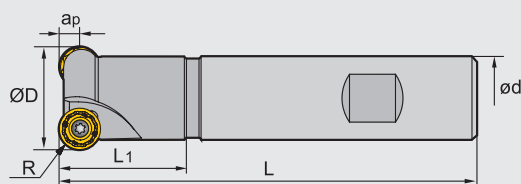
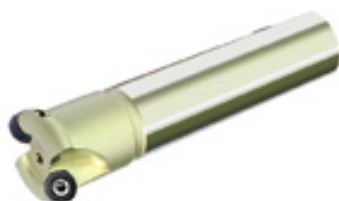




Face milling tools


FMR01
P M K S


Specification of tools

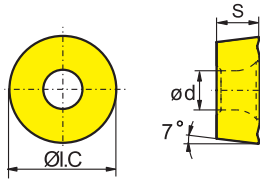
Type		Dimensions(inch)						Mounting type
		ØD	R	ød	L	apmax	Z (Number of teeth)	
FMR01	-1.00"-XP0.75" -RC10-02	1.00	0.197	0.75	1.75	4.00	0.197	2
	-1.25"-XP1.00" -RC10-02	1.25	0.197	1.00	2.50	4.75	0.197	2
	-1.50"-XP1.25" -RC12-03	1.50	0.236	1.25	2.50	4.75	0.236	3
	-2.00"-XP1.25" -RC12-03	2.00	0.236	1.25	2.50	4.75	0.236	3

D

Spare parts

Diameter ØD	Insert specifiration	Insert screw	Wrench	Sketch of installation
Ø1.00"~Ø1.25"	RCKT10T3MO-DM	I60M4×8.4	WT15S	
Ø1.50"~Ø2.00"	RCKT1204MO-□□	I60M3.5×10	WT15S	

Selection of inserts



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel	YBC302	YBM253	YBD152	YBD203	YBD252	YBG105	YBG202	YBG205	YBG205H	YB9320	YBG302	YBS203	YBS303	YNG151	YNG151C	YD101	YD201
P Steel	😊	😊	😊	😊	😊							😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊							😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron	😊	😊	😊	😊	😊							😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials	😊	😊	😊	😊	😊							😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
S Heat-resistant steel	😊	😊	😊	😊	😊							😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

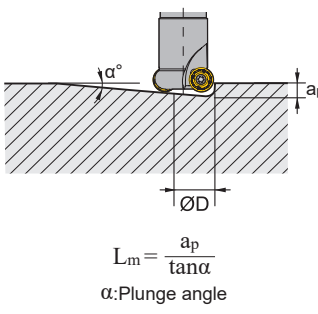
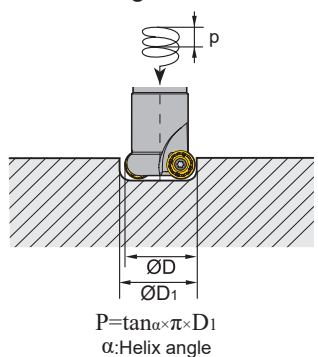
Insert shape	Type	Dimensions(inch)			Coated grade												Cermet		Cemented carbide		
		ØI.C	S	ød	YBC302	YBM253	YBD152	YBD203	YBD252	YBG105	YBG202	YBG205	YBG205H	YB9320	YBG302	YBS203	YBS303	YNG151	YNG151C	YD101	YD201
	RCKT10T3MO-DM	0.394	0.156	0.173							●	●									
	RCKT1204MO-DM	0.472	0.187	0.157			○				●	●			●						
	RCKT1204MO-DR	0.472	0.187	0.157								●	●								
	RCKT1204MO-ER	0.472	0.187	0.157		○															
	RCKT1204MO-NM	0.472	0.187	0.157		○							●			○	○				

