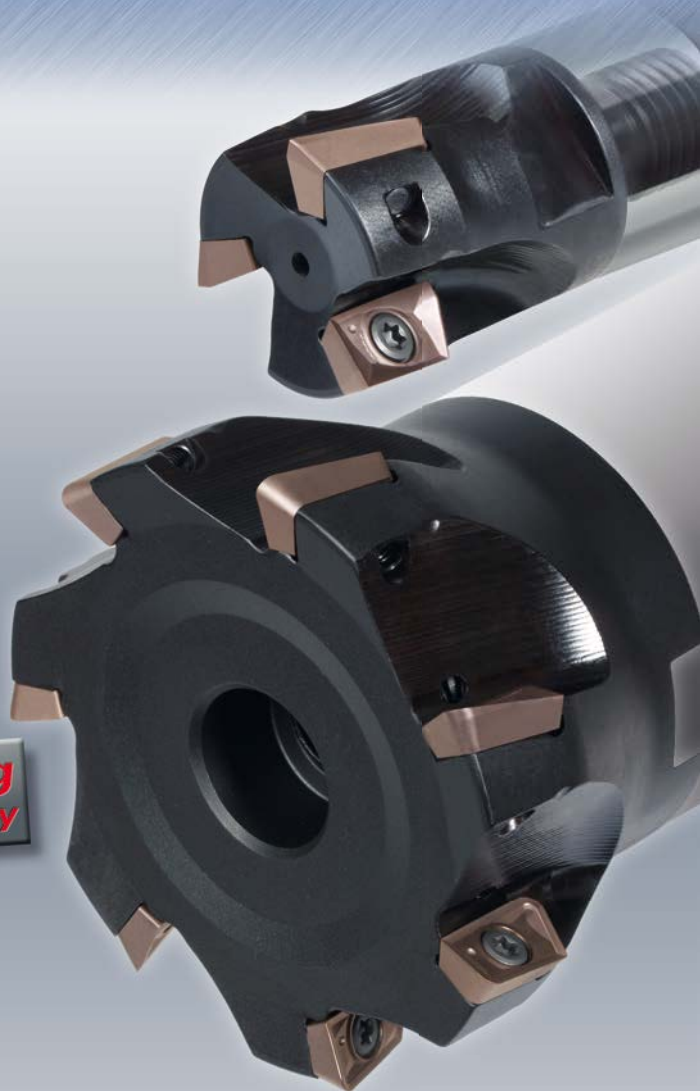


**Indexable
Milling**

AHUM15 High-Feed **Ultra** End Mill Modular Type
AHUB15 High-Feed **Ultra** Bore Type
D 25 – D 250 · High Feed Cutting (HFC)



FW Fine Wall Finishing
Improved wall surface accuracy



Indexable Milling Tools

AHU15 | High Feed Ultra

HIGH-FEED ULTRA END MILL

1. Main cutting forces are reduced by the unique high rake geometry
2. Ramp milling is possible
3. 30% increased rigidity over conventional indexable end-mills due to the utilization of a special steel material and chip pocket geometry
4. Through tool coolant is available
5. New substrate and coating technology has been adopted which allows longer tool-life and the ability to use higher cutting speeds

HIGH-FEED ULTRA END MILL

1. Durch die einzigartige hochpositive Schneidengeometrie des AHU High Feed Ultra wird der Schnittdruck erheblich reduziert
2. Auch Fräsoperationen über Rampe sind möglich
3. Die Verwendung eines speziellen Stahls und einer neu entwickelten Spankammer-Geometrie erhöhte die Steifigkeit des AHU High Feed Ultra gegenüber konventionellen WSP-Haltern um 30%
4. Zusätzlich verfügt der AHU High Feed Ultra über innen liegende Kühlkanäle
5. Durch das neue Substrat der Wendeschneidplatten in Verbindung mit einer neuen Beschichtungstechnologie ermöglicht der AHU High Feed Ultra wesentlich höhere Schnittgeschwindigkeiten bei gleichzeitig längeren Standzeiten

