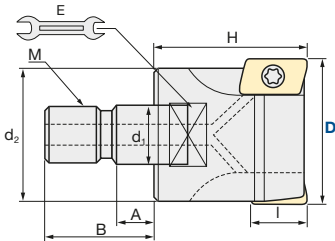
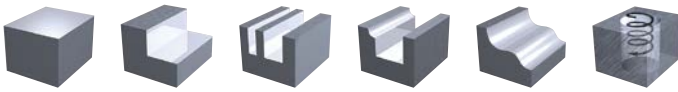


Indexable Milling Tools

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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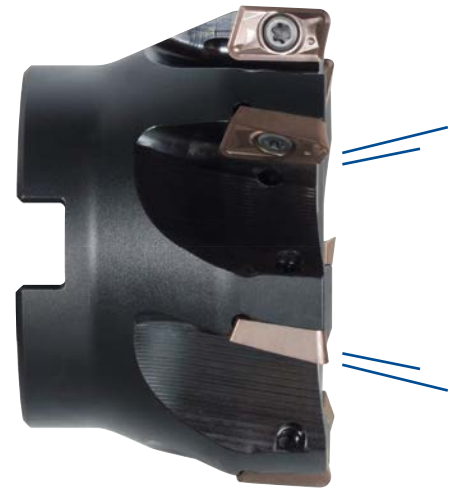
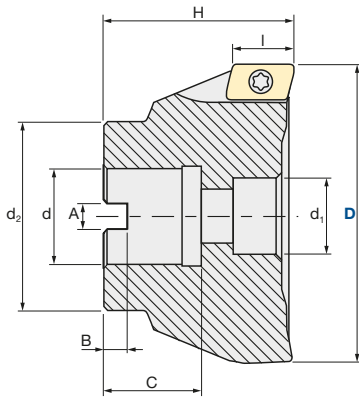
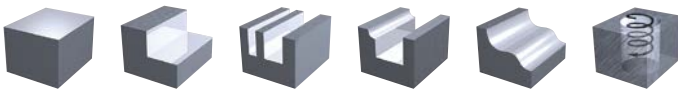
Tolerance Dia.:	Torque on screw:
0/-0.2 mm	3.0 Nm

Modular Type												
ID Code	Item Code	Flutes	D	H	d ₁	M	d ₂	A	B	E	I	Inserts
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									
FH067	AHUM-1540R-4-M16	4	40	45								
FH177	AHUM-1542R-4-M16		42									

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
--------------------------------	------------------------	----------------------	------------------------	------------------	-------------------------------



Tolerance Dia.:	Torque on screw:
0/-0.2 mm	3.0 Nm

Face Mill												
ID Code	Item Code	Flutes	D	H	d	d ₁	d ₂	A	B	C	I	Inserts
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		22	18	40	10.4	6.3	20		
FH062	AHUB-1550RM-5-27		50	27	20	45	12.4	7	22			
FH178	AHUB-1552RM-5-22	6	52	27	20	60	12.4	7	22			
FH063	AHUB-1563RM-6-27		63									
FH179	AHUB-1566RM-6-27	7	66									
FH064	AHUB-1580RM-7-27		80									
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	10	160	56	114	25.7	14	49				
FH213	AHUB-15200RM-12-60	12	200	60	60+screw				145			
FH214	AHUB-15250RM-14-60	14	250			180						

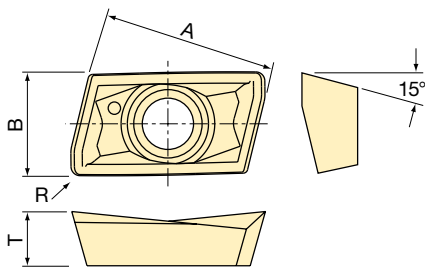
Cutting Conditions | Schnittwerte | Condizioni di taglio | Condiciones de Corte | Conditions de coupe | Valores de corte:

D 25 (Z2) - D 250 (Z14):