● Recommended grade ○ Produce according to order

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	YBG205H YBM251	900(700-1100)	0.008(0.004-0.02)	0.012(0.008-0.032)	
			YBM351	700(600-1000)	0.01(0.004-0.02)	0.012(0.008-0.032)	
			YBG302	900(650-1200)	0.008(0.004-0.02)	0.012(0.008-0.032)	
	High-carbon steel, Alloy steel	180-280	YBG205H YBG202	800(650-1000)	0.008(0.004-0.02)	0.012(0.008-0.032)	
			YBM251 YBG302	650(500-900)	0.01(0.004-0.02)	0.012(0.008-0.032)	
			YBM351	800(600-1100)	0.008(0.004-0.02)	0.012(0.008-0.032)	
	Alloy tool steel	280-350	YBC302	700(600-1000)	0.008(0.004-0.016)	0.012(0.008-0.032)	
			YBG205H YBG202	600(500-800)	0.008(0.004-0.02)	0.012(0.008-0.032)	
			YBM251 YBC301	700(550-1100)	0.008(0.004-0.016)	0.012(0.008-0.032)	
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)
			YBG351	500(300-700)	0.008(0.004-0.016)	0.012(0.008-0.024)	
			YBG202 YBG205 YBG205H	500(360-900)	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		
			YBS203 YBS303 YBG205H	300(200-400)	0.006(0.004-0.012)		

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 a_p (in)	Max.cutting depth α°	Min.length L_m (in)	Min.diameter ØD ₁ (in)	Max.diameter (in)
	RCKT10**	1.00"	0.197	14.4	0.768	1.575	0.197
		1.25"	0.197	8.4	1.339	2.126	0.197
	RCKT12**	1.50"	0.236	10.3	1.307	2.677	0.236
		2.00"	0.236	7.1	1.890	3.465	0.236

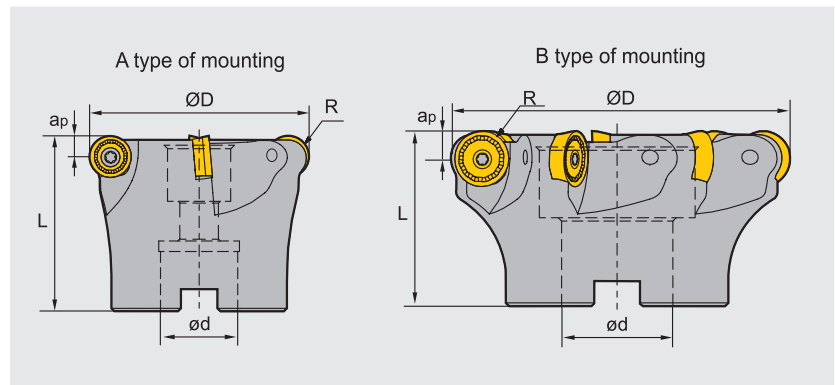
Reduce the feed rate when plunging and circular milling.
 "Attention"—drilling can form long chips.

Face milling tools



FMR02

P M K S



Specification of tools

Type		Dimensions(inch)						
		ØD	R	ød	L	apmax	Z (Number of teeth)	Mounting type
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

Spare parts

Diameter ØD	Insert specification	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	

	Good working conditions	General working conditions	Reverse working conditions
P Steel	😊😊	😞😞😞😞😞😞	😊😊
M Stainless steel	😞😞	😞😞😞😞😞	😞😞😊😊
K Cast iron		😞😞😞😞	😞
N Ferrite materials			😞😞
S Heat-resistant steel		😊😞😞😞😞😞	😞😞

Insert shape	Type	Dimensions(inch)			Coated grade											Cermet	Cemented carbide				
		ØI.C	S	ød	YBC302	YBM253	YBD152	YBD203	YBD252	YBG105	YBG202	YBG205	YBG205H	YB9320	YBG302	YBS203	YBS303	YNG151	YNG151C	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								●	●	●	○	○					

