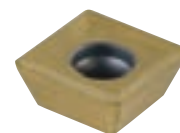


17662 120-122



Indexable Inserts and Spare Parts

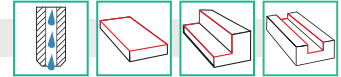
17662 301-304



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

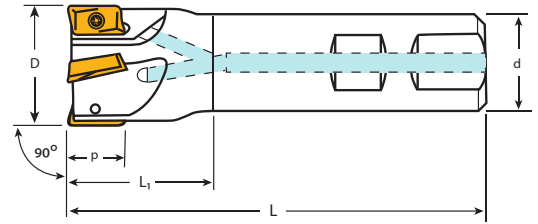
For use of ISO indexable milling inserts LN.X 100605 PNR cat. no. 17738.



17735

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

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

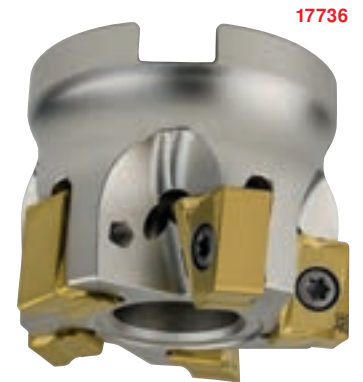


17736 105-109
Corner milling cutter 4-15 Power
Use

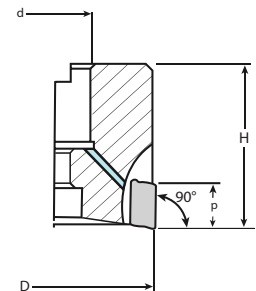
For use of ISO indexable milling inserts LN.X 151008 PNR cat. no. 17738.

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

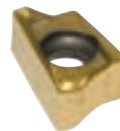
Note:

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

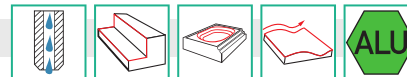
ISO designation		17738 ...	17738 ...	17738 ...	17738 ...
LNEX 100605 PNR-MA	10 pcs.	101			
LNMX 100605 PNR-MM	10 pcs.		102	103	104
LNEX 151008 PNR-MA	10 pcs.	201			
LNMX 151008 PNR-MM	10 pcs.		202	203	204

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

Plunge Milling Cutters | Screw-On Milling Cutters | Shell-type Milling Cutters | Countersink Milling Cutter for backwards operation

17560 Plunge Milling Cutters



ATORN®

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

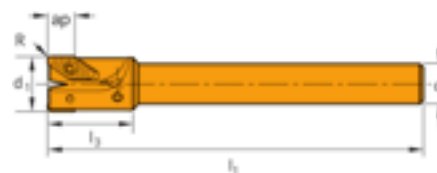
Use
For NF metals and plastics.



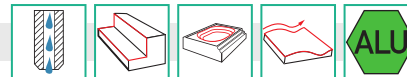
17560

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.

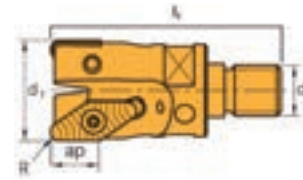
Type THR
Use
For NF metals and plastics.



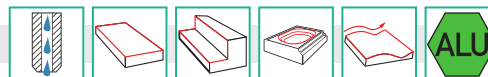
17561

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



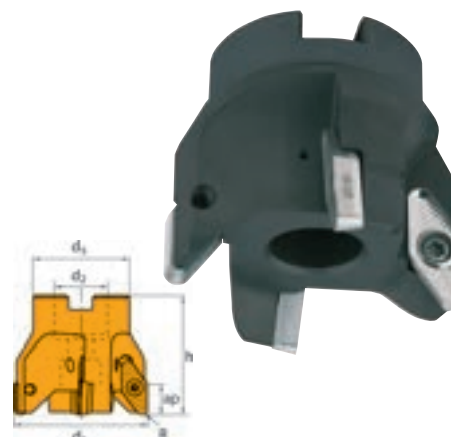
ATORN®

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



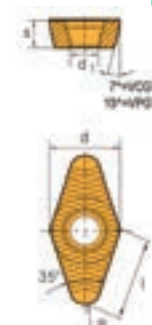
17562

17563 Indexable milling inserts VPGT/VCGT

ATORN®



Indexable inserts Type	Uncoated K 10						Coated K 10	
	l mm	s mm	d mm	d ₁ mm	R mm	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°



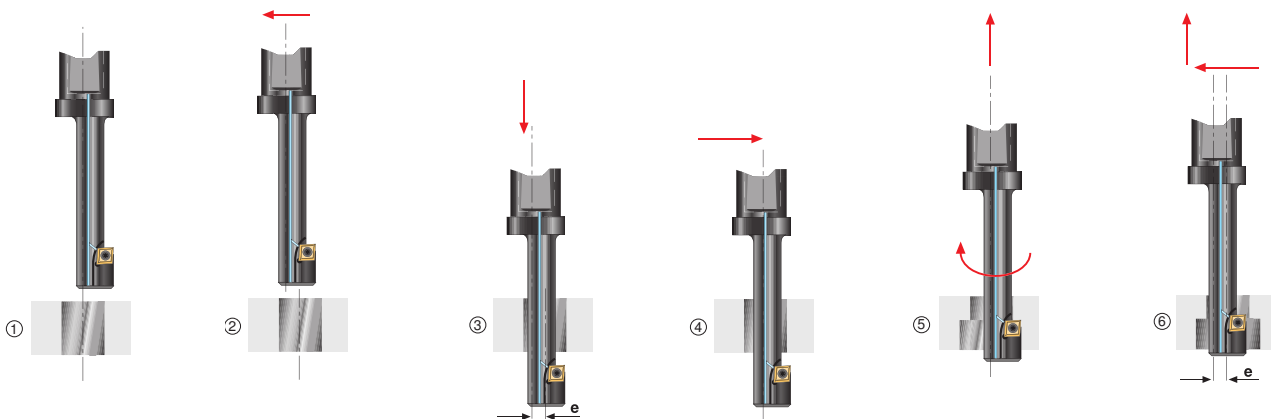
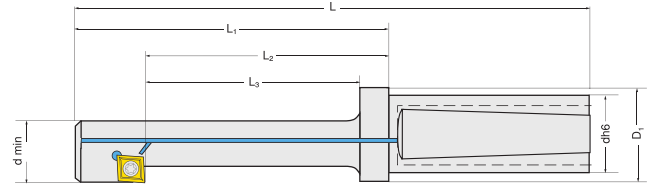
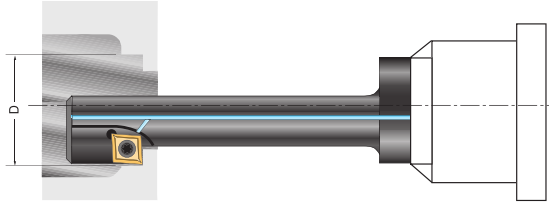
ATORN®

