

INDEXABLE MILLING

MULTI FUNCTIONAL MILLING

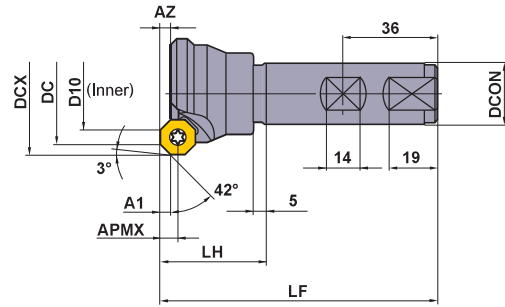


OCTACUT

P	M	K	N	S	H
Steel	Stainless Steel	Cast Iron			Hardened Steel



- 20° positive insert.
- For octagonal and round type inserts.
- Multi-functional machining.



SHANK TYPE

Right hand tool holder only.

Order Number	Stock Number of Teeth R	Dimensions (mm)									* ① ②	* ① ②	① ②
		DCX	DC	D10	LF	DCON	LH	A1	APMX	AZ			
OCTACUT322S32RB	● 2	32	23.6	13.1	125	32	45	2.5	7	3	CS350990T	①TKY10F	
OCTACUT403S32RB	● 3	40	31.7	21.2	125	32	45	2.5	7	3	CS350990T	①TKY10F	①OEMX12T3 ②REMX12T3
OCTACUT504S32RB	● 4	50	41.9	31.4	125	32	45	2.5	7	3	CS350990T	①TKY10F	
OCTACUT634S32RB	● 4	63	54.9	44.5	125	32	45	2.5	7	3	CS350990T	①TKY10F	
OCTACUT503S32R	● 3	50	38.3	24.5	125	32	45	3	9	4	CS501290T	②TKY25T	①OEMX1705 ②REMX1705
OCTACUT634S32R	● 4	63	51.4	37.6	125	32	45	3	9	4	CS501290T	②TKY25T	

* Clamp Torque (N · m) : CS350990T=2.5, CS501290T=7.5

INSERTS

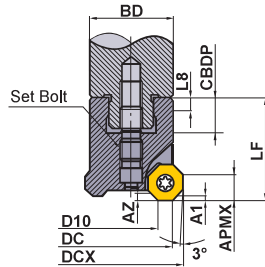
Work Material	P Steel M Stainless Steel K Cast Iron H Hardened Steel	Cutting Conditions (Guide) :										Honing :		
		● : Stable Cutting ● : General Cutting ✖ : Unstable Cutting										E : Round S : Chamfer + Hone T : Chamfer		
Shape	Order Number	Class	Honing	Coated			Cermet		CBN *1		Dimensions (mm)			Geometry
				F7030	VP15TF	NX2525	NX4545	MB730	IC	S	BS			
 *2 JS Breaker	OEMX12T3ETR1	M	T					●	●	12.7	3.97	1.0	 IC S BS	
	OEMX12T3ESR1	M	S	●						12.7	3.97	1.0		
	*2 OEMX12T3EER1-JS	M	E	●						12.7	3.97	1.0	 *2 JS Breaker BS 2.5 *1 CBN Insert	
	OEMX1705ETR1	M	T	●		●				17.0	5.0	1.4		
	OEMX1705ESR1	M	S	●						17.0	5.0	1.4		
*2 JS Breaker	*2 OEMX1705EER1-JS	M	E	●						17.0	5.0	1.4		
	*2 OEMX1705ETR1-JS	M	T	●						17.0	5.0	1.4		
 *2 JS Breaker	*2 REMX12T3EN-JS	M	E	●						12.95	4.17	—	 IC S BS	
	REMX1705SN	M	S	●						17.25	5.2	—		
	*2 REMX1705EN-JS	M	E	●						17.25	5.2	—		*2 JS Breaker

*2 Insert with breaker.

● : Inventory maintained in Japan. (10 inserts in one case) (CBN inserts are available in 1 piece in one case.)

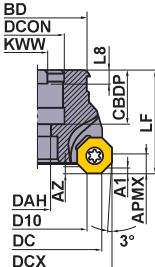


Fig.1



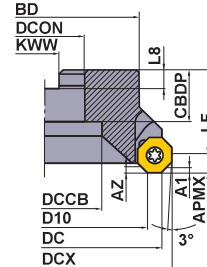
Small Insert Type
ø40
Standard Insert Type
ø50

Fig.2



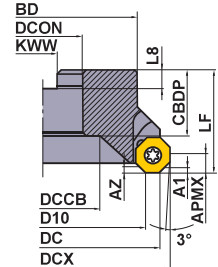
Small Insert Type
ø50
ø63
ø80

Fig.3



Standard Insert Type
ø125

Fig.4



Standard Insert Type
ø160

KAPR :3°
GAMP :+13°
GAMF :-4°

ARBOR TYPE

Right hand tool holder only.

