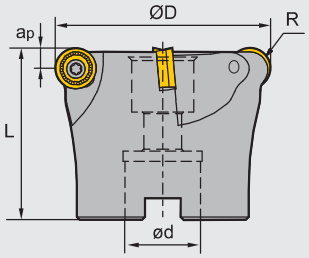
Face milling tools

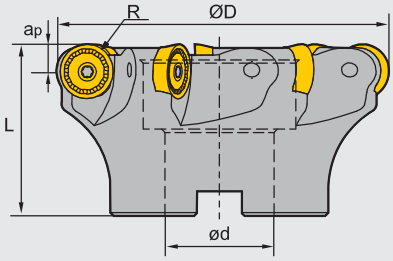
FMR02

P M K S

A type of mounting



B type of mounting



Specification of tools

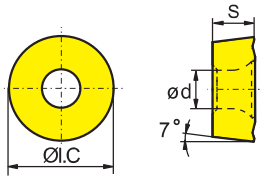
Type		Dimensions(inch)						
		ØD	R	ød	L	$a_p$max	Z (Number of teeth)	Interface form
FMR02	-2.50″-A0.75″ -RC12-04	2.50	0.236	0.75	2.00	0.236	4	A
	-3.00″-B1.00″ -RC16-05	3.00	0.315	1.00	2.00	0.315	5	B
	-4.00″-B1.25″ -RC16-06	4.00	0.315	1.25	2.50	0.315	6	B
	-5.00″-B1.50″ -RC20-07	5.00	0.394	1.50	2.50	0.394	7	B
	-6.00″-B1.50″ -RC20-08	6.00	0.394	1.50	2.50	0.394	8	B

D

Spare parts

Diameter ØD	Insert specifrication	Insert screw	Wrench	Sketch of installation
				
Ø2.50″	RC□□1204MO-□□	I60M3.5×10	WT15IS	
Ø3.00″~Ø4.00″	RC□□1606MO-□□	I60M5×13	WT20IT	
Ø5.00″~Ø6.00″	RC□□2006MO-□□	I43M6×16	WT25IT	

Selection of inserts



Insert shape	Type	Dimensions(inch)			Coated grade															Cermet		Cemented carbide				
		ØI.C	S	ød	YBC302	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YBG212	YB9320	YBG302	YBG152	YBG252	YBS203	YBS303	YNG151	YNG151C	YC30S	YD051	YD101	YD201
	RCKT1204MO-DM	0.472	0.187	0.157		●		●	○			●	●			●										
	RCKT1606MO-DM	0.630	0.250	0.219												●										
	RCKT1204MO-DR	0.472	0.187	0.157		○		○				○	●													
	RCKT1606MO-DR	0.630	0.250	0.219				●				●	●													
	RCKT2006MO-DR	0.787	0.250	0.258				●				○	●			●										
	RCKT1204MO-ER	0.472	0.187	0.157			●																			
	RCKT1606MO-ER	0.630	0.250	0.219			●																			
	RCKT2006MO-ER	0.787	0.250	0.258			●																			
	RCKT1204MO-NM	0.472	0.187	0.157			●	●						●	●				○	○						
	RCKT1606MO-NM	0.630	0.250	0.219										●	●				○	○						
	RCKT2006MO-NM	0.787	0.250	0.258				●							●	●			○	○						

● Always stock available ○ Produce according to order

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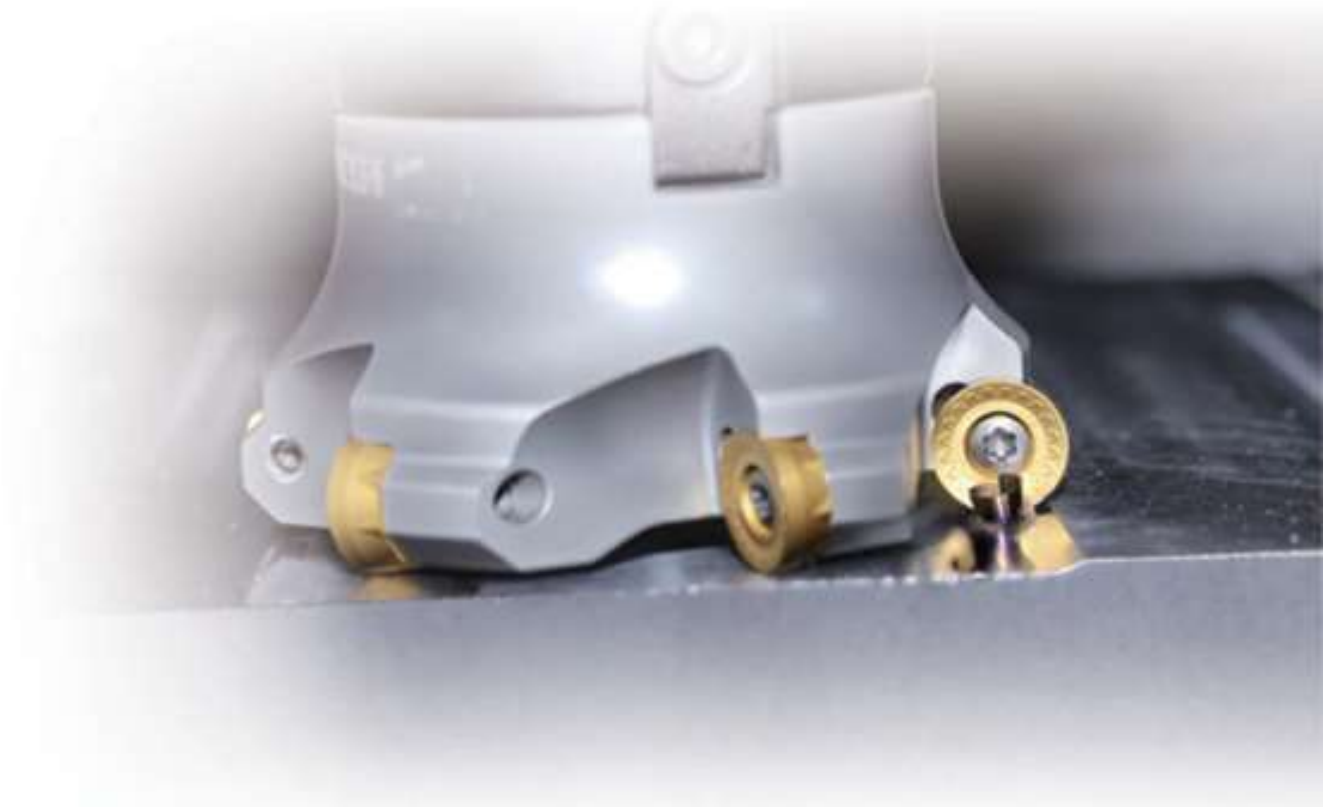