● Recommended grade ○ Produce according to order



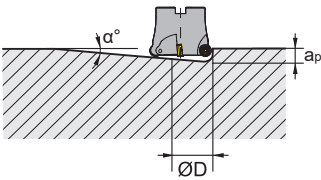


Recommended cutting parameters

Workpiece material		Hardness HB	Insert grade	Cutting parameters			
				V(SFPM)	f(IPT)		
					-DM	-DR	-ER
P	Low-carbon steel, Soft steel	≤180	YBM253 YBC302	900(700-1200)	0.008(0.004-0.02)	0.012(0.008-0.032)	
			YBM253 YBG302	700(600-1000)	0.01(0.004-0.02)	0.012(0.008-0.032)	
			YBG202 YB9320 YBG205 YBG205H	900(650-1200)	0.008(0.004-0.02)	0.012(0.008-0.032)	
	High-carbon steel, Alloy steel	180-280	YBM253 YBC302	800(650-1000)	0.008(0.004-0.02)	0.012(0.008-0.032)	
			YBM253 YBG302	650(500-1000)	0.01(0.004-0.02)	0.012(0.008-0.032)	
			YBG202 YB9320 YBG205 YBG205H	800(600-1200)	0.008(0.004-0.02)	0.012(0.008-0.032)	
	Alloy tool steel	280-350	YBM253 YBC302	700(600-1000)	0.008(0.004-0.016)	0.012(0.008-0.032)	
			YBM253 YBG302	600(500-800)	0.008(0.004-0.02)	0.012(0.008-0.032)	
			YBG202 YB9320 YBG205 YBG205H	700(550-1100)	0.008(0.004-0.016)	0.012(0.008-0.024)	
M	Stainless steel	≤HB270	YBM253	500(300-800)	0.008(0.004-0.016)	0.012(0.008-0.024)	0.012(0.008-0.024)
			YBG202 YBG205 YB9320 YBG205H	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 YBG205H	150(60-200)	0.004(0.004-0.008)		
			YBS203 YBS303	300(200-400)	0.006(0.004-0.012)		

Ramp milling, helical interpolation milling

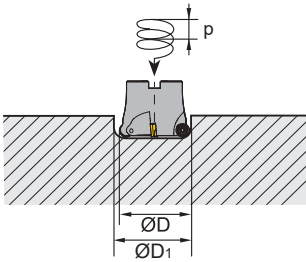
● Ramp milling



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

α : Plunge angle

● Helical interpolation milling



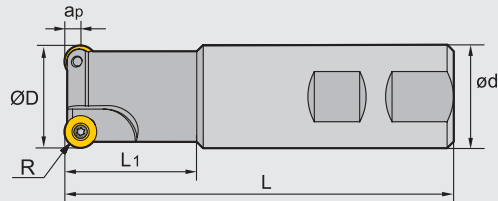
$$P = \tan \alpha \times \pi \times D_1$$

α : Helix angle

Insert	Diameter ØD(in)	Max.cutting depth ap(in)	Max.cutting depth α°	Min.length Lm(in)	Min.diameter ØD1(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.

Face milling tools

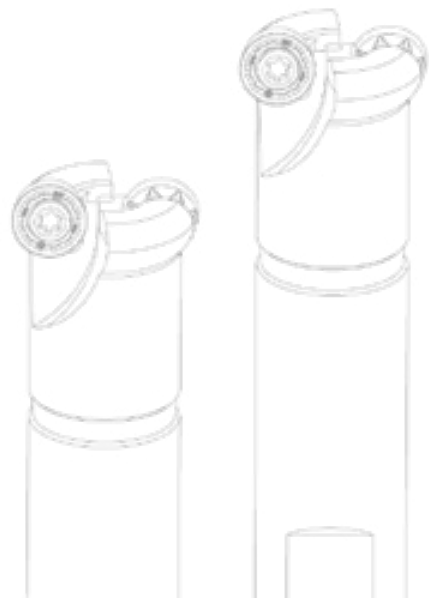

FMR03
P M K S


Specification of tools

Type		Dimensions(inch)						
		ØD	R	ød	L ₁	L	a _{pmax}	Z (Number of teeth)
FMR03	-1.00"-XP1.00" -RD08-02	1.00	0.157	1.00	1.75	4.00	0.157	2
	-1.25"-XP1.25" -RD10-02	1.25	0.197	1.25	2.50	4.75	0.197	2
	-1.50"-XP1.25" -RD12-03	1.50	0.236	1.25	2.50	4.75	0.236	3
	-2.00"-XP1.25" -RD12-03	2.00	0.236	1.25	2.50	4.75	0.236	3