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

Clamping screw 17528 Screwdriver 52529

For indexable inserts size	TORX® size	101	102	103	403	406	407
CC.. 0602..	8	101	102	103	403	406	407
CC.. 09T3..	15	101	102	103	403	406	407
CC.. 1204..	20	101	102	103	403	406	407

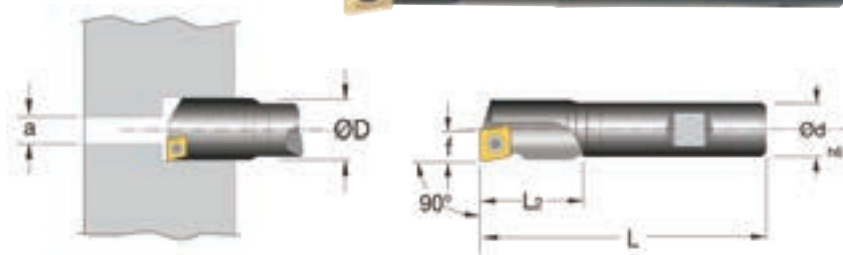


17576 - 17577 Core Drills and Countersinking Cutters

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

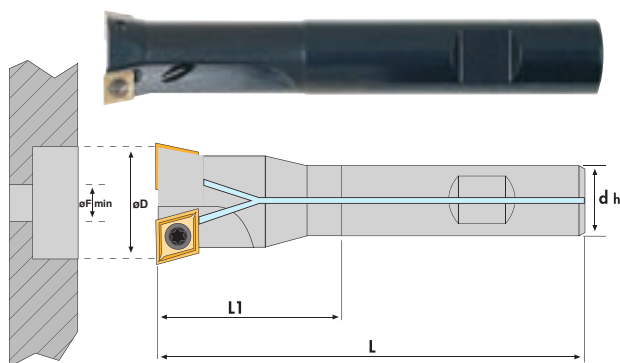
Single cutting								
Ø D	Ø d h6	a	f	L	L ₂	Indexable inserts	17576	...
mm	mm	mm	mm	mm	mm			
10	12	4	6,0	85	15	CC.. 0602..		101
11	12	4	6,0	85	16	CC.. 0602..		102
12	10	4	6,0	85	20	CC.. 0602..		103
13	12	5	6,5	85	21	CC.. 0602..		104
14	12	5	7,0	85	21	CC.. 0602..		105
15	12	5	7,5	85	24	CC.. 0602..		106
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	...
mm	mm	mm	mm	mm	mm			
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
mm	mm	mm	mm	mm		
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
mm	mm	mm	mm	mm		
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		Clamping screw	Screwdriver
For indexable inserts size	TORX® size T	17528	52529
CC.. 0602..	8	101	403
CC.. 09T3..	15	102	406

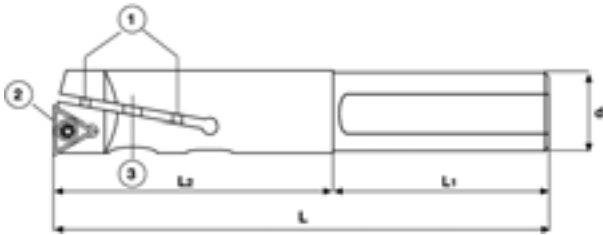


Use
For ISO indexable inserts CCMT and CCGT.

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

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

- Advantage:**
- Cost-effective alternative to spindle tools



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



D min mm	D max mm	d mm	L mm	L2 mm	L1 mm	Indexable inserts	Holder 17578	Tension screw 17578	Lock screw 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 17528	Screwdriver 52529
For indexable inserts size	TORX® size T	101	403
CC.. 0602..	8	102	406
CC.. 09T3..	15		

LARGE SELECTION – EASY SEARCH

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Don't forget! CATALOGUE VOLUME [2]

The universal catalogue for tools and machines

Experience the comprehensive product selection of our quality tools from **ATORN**.

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



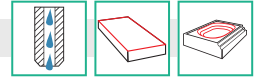
17660 306



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:

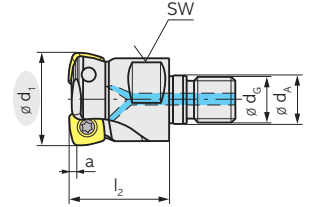
- Body with clamping screws
- **Without** indexable inserts

Advantages:

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

NEW

17865 101-104

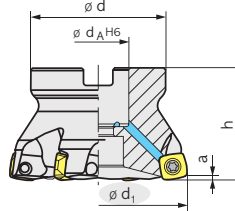
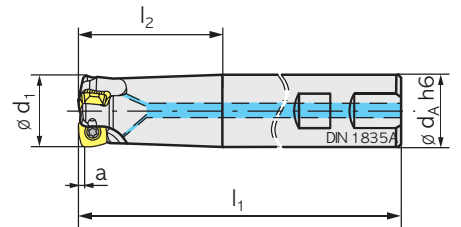


ϕd_1 mm	Designation	Z	l_2 mm	a mm	ϕd_A mm	ϕd_G mm	Indexable inserts	With thread	
								17865	...
16	GHFC.16.R.02-06-27	2	27	0,8	8,5	M 8	XP.. 06		101
20	GHFC.20.R.03-06-33	3	33	0,8	10,5	M 10	XP.. 06		102
25	GHFC.25.R.04-06-35	4	35	0,8	12,5	M 12	XP.. 06		103
32	GHFC.32.R.05-06-35	5	35	0,8	17,0	M 16	XP..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