HIGH-FEED ULTRA END MILL

1. Maggiore stabilità e minori forze di taglio grazie alla nuova geometria positiva della spoglia.
2. La fresatura in rampa è possibile
3. 30 % maggiore rigidità a confronto con frese convenzionali grazie alla particolare geometria del collo rompitrucolo e una microfusione di acciaio del corpo fresa.
4. Refrigerante attraverso il corpo fresa disponibile
5. La combinazione dello sviluppo di una micrograna
6. particolare con l'ultimo sviluppo di rivestimenti rende possibile un grande allungamento di vita dell'utensile e l'utilizzo di velocità di taglio più elevate.

HIGH-FEED ULTRA END MILL

1. El esfuerzo de corte se reduce gracias a una exclusiva geometría altamente positiva.
2. Capaz de mecanizar en rampa
3. 30% más de rigidez que herramientas de plaqueta convencionales gracias a la utilización de un acero especial y a la geometría del canal de evacuación de viruta
4. Dispone de canal de refrigeración interior.
5. La combinación de sustratos y recubrimientos de última tecnología permite una mayor vida de herramienta y la capacidad de usar velocidades de corte mayores

HIGH-FEED ULTRA END MILL

1. L'angle de dépouille très prononcé permet à lui seul de réduire la majeure partie des efforts de coupe.
2. L'usinage de rampes est possible (ramping).
3. Rigidité accrue de 30% par rapport aux fraises à plaquettes rapportées due à l'utilisation d'un acier spécial et à la forme des poches à copeaux.
4. Deux versions de corps sont disponibles : avec ou sans arrosage au centre.
5. Nous avons développés une nouvelle nuance et une nouvelle technologie de revêtement générant une durée de vie supérieure et une augmentation significative des vitesses de coupe.



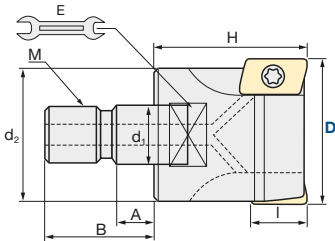
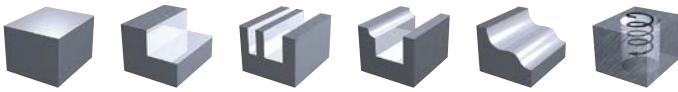
HIGH-FEED ULTRA END MILL

1. Muitas forças de corte são reduzidas devido à sua geometria positiva
2. Fresagem em rampa é possível
3. 30% aumento da rigidez comparado com plaquetas convencionais devido à utilização de um aço especial e geometria e do canal evacuação aparta.
4. Dispõe de refrigeração interna
5. Nova tecnologia de substrato e revestimento de última geração que permite maior vida útil da ferramenta e possibilidade de usar em altas velocidades de corte.