Spare parts

Diameter ØD	Insert specification	Insert screw	Wrench	Sketch of installation
				
Ø1.00"	RDKW0803MO	I60M3×7	WT09IP	
Ø1.25"	RDKW10T3MO	I60M4×10	WT15IP	
Ø1.50"~Ø2.00"	RDKW1204MO			



[illegible][illegible]

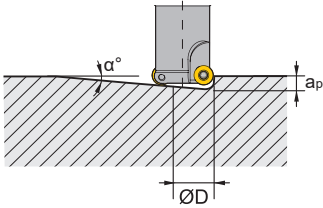
Recommended cutting parameters

Recommended cutting parameters					
Workpiece material		Hardness HB	Insert grade	Cutting parameters	
				V(SFPM)	f(IPT)
P	Low-carbon steel, Soft steel	≤180	YBM253 YBC302	900(700-1200)	0.008(0.003-0.018)
			YBM253 YBG302	700(600-1000)	0.01(0.006-0.018)
			YBG202 YBG205	900(650-1200)	0.008(0.004-0.018)
	High-carbon steel, Alloy steel	180-280	YBM253 YBC302	800(650-1000)	0.008(0.003-0.018)
			YBM253 YBG302	650(500-1000)	0.01(0.006-0.018)
			YBG202 YBG205	800(600-1200)	0.008(0.004-0.018)
	Alloy tool steel	280-350	YBM253 YBC302	700(600-1000)	0.008(0.003-0.018)
			YBM253 YBG302	600(500-800)	0.01(0.006-0.018)
			YBG202 YBG205	700(550-1100)	0.008(0.003-0.018)
M	Stainless steel	≤270	YBM253 YBG302	500(400-800)	0.008(0.004-0.018)
			YBM253	500(300-700)	0.01(0.004-0.018)
			YBG202 YBG205	500(350-900)	0.008(0.004-0.018)
K	Cast iron	180-250	YBG302	700(400-1000)	0.008(0.004-0.018)
S	High-temperature alloy	≤400	YBS203 YBS303	300(200-400)	0.006(0.004-0.012)



Ramp milling, helical interpolation milling

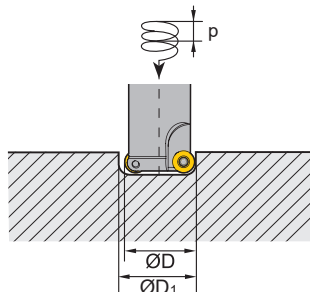
● Ramp milling



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

α : Plunge angle

● Helical interpolation milling



$$P = \tan \alpha \times \pi \times D_1$$

α : Helix angle

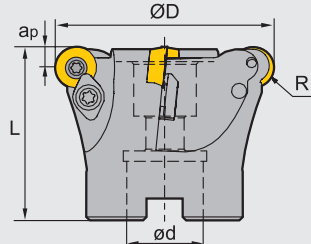
Insert	Diameter ØD(in)	Max.cutting depth ap(in)	Max.cutting depth α°	Min.length L _m (in)	Min.diameter ØD ₁ (in)	Max.diameter (in)
RD**08**	1.00"	0.157	8.8	1.016	1.634	0.157
RD**10**	1.25"	0.197	8.4	1.340	2.126	0.197
RD**12**	1.50"	0.236	10.3	1.300	2.677	0.236
	2.00"	0.236	7.1	1.890	3.465	0.236

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

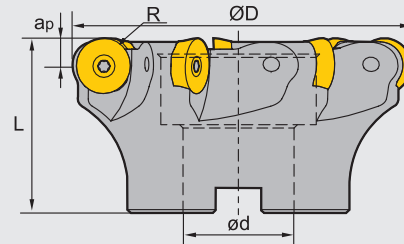
Face milling tools

**FMR04**

A type of mounting



B type of mounting



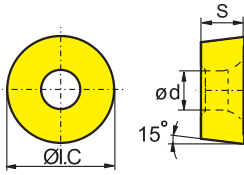
Specification of tools

Type		Dimensions(inch)						Mounting type
		ØD	R	ød	L	apmax	Z (Number of teeth)	
FMR04	-2.00"-A0.75"-RD12-04	2.00	0.236	0.75	2.00	0.236	4	A
	-2.50"-A0.75"-RD12-04	2.50	0.236	0.75	2.00	0.236	4	A
	-3.00"-A1.00"-RD16-05	3.00	0.315	1.00	2.00	0.315	5	A
	-4.00"-B1.25"-RD16-06	4.00	0.315	1.25	2.00	0.315	6	B
	-5.00"-B1.50"-RD20-06	5.00	0.394	1.50	2.50	0.394	6	B
	-6.00"-B1.50"-RD20-07	6.00	0.394	1.50	2.50	0.394	7	B