Recommended cutting parameters

Workpiece material		Hardness HB	Insert grade	Cutting parameters			
				V(SFPM)	f(IPT)		
					-DM	-DR	-ER
P	Low-carbon steel、Soft steel	≤180	YBM251	900(700-1200)	0.008(0.004-0.02)	0.012(0.008-0.032)	
			YBM351 YBG302	700(600-1000)	0.01(0.004-0.02)	0.012(0.008-0.032)	
			YBG202 YB9320	900(650-1200)	0.008(0.004-0.02)	0.012(0.008-0.032)	
	High-carbon steel、Alloy steel	180-280	YBM251	800(650-1000)	0.008(0.004-0.02)	0.012(0.008-0.032)	
			YBM351 YBG302	650(500-1000)	0.01(0.004-0.02)	0.012(0.008-0.032)	
			YBG202 YB9320	800(600-1200)	0.008(0.004-0.02)	0.012(0.008-0.032)	
	Alloy tool steel	280-350	YBM251	700(600-1000)	0.008(0.004-0.016)	0.012(0.008-0.032)	
			YBM351 YBG302	600(500-800)	0.008(0.004-0.02)	0.012(0.008-0.032)	
			YBG202 YB9320	700(550-1100)	0.008(0.004-0.016)	0.012(0.008-0.024)	
M	Stainless steel	≤270	YBM251	500(400-800)	0.008(0.004-0.016)	0.012(0.008-0.024)	
			YBM253	500(300-800)	0.008(0.004-0.016)	0.012(0.008-0.024)	0.012(0.008-0.024)
			YBM351	500(300-700)	0.008(0.004-0.016)	0.012(0.008-0.024)	
			YBG202 YBG205 YB9320	500(350-900)	0.008(0.004-0.016)	0.012(0.008-0.024)	
K	Cast iron	180-250	YBG302	700(400-1000)	0.008(0.004-0.02)	0.012(0.008-0.032)	
S	High-temperature alloy	≤400			-NM		
			YBG212	150(60-200)	0.004(0.004-0.008)		
			YBS203 YBS303	300(200-400)	0.006(0.004-0.012)		

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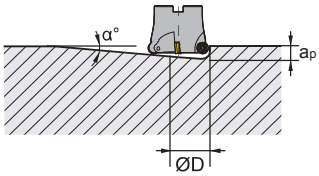
Ramp milling, helical interpolation milling

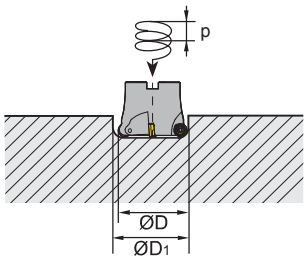
● Ramp milling



$$L_m = \frac{a_p}{\tan\alpha}$$

α:Plunge angle

● Helical interpolation milling



$$P = \tan_{\alpha} \times \pi \times D_1$$

α:Helix angle

Insert	Diameter ØD(in)	Max.cutting depth ap(in)	Max.cutting depth α°	Min.length L_m(in)	Min.diameter $ØD_1$(in)	Max.diameter (in)
RCKT12**	2.50"	0.236	5.1	2.657	4.488	0.236
RCKT16**	3.00"	0.315	5.6	3.190	5.669	0.315
	4.00"	0.315	4.1	4.362	7.244	0.315
RCKT20**	5.00"	0.394	4.2	5.362	9.055	0.394
	6.00"	0.394	3.0	7.512	11.810	0.394

Reduce the feed rate when plunging and circular milling.
"Attention"—drilling can form long chips.

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