Indexable Milling Tools

AHUM15 | High Feed Ultra Modular Type

Q max High Efficient	Jet Air Hole	▽ Roughing	▽▽ Finishing	HRC 50	No. of Teeth 2 - 4
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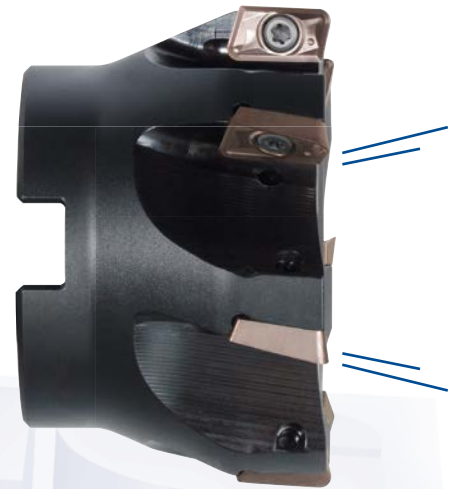
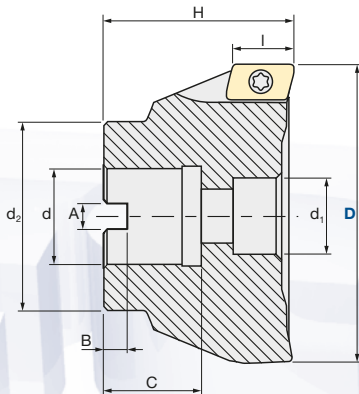
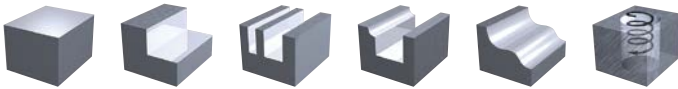
Tolerance	D 0/-0.2
Torque on screw	3 Nm

Modular Type		Flutes	D	H	d ₁	M	d ₂	A	B	E	I	Inserts
ID Code	Item Code											
FH068	AHUM-1525R-2	2	25	35	12.5	12	20.8	6	20	17	14	JDMT1505..R.. JDET-1505..R..
FH066	AHUM-1532R-3-M16	3	32	40	17	16	28.8		22	22		
FH176	AHUM-1535R-3-M16		35						22	22		
FH067	AHUM-1540R-4-M16		40						22	22		
FH177	AHUM-1542R-4-M16	42	22	22								

[ASC | Carbide Shanks for Modular Mills & AS | Steel Shanks for Modular Mills: page 8](#)

AHUB15 | High Feed Ultra Bore Type

Q max High Efficient	Jet Air Hole	▽ Roughing	▽▽ Finishing	HRC 50	No. of Teeth 4 ~ 14
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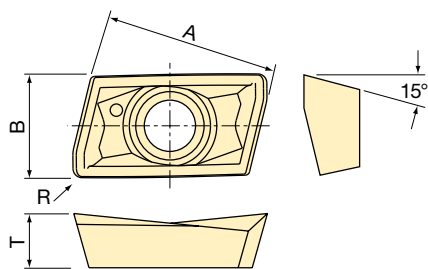


Tolerance	D 0/-0.2
Torque on screw	3 Nm

Face Mill		Flutes	D	H	d	d ₁	d ₂	A	B	C	I	Inserts
ID Code	Item Code											
FH060	AHUB-1540RM-4-16	4	40	45	16	11.5	35	8.4	5.6	18	14	JDMT1505..R.. JDET-1505..R..
FH061	AHUB-1550RM-5-22	5	50	50	22	18	40	10.4	6.3	20		
FH062	AHUB-1550RM-5-27		27		20	45	12.4	7	22			
FH178	AHUB-1552RM-5-22		22		18	40	10.4	6.3	20			
FH063	AHUB-1563RM-6-27	6	63	50	27	20	60	12.4	7	22		
FH179	AHUB-1566RM-6-27	66	27		20	60	12.4	7	22			
FH064	AHUB-1580RM-7-27	7	80		27	20	60	12.4	7	22		
FH065	AHUB-15100RM-8-32	8	100	63	32	26	70	14.4	8	25		
FH211	AHUB-15125RM-8-40		125		40	32.5	90	16.4	9	29		
FH212	AHUB-15160RM-10-40		160		40	56	114	16.4	9	29		
FH213	AHUB-15200RM-12-60	12	200	63	60	60+screw	145	25.7	14	49		
FH214	AHUB-15250RM-14-60	14	250		180	145	180					