Spare parts

Diameter ØD	Insert specification	Insert screw 	Wedge 	Wedge Screw 	Wrench 	Sketch of installation 
Ø2.00"~Ø2.50"	RDKW1204MO	I60M3.5×10	WD-204	I60M4×10	WT15IT	
Ø3.00"~Ø4.00"	RDKW1605MO	I60M5×13	WD-207	I60M5×13	WT20IT	
Ø5.00"~Ø6.00"	RDKW2006MO	I43M6×16	--	--	WT25IT	

Selection of inserts



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel	YBC302	YBM253	YBD152	YBD203	YBD252	YBG105	YBG202	YBG205	YBG205H	YBG320	YBG302	YBS203	YBS303	YNG151	YNG151C	YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
S Heat-resistant steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

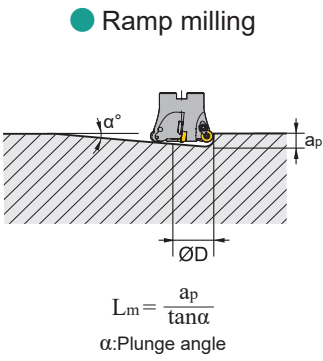
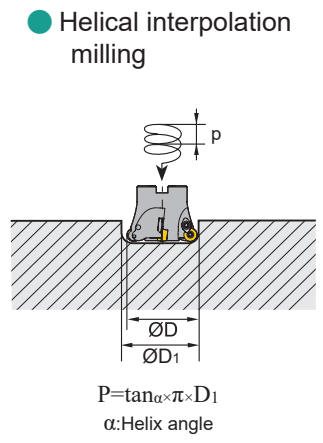
Insert shape	Type	Dimensions(inch)			Coated grade												Cermet	Cemented carbide			
		ØI.C	S	ød	YBC302	YBM253	YBD152	YBD203	YBD252	YBG105	YBG202	YBG205	YBG205H	YB9320	YBG302	YBS203	YBS303	YNG151	YNG151C	YD101	YD201
	RDKW1204MO	0.472	0.187	0.173							●	●		●							
	RDKW1605MO	0.630	0.219	0.217							○	●			○						
	RDKW2006MO	0.787	0.250	0.256								○									

● Recommended grade ○ Produce according to order

Recommended cutting parameters

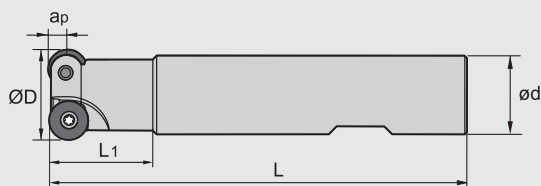
Workpiece material	Hardness HB	Insert grade	Cutting parameters	
			V(SFPM)	f(IPT)
P	Low-carbon steel, Soft steel	YBM253	900(700-1200)	0.008(0.003-0.018)
		YBC302		
		YBM253	700(600-1000)	0.01(0.006-0.018)
	High-carbon steel, Alloy steel	YBG302		
		YBG202	900(650-1200)	0.008(0.004-0.018)
		YBG205		
	Alloy tool steel	YBM253	800(650-1000)	0.008(0.003-0.018)
		YBC302		
		YBM253	650(500-1000)	0.01(0.006-0.018)
M	Stainless steel	YBG302		
		YBG202	800(600-1200)	0.008(0.004-0.018)
		YBG205		
	Cast iron	YBM253	700(600-1000)	0.008(0.003-0.018)
		YBC302		
		YBM253	600(500-800)	0.01(0.006-0.018)
K	Cast iron	YBG302	700(550-1100)	0.008(0.004-0.018)
		YBG202		
		YBG205		

