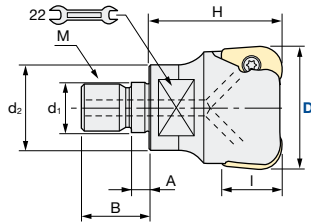
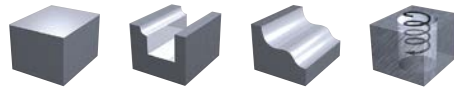




AHRM | Mini – Advanced Heavy Roughing – Modular Type

Q max High Efficient	Jet Air Hole	▽ Roughing	HRC 62	No. of Teeth 3~4
--------------------------------	------------------------	----------------------	------------------	----------------------------



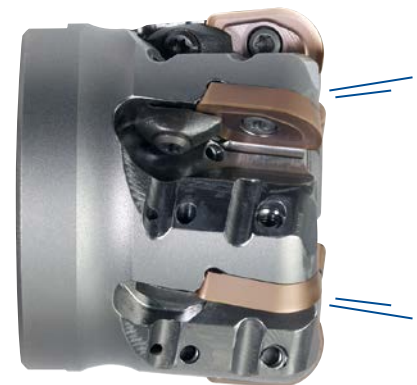
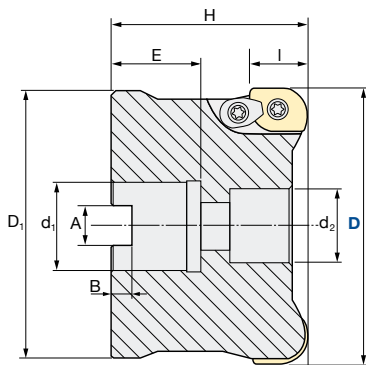
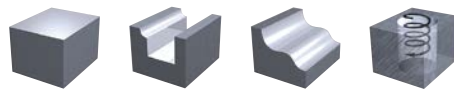
Diameter Holder only [mm]	Fastening Torque [Nm]
-0.1/-0.2 mm	2.9Nm

Modular Type		Flutes	D	H	d ₁	M	d ₂	A	B	C	E	I	Inserts
FH149	AHRM-4035R-3-M16	3	35	45	17	M16	29	6	23	12	22	18	ZDNW...
FH150	AHRM-4042R-4-M16	4	42										ZDMT...

Wrench Size

AHRB | Mini – Advanced Heavy Roughing – Bore Type

Q max High Efficient	Jet Air Hole	▽ Roughing	HRC 62	No. of Teeth 5~9
--------------------------------	------------------------	----------------------	------------------	----------------------------



Diameter Holder only [mm]	Fastening Torque [Nm]
-0.1/-0.2 mm	2.9Nm

Bore Type		Flutes	D	H	d ₁	d ₂	M	D ₁	A	B	E	I	Inserts
FH151	AHRB-4052RM-5-22	5	52	50	22	15	10*	40	10.4	6.3	20	18	ZDNW... ZDMT...
FH152	AHRB-4052RM-5-27		63	17		12*	45						
FH153	AHRB-4066RM-6-27	6	66	50	27	20	12	60	12.4	7			
FH154	AHRB-4080RM-7-27	7	80										
FH155	AHRB-4100RM-8-32	8	100	63	32	26	16	70	14.4	8	25.5		
FH156	AHRB-4125RM-9-40	9	125	40	32	20	105	16.4	9	30			