Order Number	Stock R	Number of Teeth	Dimensions (mm)											WT* (kg)	Max. Depth of Cut			Type (Fig.)
			DCX	DC	D10	LF	DCON	CBDP	DAH	DCCB	KWW	BD	L8		A1	APMX	AZ	
OCTACUT0403ARB	●	3	40	31.7	21.2	40	16	18	—	—	8.4	33	5.6	0.4	2.5	7	3	1
OCTACUT0504ARB	●	4	50	41.9	31.4	50	22	20	11	—	10.4	42.5	6.3	0.5	2.5	7	3	2
OCTACUT0634ARB	●	4	63	54.9	44.5	50	22	20	11	—	10.4	44	6.3	0.7	2.5	7	3	2
OCTACUT0805CRB	●	5	80	71.9	61.5	50	25.4	26	13	—	9.5	53	6	1.2	2.5	7	3	2
OCTACUT0503AR	●	3	50	38.3	24.5	50	22	20	—	—	10.4	41	6.3	0.5	3	9	4	1
OCTACUT0634AR	●	4	63	51.4	37.6	50	22	20	11	—	10.4	44	6.3	0.7	3	9	4	2
OCTACUT0805CR	●	5	80	68.4	54.7	50	25.4	26	13	—	9.5	53	6	1.2	3	9	4	2
OCTACUT1006DR	●	6	100	88.5	74.7	63	31.75	32	17	—	12.7	70	8	1.6	3	9	4	2
OCTACUT1257ER	●	7	125	113.5	99.8	63	38.1	35	—	60	15.9	80	10	1.8	3	9	4	3
OCTACUT1608FR	●	8	160	148.5	134.8	63	50.8	38	—	80.9	19.1	120	11	3.6	3	9	4	4

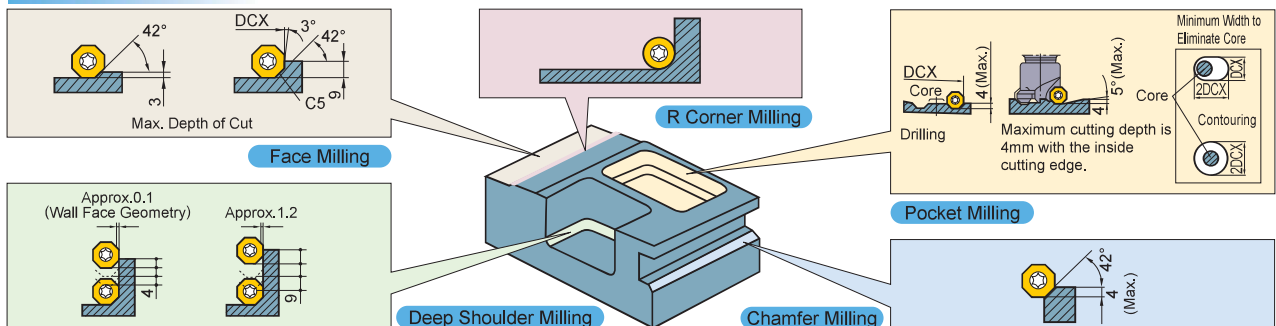
* WT : Tool Weight

SPARE PARTS

Tool Holder Number	Spare Parts					
	Clamp Screw	Wrench	Wrench	Set Bolt	Set Bolt	Insert
OCTACUT0403ARB	CS350990T	TKY10F	—	HDS08030	—	①OEMX12T3 ②REM12T3
OCTACUT0504ARB				—	BOES101	
OCTACUT0634ARB				—	—	
OCTACUT0805CRB				—	—	
OCTACUT0503AR	CS501290T	—	TKY25T	HDS10031	—	①OEMX1705 ②REM1705
OCTACUT0634AR				—	BOES101	
OCTACUT0805CR				—	—	
OCTACUT1006DR				—	HSC16035	
OCTACUT1257ER				—	—	
OCTACUT1608FR	—	—	—	—	—	

* Clamp Torque (N · m) : CS350990T=2.5, CS501290T=7.5

APPLICATION



Above sizes are for OEMX1705.

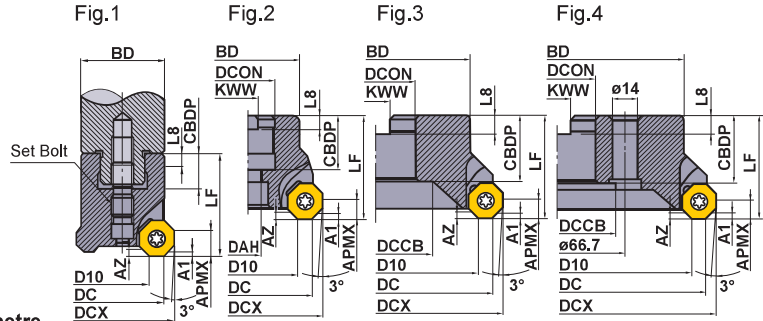
SPARE PARTS > P001
TECHNICAL DATA > Q001

INDEXABLE MILLING



For metric arbor

The cutter bore diameter DCON is indicated in millimetre.