Ramp milling, helical interpolation milling

● Ramp milling  $L_m = \frac{a_p}{\tan \alpha}$ α: Plunge angle	Insert	Diameter ØD(in)	Max.cutting depth ap(in)	Max.cutting depth α°	Min.length Lm(in)	Min.diameter ØD1(in)	Max.diameter (in)
● Helical interpolation milling  $P = \tan \alpha \times \pi \times D_1$ α: Helix angle	RDKW12**	2.00"	0.236	7.1	1.890	3.465	0.236
		2.50"	0.236	5.1	2.638	4.488	0.236
RDKW16**		3.00"	0.315	5.6	3.209	5.669	0.315
		4.00"	0.315	4.1	4.350	7.244	0.315
RDKW20**		5.00"	0.394	4.2	5.360	9.055	0.394
		6.00"	0.394	3.0	7.480	11.810	0.394

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

Face milling tools


FMR05


Specification of tools

Type		Dimensions(inch)					
		ØD	ød	L ₁	L	a _p max	Z (Number of teeth)
FMR05	-0.625"-XP0.75"-RP2-02	0.625	0.75	1.75	4	0.125	2
	-0.750"-XP0.75"-RP2-02	0.750	0.75	1.75	4	0.125	2
	-0.875"-XP0.75"-RP2-03	0.875	0.75	1.75	4	0.125	3
	-0.875"-XP0.75"-RP3-02	0.875	0.75	1.75	4	0.180	2
	-1.000"-XP0.75"-RP3-02	1.000	0.75	1.75	4	0.180	2
	-1.250"-XP1.00"-RP3-03	1.250	1.00	2.75	5	0.180	3
	-1.250"-XP1.00"-RP4-02	1.250	1.00	2.75	5	0.250	2
	-1.500"-XP1.25"-RP4-03	1.500	1.25	2.75	5	0.250	3
	-1.750"-XP1.50"-RP4-04	1.750	1.50	2.75	5	0.250	4

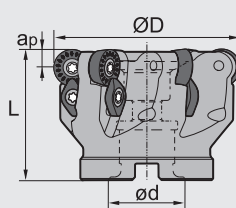
Spare parts

Diameter ØD	Insert specification	Insert screw	Wrench	Sketch of installation
				
Ø0.625"~Ø0.875"	RPMW06T200	I60M2.2×5.5	WT07IP	
	RPMW2T200			
Ø0.875"~Ø1.250"	RPMW09T300	I60M3×7	WT09IP	
	RPMW3(2.5)			
Ø1.250"~Ø1.750"	RPMW12T400	I60M4×8.4	WT15IP	
	RPMW43			

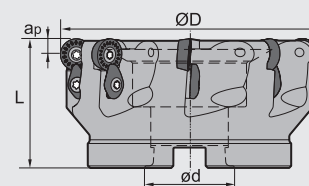
Face milling tools

**FMR05**

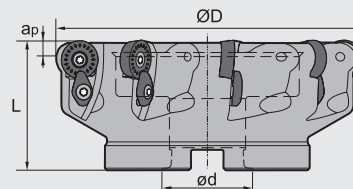
A type of mounting



B type of mounting



C type of mounting



Specification of tools

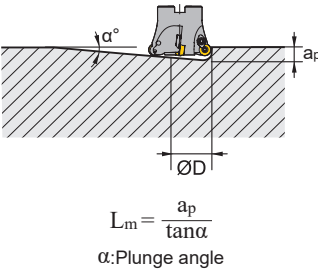
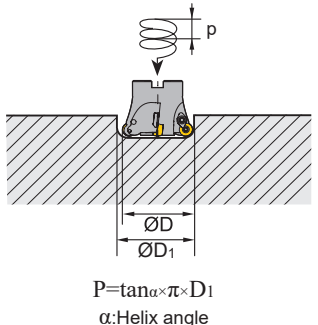
Type		Dimensions(inch)					
		ØD	ød	L	apmax	Z (Number of teeth)	Mounting type
FMR05	-2.00"-A0.75"-RP4-05	2.00	0.75	1.75	0.250	5	A
	-2.50"-A0.75"-RP4-06	2.50	0.75	1.75	0.250	6	A
	-3.00"-A1.00"-RP4-07	3.00	1.00	2.00	0.250	7	A
	-3.00"-A1.00"-RP5-05	3.00	1.00	2.00	0.315	5	A
	-4.00"-B1.50"-RP5-07	4.00	1.50	2.50	0.315	7	B
	-5.00"-B1.50"-RP5-08	5.00	1.50	2.50	0.315	8	B
	-5.00"-B1.50"-RP6-07	5.00	1.50	2.50	0.375	7	B
	-6.00"-B2.00"-RP6-08	6.00	2.00	2.50	0.375	8	B
	-8.00"-C2.50"-RP6-09	8.00	2.50	2.50	0.375	9	C