Page 6-7

Indexable Milling Tools

INSERTS



JDMT-150530-R



JDMT-150504-R-FW

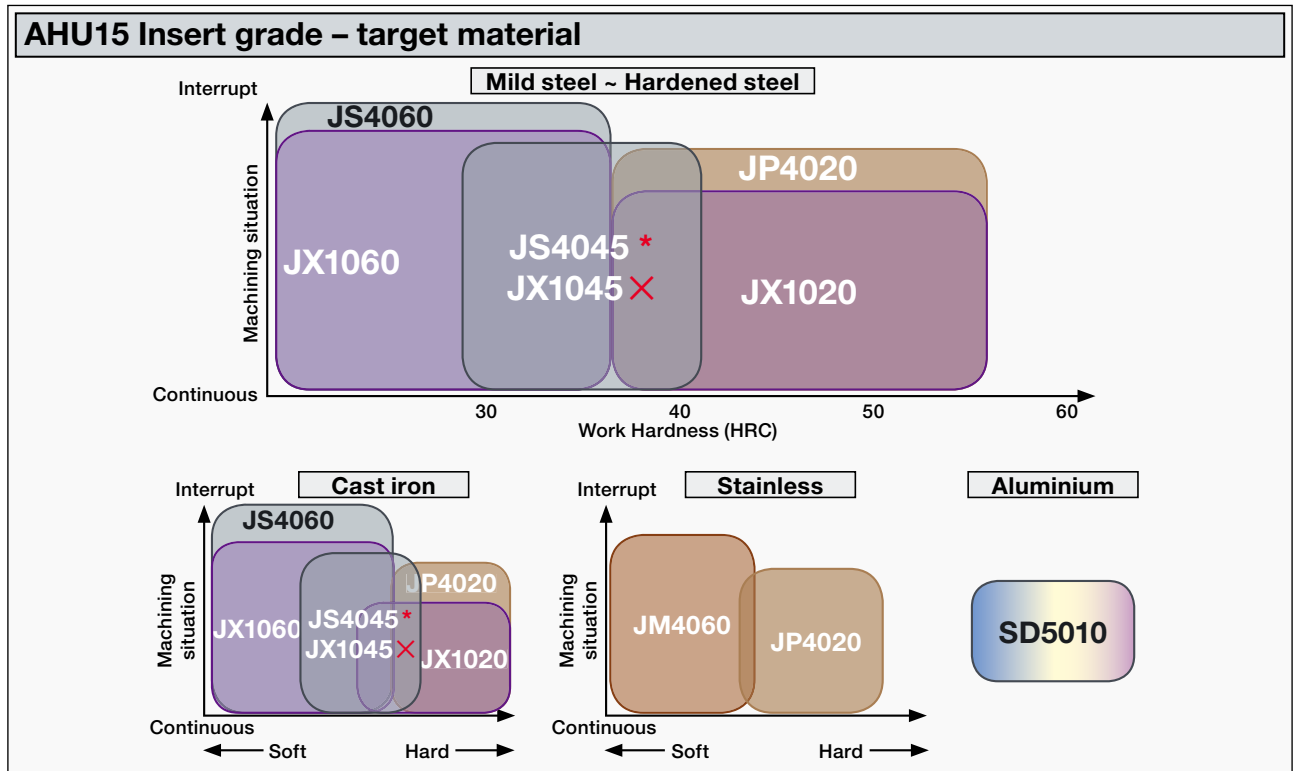
- In case of bigger corner-R than R2.0, modification of body is needed.
- Für Eckenradien über R 2.0 muss der Halter entsprechend modifiziert werden.
- In caso di raggio torico R maggiore di 2 è necessario modificare opportunamente il corpo fresa.
- Si el radio de placa es superior a R 2.0, el soporte debe modificarse.
- Si le rayon de tore est supérieur à R 2, une modification du porte plaquettes s'avère nécessaire.
- Se o raio da plaquete for maior que R 2.0 , precisa de mudar o corpo.

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

- SD5010** PVD · For Aluminium
- JM4060** PVD · For stainless steels & carbon steels < 35HRC
- JX1060** PVD · For carbon steels < 35HRC
- JS4060** PVD · For carbon steels < 35HRC

- JX1045** X to be replaced by JS4045
- JS4045** PVD · For general steels 30–40HRC
- JP4020** PVD · For pre-hardened steels 40–55 HRC
- JX1020** PVD · For pre-hardened steels 40–55HRC

* coming soon

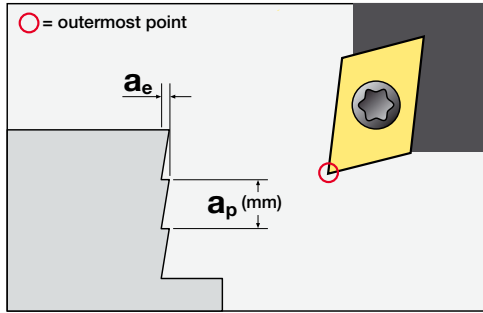


Parts	Clamp Screw		Wrench	
	ID-Code	Item-Code	ID-Code	Item-Code
AHU-M				
AHU-B	ET038	412-141	ET049	105-T15
AHUB-1540RM-4-16	Special screw			
	ID-Code	Item-Code		
	ET050	K06-676		