KAPR :3°
GAMP :+13°
GAMF :-4°

ARBOR TYPE

Right hand tool holder only.

Order Number	Stock R	Number of Teeth	Dimensions (mm)											WT* (kg)	Max. Depth of Cut			Type (Fig.)
			DCX	DC	D10	LF	DMM	CBDP	DAH	DCCB	KWW	BD	L8		A1	APMX	AZ	
OCTACUT0403ARB	●	3	40	31.7	21.2	40	16	18	—	—	8.4	33	5.6	0.4	2.5	7	3	1
OCTACUT0504ARB	●	4	50	41.9	31.4	50	22	20	11	—	10.4	42.5	6.3	0.5	2.5	7	3	2
OCTACUT0634ARB	●	4	63	54.9	44.5	50	22	20	11	—	10.4	44	6.3	0.7	2.5	7	3	2
OCTACUT0805ARB	●	5	80	71.9	61.5	50	27	23	13	—	12.4	53	7	1.2	2.5	7	3	2
OCTACUT0503AR	●	3	50	38.3	24.5	50	22	20	—	—	10.4	41	6.3	0.5	3	9	4	1
OCTACUT0634AR	●	4	63	51.4	37.6	50	22	20	11	—	10.4	44	6.3	0.7	3	9	4	2
OCTACUT0805AR	●	5	80	68.4	54.7	50	27	23	13	—	12.4	53	7	1.2	3	9	4	2
OCTACUT1006AR	●	6	100	88.5	74.7	50	32	32	45	—	14.4	70	8	1.6	3	9	4	2
OCTACUT1257BR	●	7	125	113.5	99.8	50	40	32	—	56	16.4	80	9	1.8	3	9	4	3
OCTACUT1608CR	●	8	160	148.5	134.8	50	40	29	—	88.7	16.4	120	9	3.6	3	9	4	4

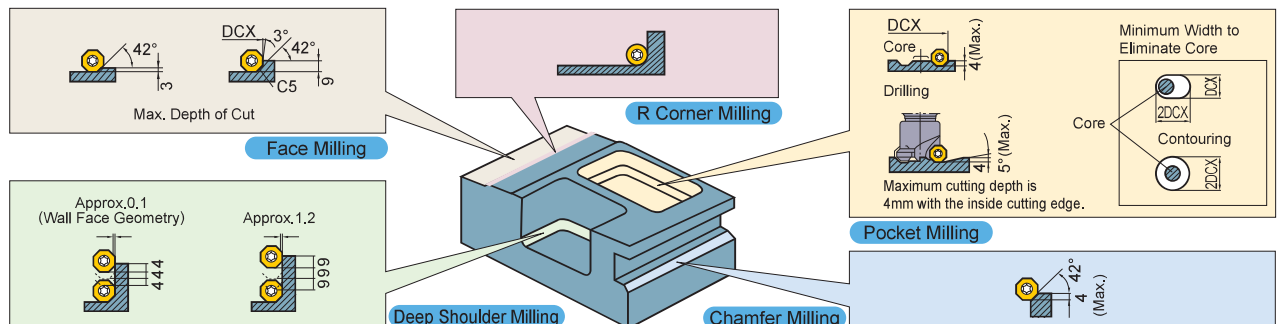
* WT : Tool Weight

SPARE PARTS

Tool Holder Number	Spare Parts					
	Clamp Screw	Wrench	Wrench	Set Bolt	Set Bolt	Insert
OCTACUT0403ARB	CS350990T	TKY10F	—	HDS08030	—	①OEMX12T3○○○○○ ②REMX12T3○○○○○
OCTACUT0504ARB				—	BOES101	
OCTACUT0634ARB				—	—	
OCTACUT0805ARB				—	—	
OCTACUT0503AR	CS501290T	—	TKY25T	HDS10031	—	①OEMX1705○○○○○ ②REMX1705○○○○○
OCTACUT0634AR				—	BOES101	
OCTACUT0805AR				—	—	
OCTACUT1608CR				—	—	