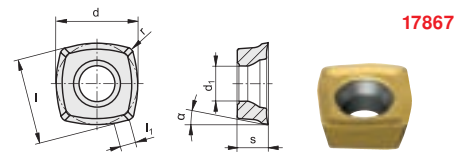


17865 301-304

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



17867

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

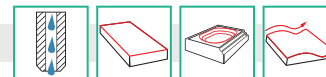
Spare parts

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



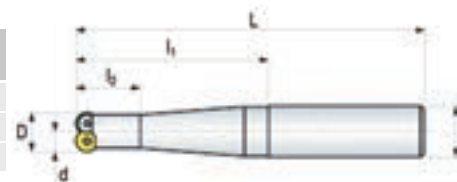
For indexable inserts RDHX 0702

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/Al2O3	x	KH	2,38	7	2,7	10 pcs.		305
RDHX 0702 MOT	P 25/Al2O3	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/Al2O3	x	KH	3,18	10	3,1	10 pcs.		310
RDHX 1003 MOT	P 25/Al2O3	x	P	3,18	10	3,1	10 pcs.		311
RDHX 1003 MOT	P 40/Al2O3	x	P	3,18	10	3,1	10 pcs.		312
RDHX 1003 MOT	M 40/Al2O3	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

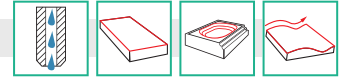


17824 312

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							
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							
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

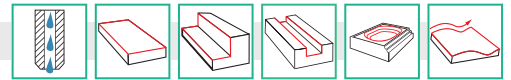
17824 322



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:

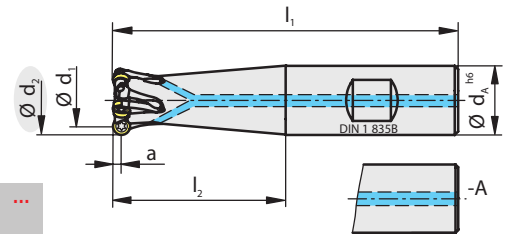
- Soft cutting, low-vibration cutting edge geometry
- Maximum process reliability
- Foreseeable wear behaviour
- Reproducible service life

Scope of supply:

- Body with clamping screws
- Without indexable inserts



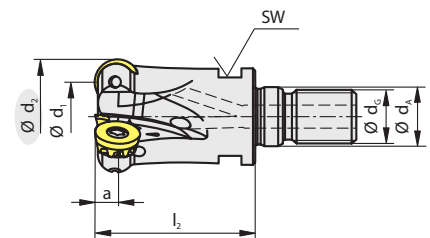
17868 101-126



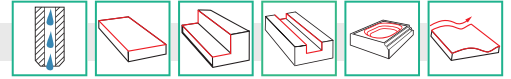
Ø d ₂ mm	Designation	Z	Ø d ₁ mm	l ₁ mm	l ₂ mm	Ø d _A mm	a mm	Indexable inserts	With shank	
									17868	...
10	C251.10.R.02-05-A-25-165-RS	2	5	165	25	10	2,5	RD.. 0501..		101
10	C251.10.R.02-05-B12-20-RS	2	5	67	20	12	2,5	RD.. 0501..		102
12	C251.12.R.03-05-A-32-165-RS	3	7	165	32	12	2,5	RD.. 0501..		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-A40-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 ▶



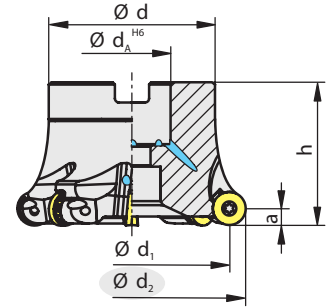
Continuation ▶

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

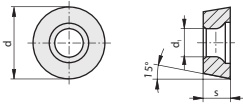
NEW

17868 301-321

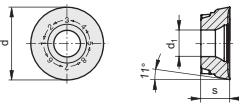


Milling Tools

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

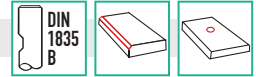
Spare parts

for indexable inserts	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	Power 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...

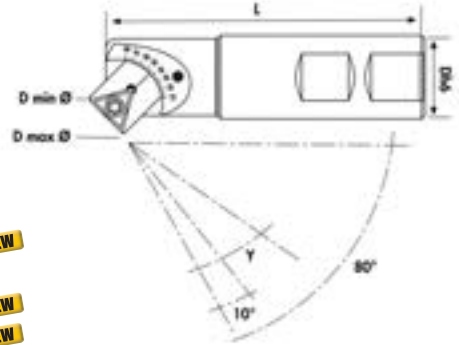
Scope of supply:

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.

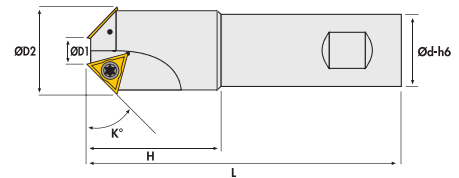
Use

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	Wrench
TCMT 1102	M 2,5 x 0,45	6,3	8	17528 101	51932 404
TCMT 16T3	M 4,0 x 0,7	8	15	17528 102	51932 407

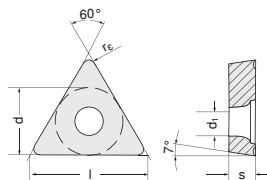
17856

Indexable milling inserts TCMT

HW

Type

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



17856

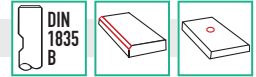


PM
H 42
TiN

ISO designation	l mm	d mm	d ₁ mm	s mm	r	...
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