Indexable Milling Tools

INSERTS



JDMT-150530-R



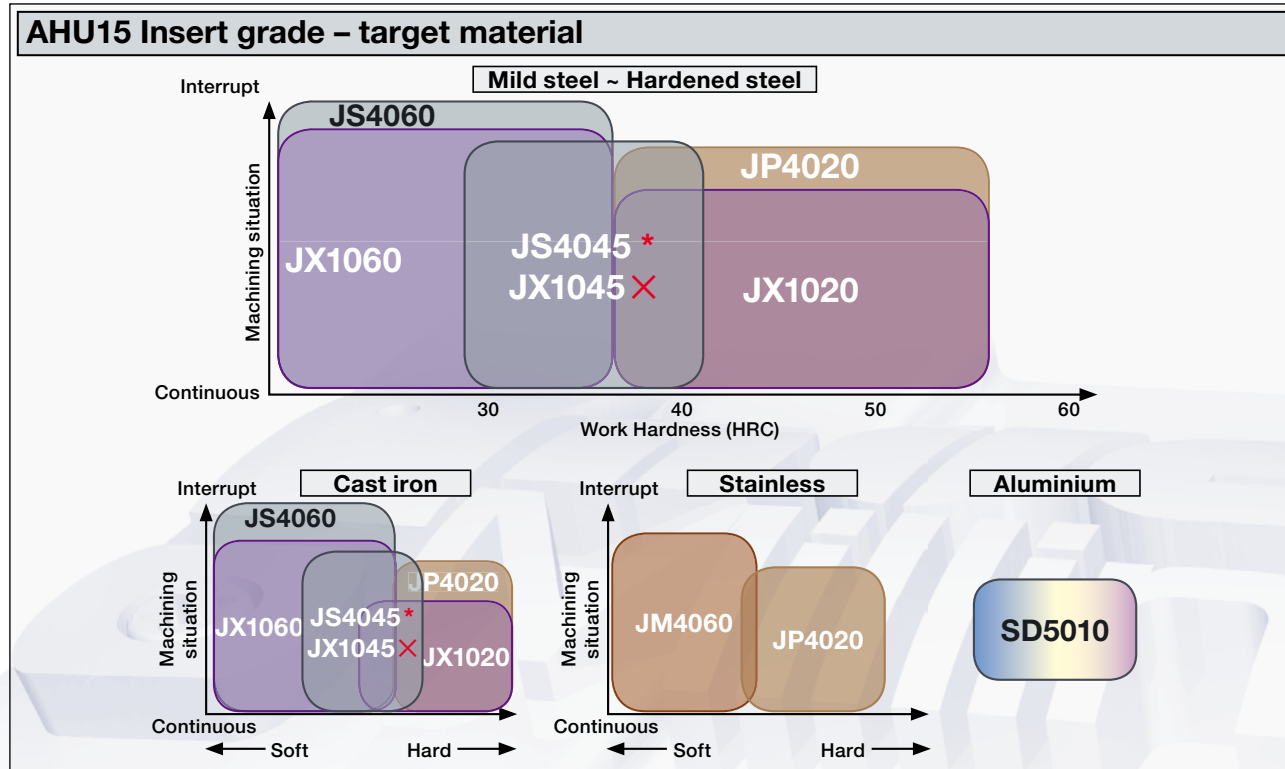
JDMT-150504-R-FW

- In case of bigger corner-R than R2.0, modification of body is needed.
- Für Eckenradien über R2.0 muss der Halter entsprechend modifiziert werden.
- In caso di raggio torico R maggiore di 2 è necessario modificare opportunamente il corpo fresa.
- Si el radio de placa es superior a R2.0, el soporte debe modificarse.
- Si le rayon de tore est supérieur à R2, une modification du porte plaquettes s'avère nécessaire.
- Se o raio da plaquete for maior que R2.0, precisa de mudar o corpo.