* Clamp Torque (N · m) : CS350990T=2.5, CS501290T=7.5

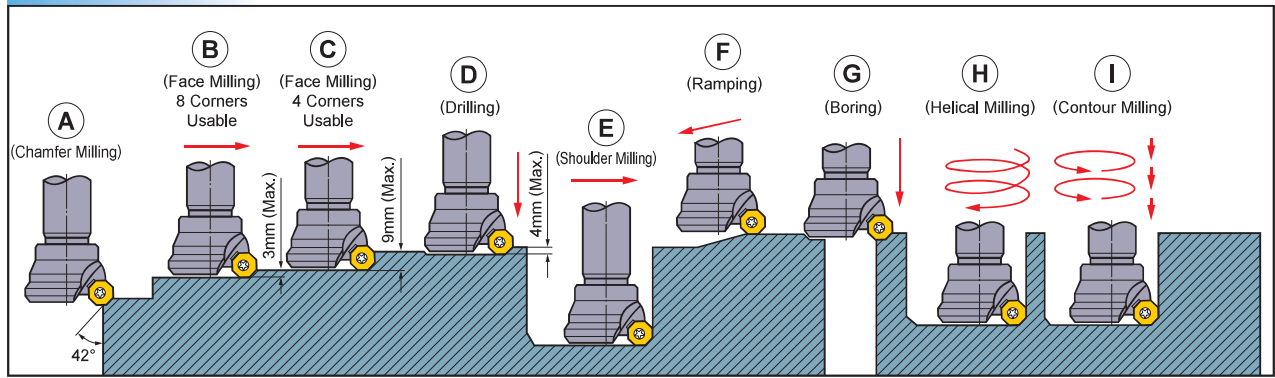
APPLICATION



Above sizes are for OEMX1705○○○○○.

● : Inventory maintained in Japan.

RECOMMENDED CUTTING CONDITIONS



This list of recommended cutting conditions is for cutters with diameter $\leq \phi 80$. For cutters with diameter $> \phi 80$ increase cutting speed by 10%. Above sizes are for OEMX1705.

Work Material	Hardness	Grade	Cutting Speed (m/min)	Feed per Tooth (mm/t.)			
				Cutting Mode			
P Mild Steel	$\leq 180\text{HB}$	F7030	240 (180—300)	A	0.2 (0.15—0.25)		
		VP15TF	180 (100—250)	B	0.2 (0.15—0.25)		
	Carbon Steel Alloy Steel	180—280HB	F7030	200 (140—240)	C,E,F	0.2 (0.15—0.25)	
			VP15TF	180 (100—250)	D,G,H,I	0.075 (0.05—0.1)	
		280—380HB	F7030	150 (100—170)	A	0.2 (0.15—0.25)	
			VP15TF	120 (80—160)	B	0.2 (0.15—0.25)	
	Pre-Hardened Steel	35—45HRC	F7030	130 (90—160)	C,E,F	0.2 (0.15—0.25)	
			VP15TF	120 (80—160)	D,G,H,I	0.075 (0.05—0.1)	
	High Alloy Steel	$\leq 300\text{HB}$	F7030	150 (100—170)	A	0.2 (0.15—0.25)	
			VP15TF	120 (80—160)	B	0.2 (0.15—0.25)	
	M Stainless Steel	$\leq 270\text{HB}$	F7030	200 (140—240)	C,E,F	0.2 (0.15—0.25)	
			VP15TF	150 (100—200)	D,G,H,I	0.075 (0.05—0.1)	
K Gray Cast Iron		Tensile Strength $\leq 350\text{MPa}$	VP15TF	160 (100—220)	A	0.3 (0.25—0.35)	
					B	0.25 (0.2—0.3)	
		Ductile Cast Iron	Tensile Strength 360—500MPa	VP15TF	160 (100—220)	C,E,F	0.1 (0.05—0.15)
						D,G,H,I	0.05 (0.025—0.075)
Ductile Cast Iron	Tensile Strength 500—800MPa	VP15TF	140 (90—190)	A	0.25 (0.2—0.3)		
				B	0.2 (0.15—0.25)		
H Hardened Steel	45—60HRC	VP15TF	80 (50—100)	C,E,F	0.1 (0.05—0.15)		
				D,G,H,I	0.05 (0.025—0.075)		
	MB730	150 (100—200)	B (D.O.C 0.1—0.3mm)	0.15 (0.1—0.2)	A	0.15 (0.1—0.2)	
					B	0.15 (0.1—0.2)	
					C,E,F	0.1 (0.05—0.12)	
					D,G,H,I	0.05 (0.025—0.06)	

● Revolution (min^{-1}) = $(1000 \times \text{Cutting Speed}) \div (3.14 \times \text{DC})$

● Table Feed (mm/min) = Feed per Tooth \times Number of Teeth \times Cutter Revolution

(Note 1) This list of recommended cutting conditions is for flank wear of 0.3mm in 30 min. cutting time.

(Note 2) More than 50mm shank length should be clamped in the milling chuck.

(Note 3) Use step cutting when drilling (0.5 mm steps are recommended).

(Note 4) When chattering occurs, reduce cutting speed by 20—30 %.

(Note 5) When using round inserts, make sure that the flat portion of the flank surface is secure against the insert seat wall.