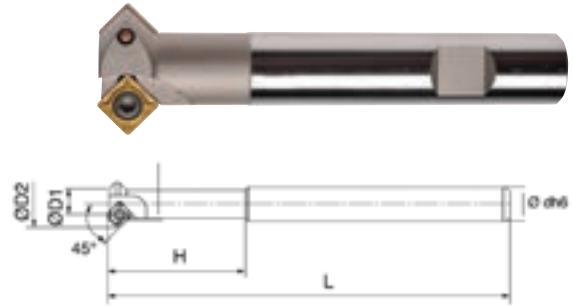
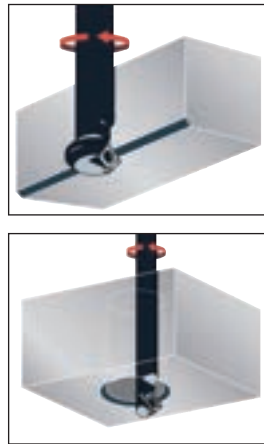
Angled cutters 45°



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		404
SCMT 09T3	M 4,0 x 0,7	8	15		407

17536 - 17857

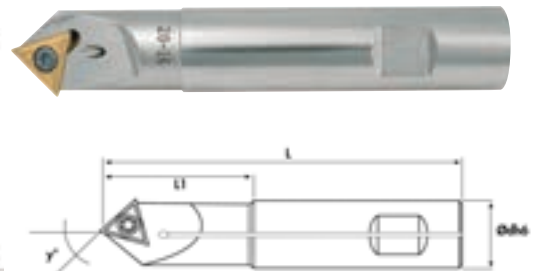
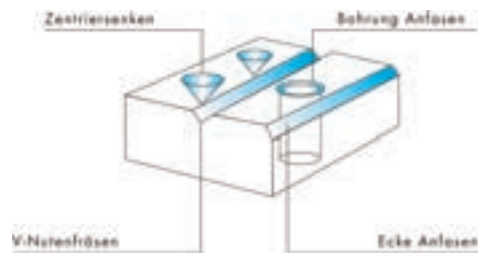
Milling cutter for bevelling and centring



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
TCMX 16T3 ZR 10 pcs.



17857

P M K
H 42
TiN
17857

size	TORX® size	Clamping screw	Screwdriver
	T	17761	52529
M 4 x 8	15		406



17540 - 17541 T-Slot Milling Cutters

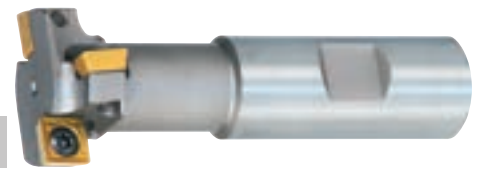


Type
- T-slot milling cutter of special steel with driving face in compliance with DIN 1835 B

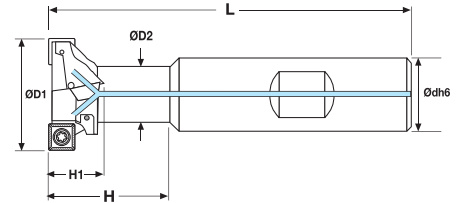
Advantage:
For ISO indexable inserts SPMT.

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

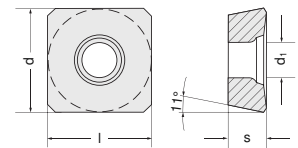
Indexable Inserts and Spare Parts

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

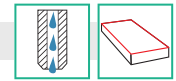
Spare parts	TORX® size	Clamping screw	Screwdriver
For indexable inserts	T	17520	52529
SPMT 06..	8		403
SPMT 09..	15		406
SPMT 12..	20		407

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

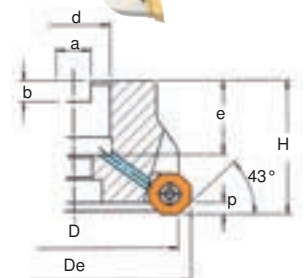
Advantage:
- Quiet, soft-cutting, milling behaviour thanks to positive install position of the indexable insert

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

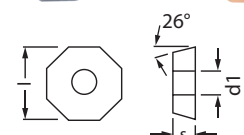
Indexable Inserts and Spare Parts

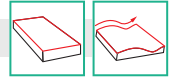
ISO designation	l mm	d ₁ mm	s mm	17710	...	17710	...	17710	...
OFEX 05T305	12,7	4,5	3,97		401				
OFMT 05T305	12,7	4,5	3,97		402		403		

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

17710 401

17710 403





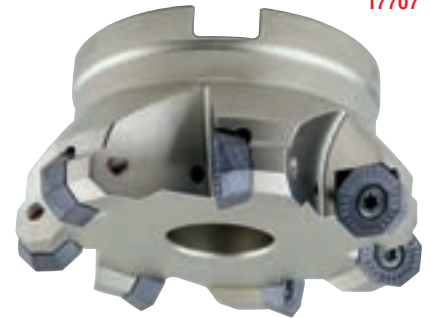
ATORN®

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

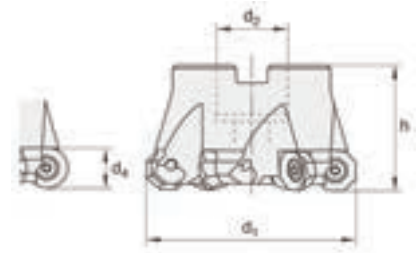
Universeller Einsatz im broad spectrum of materials. For face milling with 8-edge, 12-edge or round indexable inserts **OCKX, RCKX or XCKX**.