Spare parts

Diameter ØD	Insert specification	Insert screw	Wedge	Wedge screw	Wrench	Sketch of installation
						
Ø2.00"~Ø3.00"	RPMW120400	I60M4×8.4	WD-204	I60M4×10	WT15IP	
	RPMW43					
Ø3.00"~Ø5.00"	RPMW160500	I60M5×13	WD-208	I60M5×13	WT20IP	
	RPMW50500					
Ø5.00"~Ø8.00"	RPMW190600					
	RPMW64					



Ramp milling, helical interpolation milling

● Ramp milling 	Insert	Diameter ØD(in)	Max.cutting depth ap(in)	Max.cutting depth α°	Min.length Lm(in)	Min.diameter ØD1(in)	Max.diameter (in)
● Helical interpolation milling 	RPMW2**	0.625"	0.118	13.0	0.512	1.012	0.118
		0.750"	0.118	9.0	0.748	1.26	0.118
		0.875"	0.118	6.5	1.035	1.516	0.118
	RPMW3**	0.875"	0.185	15.0	0.689	1.380	0.185
		1.000"	0.185	13.0	0.803	1.630	0.185
		1.250"	0.185	9.5	1.106	2.130	0.185
	RPMW4**	1.250"	0.248	13.0	1.142	2.004	0.248
		1.500"	0.248	9.0	1.567	2.504	0.248
		1.750"	0.248	6.5	2.177	3.004	0.248
		2.000"	0.248	7.0	2.020	3.504	0.248
		2.500"	0.248	5.3	2.670	4.504	0.248
		3.000"	0.248	4.0	3.547	5.504	0.248
	RPMW5**	3.000"	0.299	5.0	3.421	5.402	0.299
		4.000"	0.299	3.7	4.626	7.402	0.299
		5.000"	0.299	2.7	6.346	9.402	0.299
	RPMW6**	5.000"	0.374	3.5	6.114	9.252	0.374
		6.000"	0.374	2.7	7.929	11.252	0.374
		8.000"	0.374	2.0	10.709	15.252	0.374

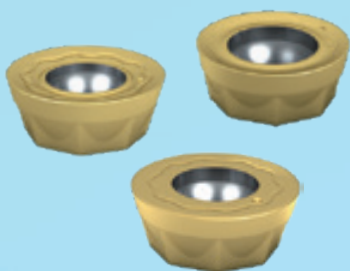
Reduce the feed rate when plunging and circular milling.
 "Attention"—drilling can form long chips.

