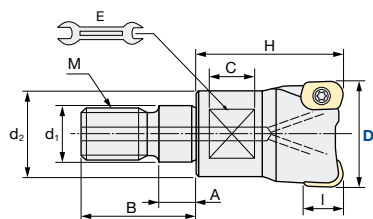
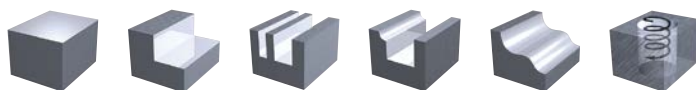


Indexable Milling Tools

APHP | Advanced Pico Hard Precision – Modular Type

Q max	Jet	▽	▽▽	HRC	No. of Teeth
High Efficient	Air Hole	Roughing	Semi-Finishing	62	1-8

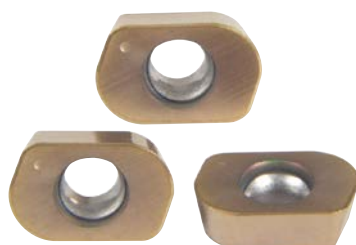
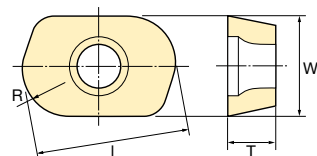


True radius	2.0 mm
Tolerance	D -0.046/-0.096
Torque on screw	0.5 Nm

Modular Type													
ID Code	Item Code	Flutes	D	H	d ₁	M	d ₂	A	B	C	E	I	Inserts
FH182	APHP-1008R-1-M6	1	8	19	6.5	M6	9.4	5.5	14.5	5	7	6.215	EPHW0402TN-2
FH183	APHP-1010R-2-M6	2	10	17	6.5		9.8						
FH184	APHP-1012R-3-M6	3	12	17	6.5								
FH185	APHP-1016R-4-M8	4	16	22	8.5	M8	12.8		17	8	10		
FH186	APHP-1020R-5-M10	5	20	25	10.5	M10	17.8		19	10	15		
FH187	APHP-1025R-6-M12	6	25	25	12.5	M12	20.8	22	17				
FH188	APHP-1032R-8-M16	8	32	27	17	M16	28.8	6	23	12	22		

Wrench Size

INSERTS APHP | Advanced Pico Hard Precision – Modular Type



Micro Grain PVD Coating
Hard Tough

Diamond Coating
for Graphite

ID Code	Item Code	Tolerance Class	Coating			Size (mm)			
			PJP Coated	PJP Coated	D Coated	R	I	T	W
WF210	EPHW0402TN-2 PJP08M	H	PJP08M	PJP15M	D08M	2	6.215	2	4.2
WF211	EPHW0402TN-2 PJP15M								
WF212	EPHW0402TN-2 D08M								

Parts Shape		Clamp Screw		Wrench	
Type	Cutter body	ID-Code	Item-Code	ID-Code	Item-Code
Modular	APHP-10...	ET052	240-140	ET056	104-T6

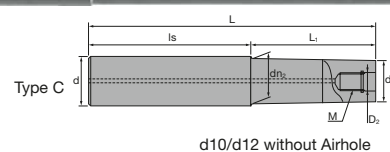
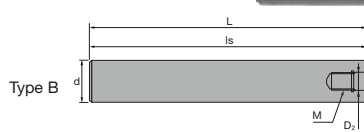
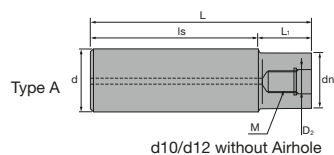
Cutting Conditions | Schnittwerte | Condizioni di taglio | Condiciones de Corte | Conditions de coupe | Valores de corte:

D 8 (Z1) – D 32 (Z8):

Page 4

Indexable Milling Tools

ASC | Carbide Shanks for Modular Mills



	Carbide Shank										
	ID Code	Item Code	D ₂	M	L	L ₁	Is	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				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				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				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				120	100	18.5	19.5		C
	FH263	ASC20-10.5-270-150Z			270	150	120				
	FH264	ASC20-10.5-270-50Z				50	220				
	FH145	ASC25-12.5-145-65	12.5	M12	145	65	80	23	-	25	A
	FH146	ASC25-12.5-265-65			265		200				
	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				195	120				
	FH147	ASC32-17-160-80			17	M16	160				
	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	Is	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	-	12	A
With Airhole	FH133	AS16-8.5-95-15	8.5	M8	95	15	80	14.5	15.5	16	C
	FH134	AS20-10.5-100-20	10.5	M10	100	20		18	-	20	A
	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.

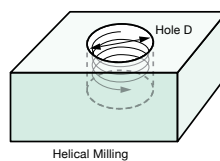
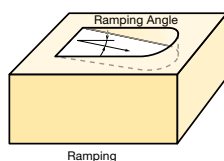
- Aptos para amarrar en portapinzas SUPER Lock.
 Les attachements SUPER Lock peuvent être utilisés.
 Cones hidráulicos de grande aperto e aperto térmico podem ser usados.

- For further information about modular chucks please see our brochure *Indexable Modular Series No. 328.2*
 Weitere Informationen über modulare Werkzeugaufnahmen finden Sie in unserem Prospekt: *Indexable Modular Series No. 328.2*
 Para obtener más información sobre conos modulares consulte nuestro folleto *Indexable Modular Series No. 328.2*
 Per maggiori informazioni riguardanti la gamma dei mandrini avvitali consultate il catalogo *Indexable Modular Series No. 328.2*

- Pour de plus amples informations concernant les attachements modulaires, voyez SVP notre brochure *Indexable Modular Series No. 328.2*
 Para mais informações sobre Conos Modulares consulte o nosso folheto *Indexable Modular Series No. 328.2*



Ramping / Helical Milling



Tool diameter D mm	D 8	D 10	D 12	D 16	D 20	D 25	D 32
Max. ramp angle °	less than 0.5° (max. 1.0°)						
Helical Milling / Hole Dia. (mm)	10-15	13-19	17-23	25-31	33-39	43-49	57-63