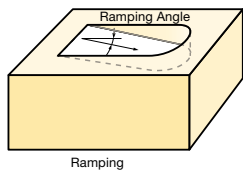
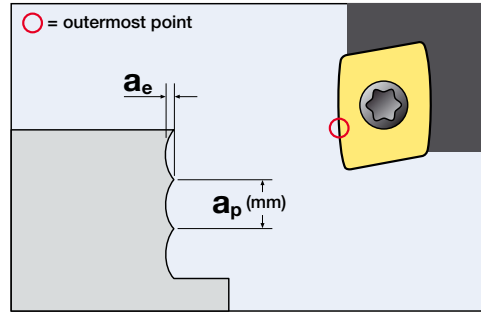
Indexable Milling Tools

AHU15 | High Feed Ultra – improved cutting surface

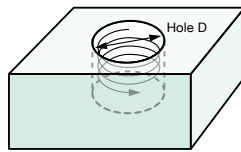
Conventional (JDMT.....R)



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

AHU15 | Recommended Cutting Conditions



- Please choose the best conditions from the table
- To reduce tool breakage index the inserts earlier than the maximum edge life
- Chips can become hot and can cause burns or damage to eyes. Please ensure machine guards are used, and safety specs and gloves worn at all times when carrying out work near to the tool or work-piece
- Please ensure caution when using neat cutting oil due to the risk of fire



- Bitte wählen Sie aus der Tabelle die für Ihre Anwendung am besten geeigneten Bedingungen
- Um die Gefahr des Werkzeugbruchs zu reduzieren, sollten die Wendschneidplatten gewechselt werden, bevor die maximale Standzeit der Schneide erreicht ist
- Die während der Bearbeitung entstehenden Späne können sehr heiß werden und können zu Verbrennungen oder Verletzungen von Haut und Augen führen. Bitte stellen Sie sicher, dass während der Bearbeitung die Maschinentüren geschlossen sind. Bei Arbeiten in der Nähe oder direkt am Werkzeug oder Werkstück, sollten immer eine Schutzbrille und Handschuhe getragen werden
- Erhöhte Vorsicht ist geboten beim Einsatz von purem Schneidöl, da es sich während der Bearbeitung entzünden kann



- Scegliere le condizioni migliori della tabella indicata.
- Per evitare la rottura dell'utensile cambiate l'inserto prima di arrivare all'usura massima.
- I trucioli possono essere molto caldi durante il lavoro. Usate sempre i mezzi di sicurezza (Occhiali, guanti, vetri di sicurezza...) durante il lavoro vicino all'utensile o al materiale.
- Attenzione al rischio di fiamma se durante il lavoro usate refrigerante a base di olio.



- Veillez choisir les conditions de coupes les mieux adaptées grâce au tableau.
- Pour réduire les risques de rupture de l'outil, changez l'insert avant d'avoir atteint la durée de vie maximale de l'arrête de coupe.
- Les copeaux peuvent devenir chauds et causer des lésions oculaires ou des brûlures. Veuillez vous assurer que les protections de la machines sont correctement utilisées, et que des lunettes et des gants soient portés pour tout travail à proximité de l'outil ou de la pièce à usiner.
- Prenez vos précautions lors d'utilisation d'huiles de coupes à cause des risques d'incendie



- Seleccionar las condiciones de la tabla de indicada
- Para reducir el riesgo de rotura de la herramienta hay cambiar la plaquita antes de agotar la vida máxima del filo
- Las virutas pueden saltar candentes y pueden causar quemaduras o daño en los ojos.
- Por favor, asegúrese de cerrar las protecciones de la máquina y de que son utilizados gafas y guantes en todo momento al realizar trabajos cerca de la herramienta o la pieza.
- Por favor, tome precaución al utilizar aceite de corte debido al riesgo de ignición.

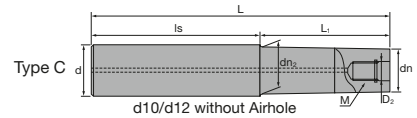
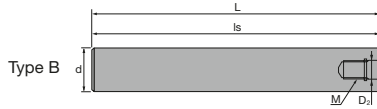
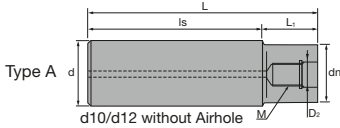


- Escolha as melhores condições da tabela
- Para evitar que a ferramenta se destrua substituir as plaquetas mais cedo que o seu desgaste limite.
- As aparas quentes podem provocar queimaduras ou danos nos olhos, verifique se as proteções da máquina são usadas e todas as especificações de segurança são respeitadas perto da máquina e ferramenta.
- Cuidado ao utilizar óleo de corte puro, devido ao risco de incêndio.

AHU15 | Adjust of Cutting Conditions for Finishing

For finishing please adjust the cutting conditions as follows:	
V_c	+50 %
f_z	0.1 mm
a_p	~ 5mm maximum
a_e	0.3 ~ 0.5 mm

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										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	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	-	32
	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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