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

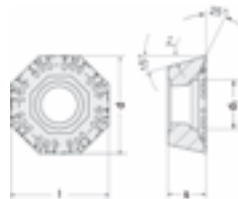
Type

- TRT with wide cutting edge chamfer

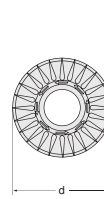
Use

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

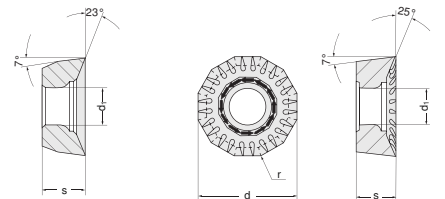
OCKX



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	...	PK 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

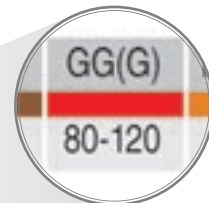
size	TORX® size	17708	...	52529	...
M 5 x 12	20		101		407

Info

The HHW colour-code system

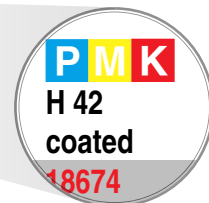
With the **HHW** colour-code system you can identify the materials for which the tool is suitable at first glance. In most catalogue areas the **HHW** colour code system additionally informs you of the application data for the respective tool. The **HHW** colour code system is logically structured based 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

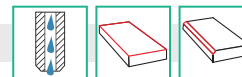
Designation	W ^{+0,1} mm	R ^{+0,05} mm		PK H 42 coated 18674	...
GTN-2	2,2	0,16	10 pcs.		113
GTN-3	3,1	0,20	10 pcs.		114



Face Milling Cutters

17722 - 17847

Face milling cutters 45°



ATORN®

Type

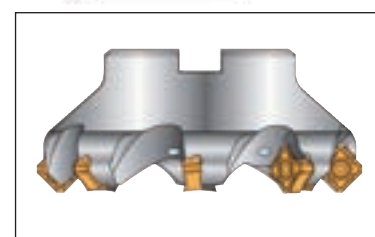
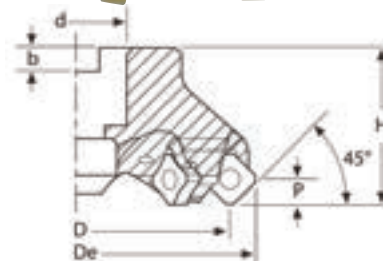
- Double-sided indexable inserts
- Large clamping angle
- Eight cutting edges
- Cut with minimal machining force and excellent surface finish
- With internal cooling (except cat. no. 17722 107-108)

Use

For universal implementation.

Note:

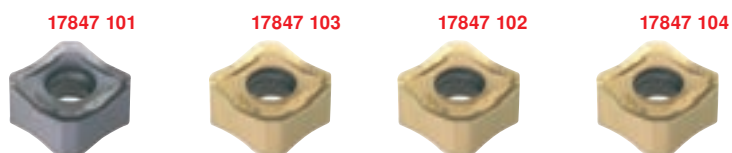
Incl. of clamping screw and key.



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

17847 ...

P

HC 4630
Coated

17847 ...

M

HC 4535
Coated

17847 ...

K

HC 4410
Coated

17847 ...

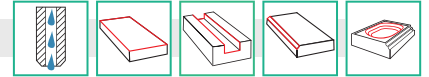
ISO designation	...	...	...	...
SNEX 1206 ANN-MA	10 pcs.		101	
SNMX 1206 ANN-MM	10 pcs.			103
				102
				104

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 ...
				101
				406

SAFETY FIRST! The current PSA catalogues

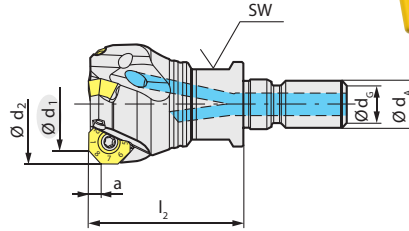




- Type**
- Stable body
 - Extremely positive install position of the indexable insert
 - Patented screw clamping

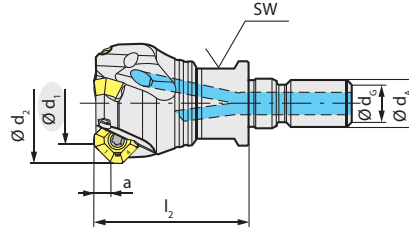
- Advantages:**
- Soft cut
 - Minimal power requirements
 - 8 useable cutting edges

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



NEW

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

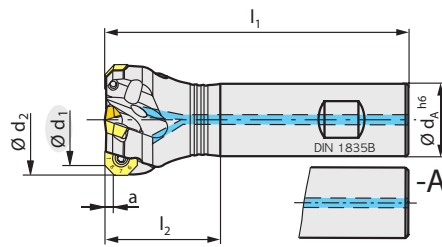


17876 101-103
(with indexable insert SF..)

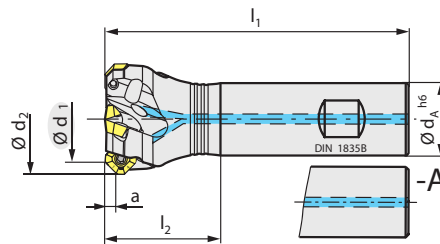


$\varnothing d_1$ mm	Designation	Z	$\varnothing d_2$ mm	l_2 mm	a mm	$\varnothing d_A$ mm	$\varnothing d_G$ mm	Indexable inserts	With thread	
									17876	...
20 (18,9)	G274.20.R.03-09	3	25,6 (27,4)	35 (35,7)	2,5 (3,8)	12,5	12	OF.. 04.. / SF.. 09..		101
25 (23,8)	G274.25.R.04-09	4	30,6 (32,5)	35 (35,7)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



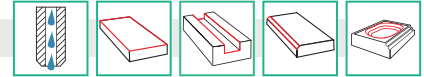
17876 201-206
(with indexable insert SF..)



$\varnothing d_1$ 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

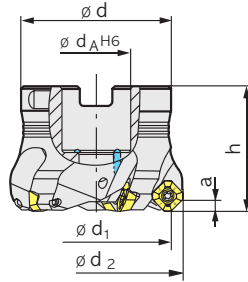
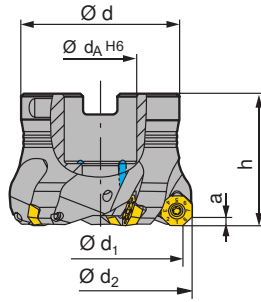
Continuation ▶



- 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



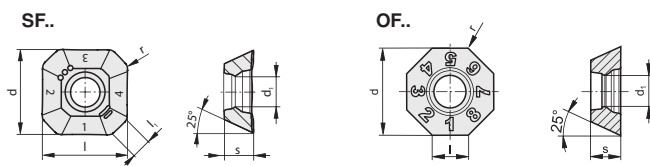
17876 301-312
(with indexable insert OF..)