Inserts	Corner-R	Grade							Size (mm)			
		SD5010	JM4060	JS4060	JX1020	JS4045	JX1045 X	JX1060	JP4020	A	B	T
Item Code		ID Code										
JDMT-1505-R04-FW	0.4-FW		WF358	WF357		WF367 *	WF182 X		WF356	16	9.12	5
JDMT-1505-R08-FW	0.8-FW		WF361	WF360	WF183	WF368 *	WF184 X	WF185	WF359			
JDMT-1505-R20	2.0		WF364	WF363		WF369 *	WF186 X		WF362			
JDMT-1505-R20-FW	2.0-FW					*	WF199 X					
JDMT-1505-R30	3.0					*	WF187 X					
JDET-1505-R04-FA	0.4-FA	WF365										

* coming soon

SD5010	PVD · For Aluminium	JX1045	X to be replaced by JS4045
JM4060	PVD · For stainless steels & carbon steels < 35HRC	JS4045	PVD · For general steels 30–40HRC
JS4060	PVD · For carbon steels < 35HRC	JX1060	PVD · For carbon steels < 35HRC
JX1020	PVD · For pre-hardened steels 40–55HRC	JP4020	PVD · For pre-hardened steels 40–55 HRC

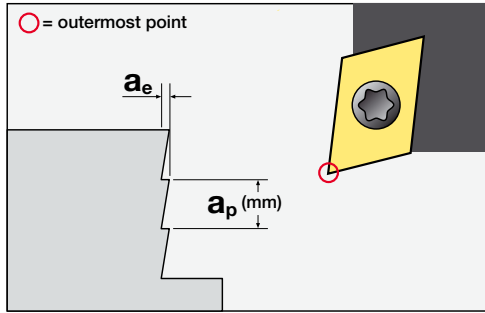


Parts	Clamp Screw		Wrench	
	ID-Code	Item-Code	ID-Code	Item-Code
AHU-M				
AHU-B	ET038	412-141	ET049	105-T15
AHUB-1540RM-4-16	Special screw			
	ID-Code	Item-Code		
	ET050	K06-676		

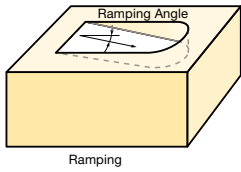
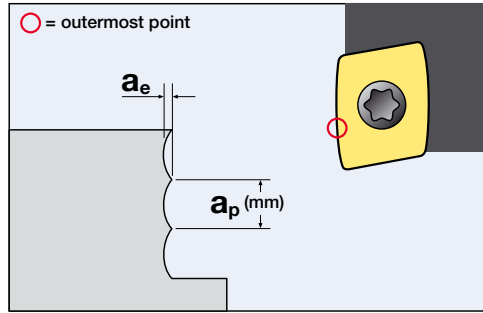
Indexable Milling Tools

AHU15 | High Feed Ultra – improved cutting surface

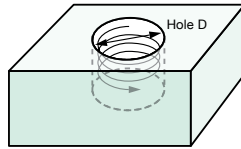
Conventional (JDMT.....R)



Fine Wall type **JDMT.....R-FW**



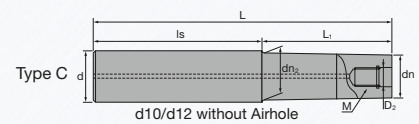
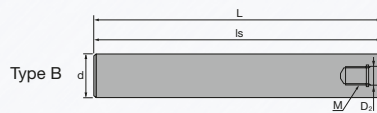
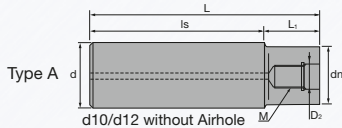
Ramping



Helical Milling

Tool Dia (mm)		32	40	50	63	80	100	125	160	200	250
Maximum Ramping Angle		4°	3°	2°	1.5°	1°	1°	0.8°	0.6°	0.5°	0.4°
Helical Milling - Hole Dia (mm)	Min.	47	64	83	109	143	183	233	303	383	483
	Max.	60	76	96	122	156	196	246	316	396	496

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			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									
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	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			315	195	120								
	FH147	ASC32-17-160-80			17	M16	160					80	80	28	-
	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*



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