* Special Screw



INSERTS AHR | Mini – Advanced Heavy Roughing

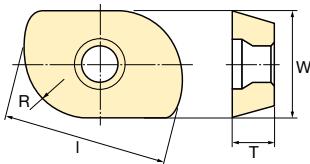


Fig.1: ZDNW Standard Shape

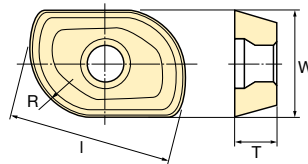


Fig.2: ZDMT with Breaker



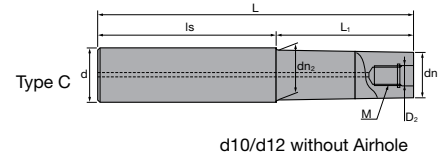
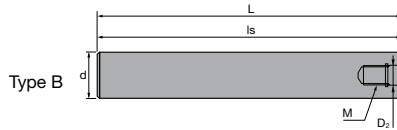
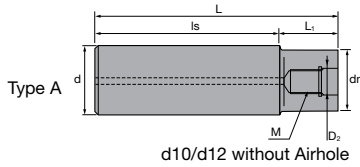
Inserts	Tolerance Class	Grade					Size (mm)				Shape
		JX1060	JS4060	JX1045	JP4020	JX1005	R	I	T	W	
Item Code		ID Code									
ZDNW1204080TR JX1005	N					WF674	8	21.5	4.76	12.7	Fig.1
ZDNW1204080TR JX1045				WF677							
ZDNW1204080TR JX1060		WF678									
ZDNW1204080TR JS4060			WF679								
ZDNW1204080TR JP4020					WF680						
ZDMT1204080TR JX1005	M					WF681	8	21.5	4.76	12.7	Fig.2
ZDMT1204080TR JX1045				WF684							
ZDMT1204080TR JS4060			WF686								
ZDMT1204080TR JP4020					WF687						

JX1060	PVD · For carbon steels < 35 HRC
JS4060	PVD · General grade for 30–40 HRC Recommended for dry cutting
JX1045	PVD · For carbon steels < 30 HRC and cast iron
JP4020	PVD · For pre-hardened steels 40–55 HRC
JX1005	PVD · Main Grade




Parts	Clamp Screw	Clamp Piece Set		Wrench			
		ID-Code	Item-Code	ID-Code	Item-Code		
Modular	AHRM-40 ...	ET048	262-142	-	-	ET049	105-T15
Bore Type	AHRB-4 ...	Special Screw					
		ID-Code		Item Code			
Bore Type	D52 M10 (d_i = 22)	ET051		100-902			
Bore Type	D52 M12 (d_i = 27)	ET055		100-903			




AHR-Mini: Helical Bore Formula

Input data	Outside Diameter	D35	D42	D52	D66	D80	D100	D125
Radius of insert	R8	R8	R8	R8	R8	R8	R8	R8
Width of insert: W ₁	12	12	12	12	12	12	12	12
Ramping angle		10°	5°	3.5°	2.5°	2°	1.5°	1°
Flat bottom	Minimum Diameter	53	67	87	115	143	183	233
	Best for flat bottom	54	68	88	116	144	184	234
	Maximum Diameter	55	69	89	117	146	185	235
Through hole	Minimum Diameter	47	61	81	109	137	177	227
	Maximum Diameter	68	82	102	130	158	198	248