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

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 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



17877 102



17877 105



Use
Carbide type
Coating

N
CTW4615
Uncoated

MS
CTC5235
CVD

P
CTP1235
PVD

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

Clamping screw

17999



Wrench

51932



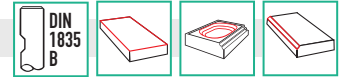
for indexable inserts Size	Clamping screws	Size T	17877	...	17877	...	17877	...
OF.. 04.. / SF.. 09..	M 2,5 x 7,6	IP 8		122		404		

For milling cutters with bore Ø d ₁ mm	For indexable inserts size	Power screw	17998	...
32 (30,7) - 40 (38,7)	OF.. 04.. / SF.. 09..	M 8 x 30,0		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.

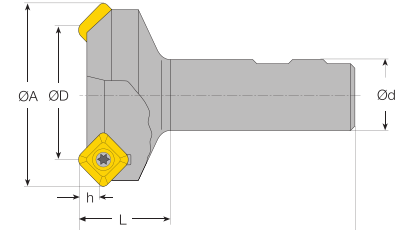


17534

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	

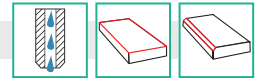
Spare parts

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



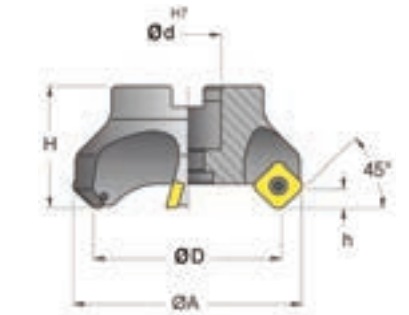
17720

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	17721	...	Screwdriver	52529	...
SE.T 1204..	M 5,0 x 0,8	11	20	101		407		

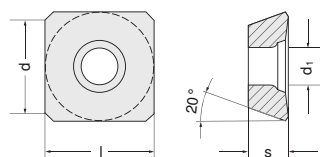


17838

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	10 pcs.	17838	...	17838	...
SEHT 1204 AF	12,7	5,50	4,76	10 pcs.	203		202	
SEHT 1204 AF-AL	12,7	5,50	4,76	10 pcs.	203		202	

17838 203

17838 202



N
H 25/Alu
Uncoated
17838



P M
H 42
TiN
17838

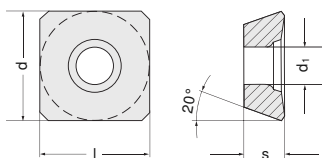
17845

Indexable milling inserts SEET



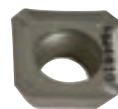
Type
- Square
- Positive 20°
- with chip deflection step

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	d1 mm	s mm		17845	...	17845	...	17845	...
SEET 1204 AF SN	12,7	5,50	4,76	10 pcs.		101		103		102

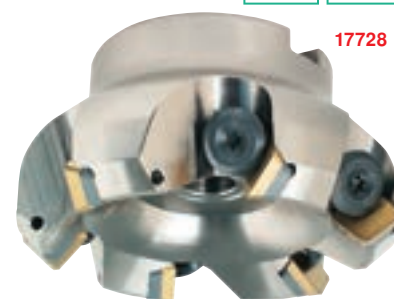
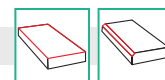
17728 - 17729

Face milling cutters 45°

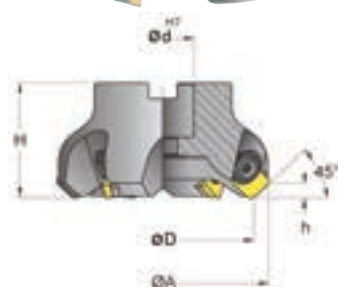


Type
- Positive
- Right-hand cut
- Without indexable inserts

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



Spare parts

		17729	...
Support plate	-		101
Screw for support plate	10 pcs.		102
Clamping screw	10 pcs.		103

17729 101

17729 102

17729 103



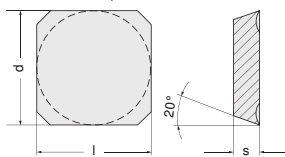
17841

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.		105		103		102
SEEN 1203 AF SN	12,7	3,18	10 pcs.		105		107		106



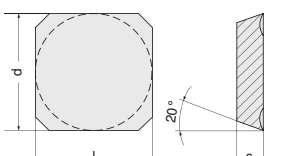
17843

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

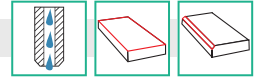
Use
Carbide type
Coating

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.

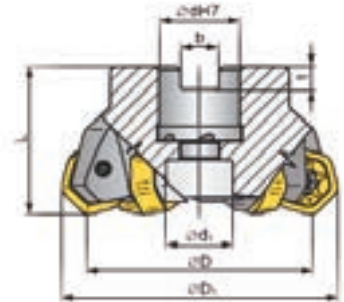
Use

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



$\varnothing D$ mm	$\varnothing d_{H7}$ 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

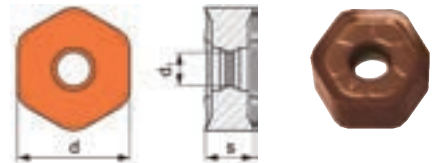
K 15
 Coated

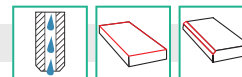
Designation	d mm	s mm	d_1 mm	17739	...	17739	...	17739	...
HNGJ09-M	16,5	6,35	4,9		201		202		203
HNGJ09-R	16,5	6,35	4,9				204		203

Spare parts

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

17739 201-204





17873 - 17874

Face Milling System 273-6

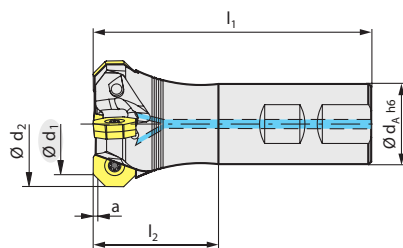


- Type**
- Stable body with hard&tough coating
 - Maximum number of cutting edges
- Advantages:**
- Extremely economical
 - Reduced power requirement
 - High stability and quiet operation

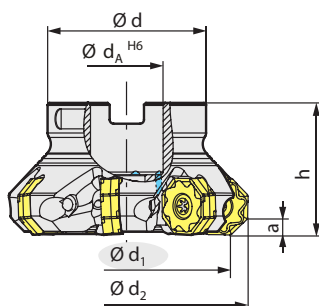
Scope of supply:

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

NEW

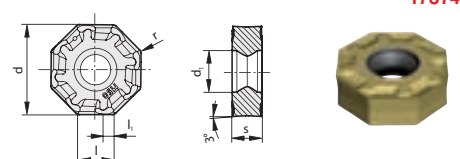


Ø d ₁ mm	Designation	Z	Ø d ₂ mm	l ₁ mm	l ₂ mm	Ø d _A mm	a mm	Indexable inserts	With shank 17873	...
32	C273.32.R.03-06-B-40	3	42,2	101	40	32	3,5	OAKU 06..		101
40	C273.40.R.04-06-B32-50	4	50,2	111	50	32	3,5	OAKU 06..		102



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	...	...
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	...	...
OAKU 06..	M 5,0 x 14,0	T 20	121	208

For milling cutters with bore **Power screw** **17998** ...

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



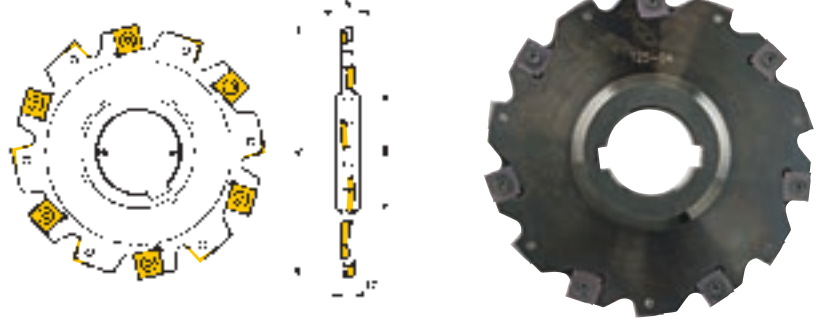
ATORN®

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

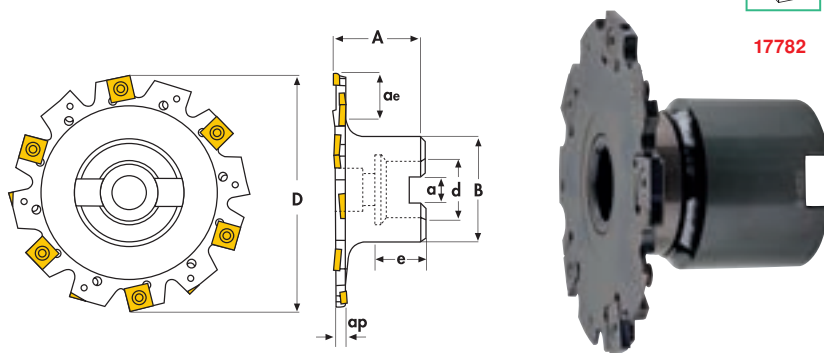
Side Milling Cutters With Collar



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	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

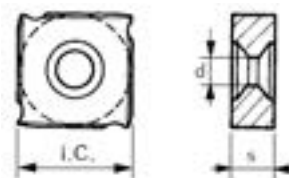
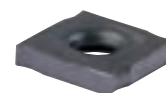
For indexable inserts SNHX 1205T

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					PMK		K	
Carbide type					HC 4630		HW 7415	
Coating					TiAlN-coated		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



Type	Size	TORX size	Clamping screws	Screwdriver
VTX 3503	M 3,5 x 3	9	17789	52529
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	-



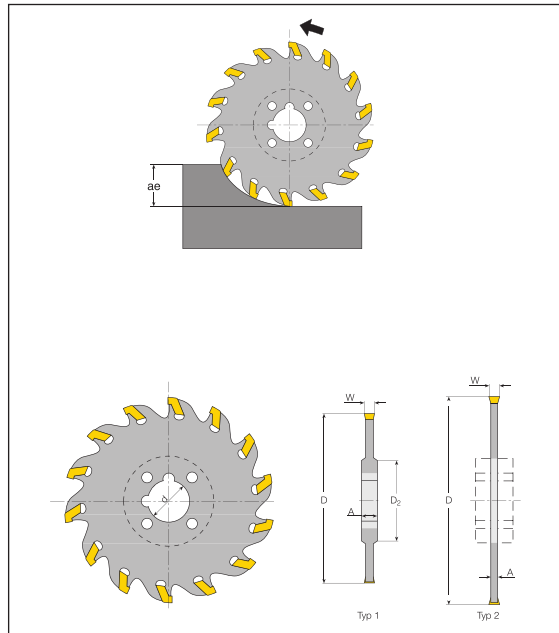
ATORN®

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.

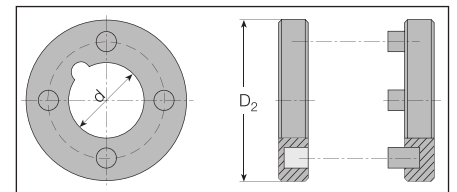


Type 1	D mm	W mm	Z	d mm	A mm	max. depth mm	max. rpm U/min	D2 mm	17793	...
ASC 100 1.6-22A	100	1,6	10	22	2,4	30,5	800	39		101
ASC 125 1.6-27A	125	1,6	12	27	2,4	30,5	640	64		102
ASC 100 2-22A	100	2-2,3	10	22	2,4	30,5	800	39		103