ASC | Carbide Shanks for Modular Mills


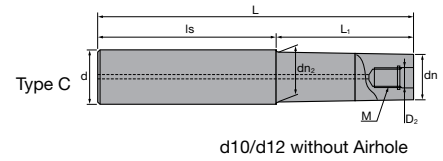
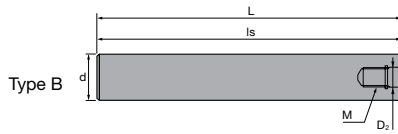
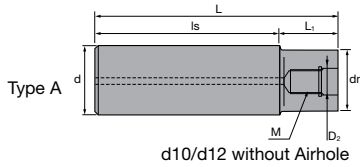
Carbide Shank																
	ID Code	Item Code	D ₂	M	L	L ₁	l _s	dn	dn ₂	d	Type					
Without Airhole	FH137	ASC10-6.5-74-24	6.5	M6	74	24	50	9.3	-	10	A					
	FH254	ASC10-6.5-84-34			84	34										
	FH255	ASC10-6.5-114-24			114	24						90				
	FH138	ASC10-6.5-114-49			114	49	65									
	FH139	ASC12-6.5-74-24			74	24	50					11	11.5	12	C	
	FH256	ASC12-6.5-94-44			94	44										
	FH257	ASC12-6.5-129-24			129	24										105
	FH140	ASC12-6.5-129-64			129	64										65
With Airhole	FH141	ASC16-8.5-95-30	8.5	M8	95	30	65	14.5	15.5	16	C					
	FH258	ASC16-8.5-120-55			120	55										
	FH142	ASC16-8.5-140-75			140	75										
	FH260	ASC16-8.5-160-30			160	30						130				
	FH259	ASC16-8.5-160-95			160	95						65				
	FH143	ASC20-10.5-120-50	10.5	M10	120	50	70	18	-	20	A					
	FH261	ASC20-10.5-170-90Z			170	90	80	18.5	19.5		C					
	FH144	ASC20-10.5-220-50			220	50	170	18	-		A					
	FH262	ASC20-10.5-220-120Z			220	120	100	18.5	19.5		20	C				
	FH263	ASC20-10.5-270-150Z			270	150	120									
	FH264	ASC20-10.5-270-50Z			270	50	220									
	FH145	ASC25-12.5-145-65	145	65	80											
	FH146	ASC25-12.5-265-65	265	65	200	23	-	25	A							
	FH265	ASC25-12.5-215-115	215	115	100											
	FH266	ASC25-12.5-265-145	265	145	120											
	FH268	ASC25-12.5-315-65	315	65	250											
	FH267	ASC25-12.5-315-195	315	195	120											
	FH147	ASC32-17-160-80	160	80	80					28	-	32	A			
	FH269	ASC32-17-260-140	260	140	120											
	FH148	ASC32-17-310-80	310	80	230											
FH270	ASC32-17-360-240	360	240	120												

 SUPER Lock milling chucks or shrink-fit holders can be used.
 SUPER Lock Aufnahmen oder Schrumpffutter können verwendet werden.
 Possono essere utilizzati mandrini a forte serraggio SUPER Lock.

 Aptos para amarrar en portapinzas SUPER Lock.
 Les attachements SUPER Lock peuvent être utilisés.
 Cones hidráulicos de grande aperto e aperto térmico podem ser usados.



AS | Steel Shanks for Modular Mills



Steel Shank											
	ID Code	Item Code	D ₂	M	L	L ₁	ls	dn	dn ₂	d	Type
Without Airhole	FH131	AS10-6.5-74-0	6.5	M6	74	–	74	–	–	10	B
	FH132	AS12-6.5-84-4			84	4	80	11			A
With Airhole	FH133	AS16-8.5-95-15	8.5	M8	95	15	80	14.5	15.5	16	A
	FH134	AS20-10.5-100-20	10.5	M10	100	20		18	–	20	
	FH271	AS25-12.5-115-35	12.5	M12	115	35		23	23	25	
	FH272	AS32-17-110-30	17	M16	110	30		28	28	32	

🇬🇧 SUPER Lock milling chucks can be used.

🇩🇪 SUPER Lock Aufnahmen können verwendet werden.

🇮🇹 Possono essere utilizzati mandrini a forte serraggio SUPER Lock.

🇪🇸 Aptos para amarrar en portapinzas SUPER Lock.

🇫🇷 Les attachements SUPER Lock peuvent être utilisés.

🇵🇹 Cones hidráulicos de grande aperto e aperto térmico podem ser usados.

- 🇬🇧 For further information about modular chucks please see our brochure *Indexable Modular Series No. 328*
- 🇩🇪 Weitere Informationen über modulare Werkzeugaufnahmen finden Sie in unserem Prospekt: *Indexable Modular Series No. 328*
- 🇪🇸 Para obtener más información sobre conos modulares consulte nuestro folleto *Indexable Modular Series No. 328*
- 🇮🇹 Per maggiori informazioni riguardanti la gamma dei mandrini avvitabili consultate il catalogo *Indexable Modular Series No. 328*
- 🇫🇷 Pour de plus amples informations concernant les attachements modulaires, consultez SVP notre brochure *Indexable Modular Series No. 328*
- 🇵🇹 Para mais informações sobre Conos Modulares consulte o nosso folheto *Indexable Modular Series No. 328*