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	-

Tool System for Drilling Machining

17580 - 17593

Tool System for Drilling Machining MINI-MILL



ATORN®

17580

Tool holder type ZH22

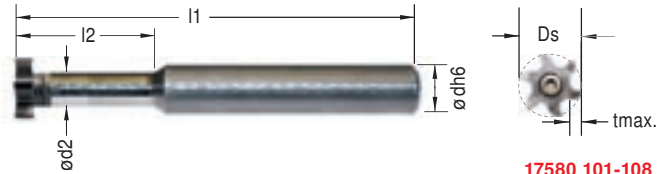
Type

- 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

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

17580 201-203



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

17580 301-308



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

17580 401



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

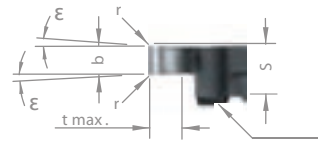
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NEW 17582

17582
ATORN®

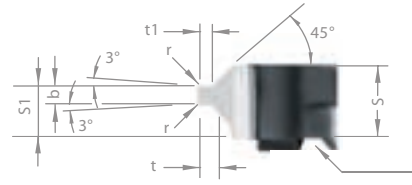
- Cutting inserts for **Seeger circlip grooves** DIN 471/472 and **slot milling in general**
- Carbide/HC 8620 TiAlN-coated



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®

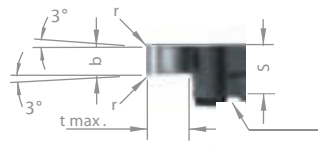
- Cutting inserts slot outer edge chamfering **Seeger circlip grooves** DIN 471/472
- Carbide/HC 8620 TiAlN-coated



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



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

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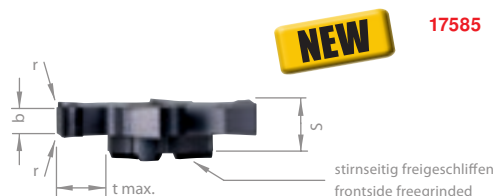
Tool System for Drilling Machining

17580 - 17593 Tool System for Drilling Machining MINI-MILL

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17585 **ATORN**[®]

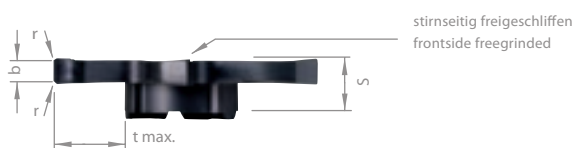
- Cutting inserts for **slot milling in general with 6 teeth**
- Carbide/HC 8620 TiAlN-coated



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**[®]

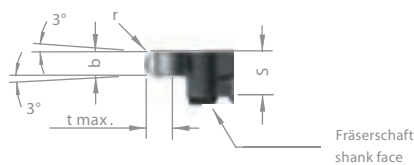
- Cutting inserts for **slot milling in general with 6 teeth**
- t max. 12 mm only in conjunction with holder ZH22
- Carbide/HC 8620 TiAlN-coated



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**[®]

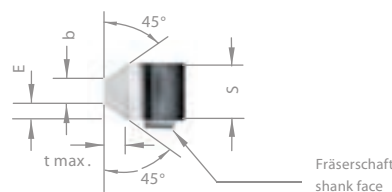
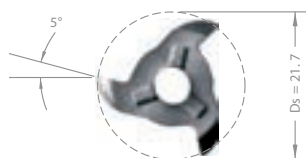
- Cutting inserts for **full radius grooves**
- Carbide/HC 8620 TiAlN-coated



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

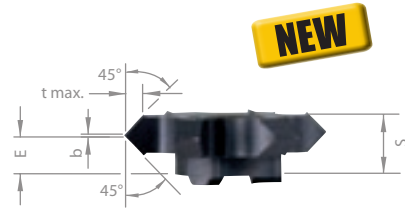
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17589

ATORN®

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



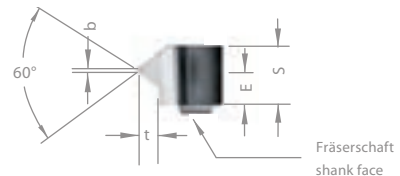
17589

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



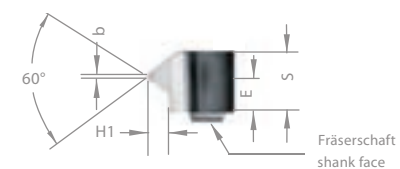
17591

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



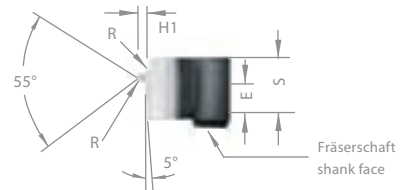
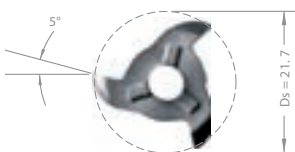
17592

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

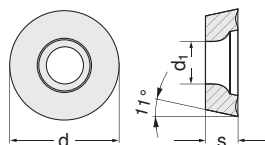
Milling Indexable Inserts

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.

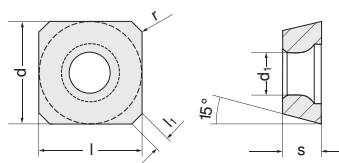
102

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.
SDNT 0903 AESN	9,52	3,40	3,18	1,68	1,0	10 pcs.

102

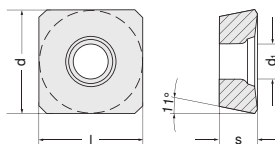
101

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.

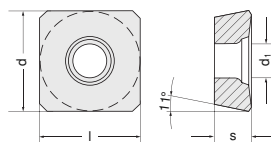
103

17850

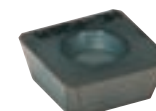
Indexable milling inserts SPEW

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

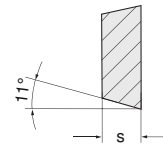
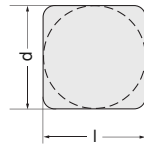
17849

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		17849	...	17849	...
SPKN 1203 ED SR	12,7	3,18	10 pcs.		103		102

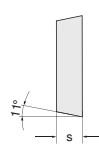
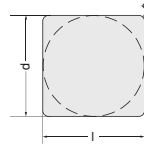
17855

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		17855	...
SPUN 120308	12,7	3,18	0,4	10 pcs.		101







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