FMR11 series

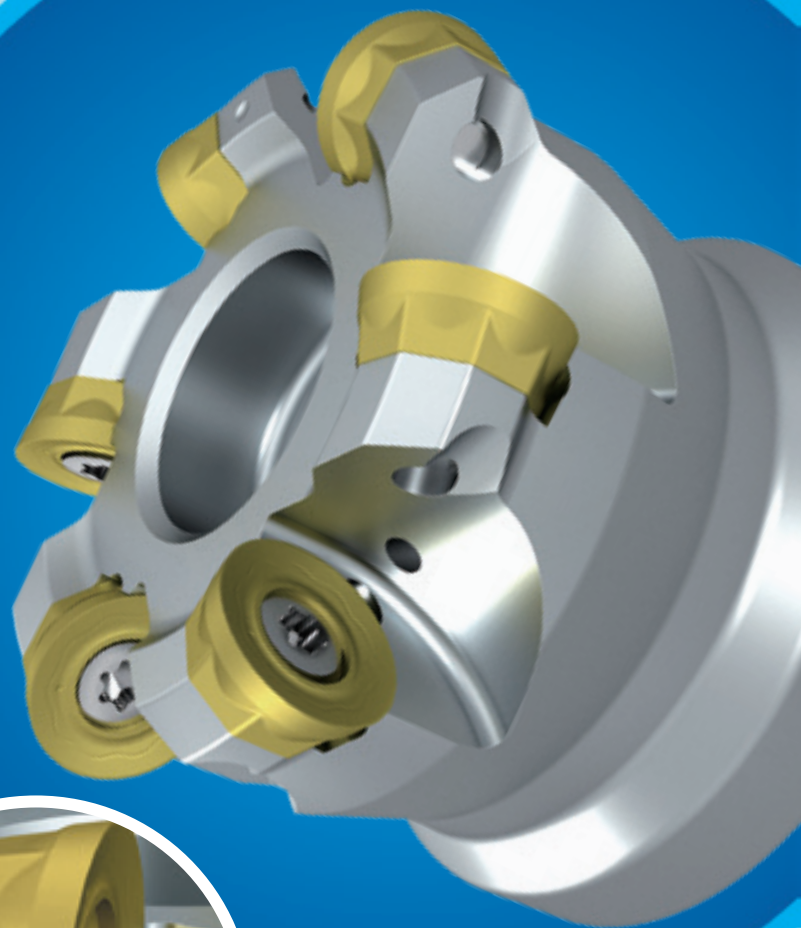
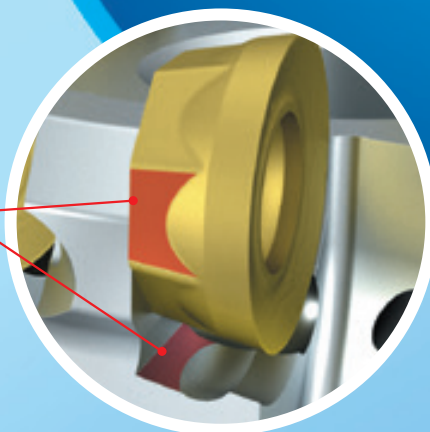
Anti-rotation designed insert, gets stable processing and long life.

Insert can be indexed 8 times, good cost performance.

Two rear angle specifications of 11 degrees and 15 degrees, cover 08, 10, 12 kinds of sizes, wide application range.



Anti-rotation surface



Case for FMR11

Case1

Material: H13(HRC44-48)
Testing tool: FMR11-2.00"-A0.75"-RP12-06C
Testing insert: RPKT1204MO-M/YBG205H
Cutting parameters: $V_c=804\text{SFM}$, $F_z=0.035\text{IPR}$,
 $a_p=0.008"$, $a_e=1.57"$

Conclusion: The FMR cutter gets better surface quality and longer tool life than the similar tool from company K.

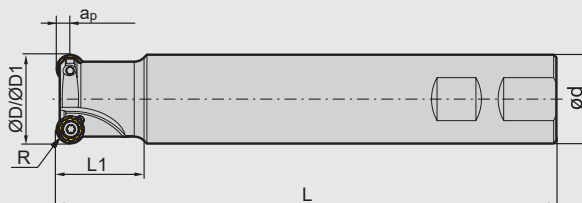
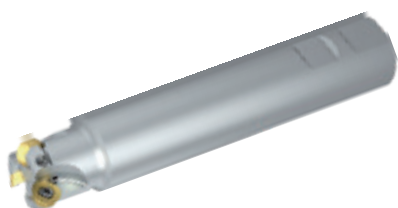
Case2

Material: S136(HRC40-45)
Testing tool: FMR11-1.25"-XP1.25"-RP10-02C
Testing insert: RPKT10T3MO-MM/YBS303
Cutting parameters: $V_c=591\text{SFM}$, $F_z=0.024\text{IPR}$,
 $a_p=0.02"$, $a_e=0.59"$

Conclusion: RPKT10T3MO-MM/YBS303 gets 13% longer tool life than the similar insert from company H.



Face milling tools


FMR11 **P** **M** **K** **S**


Specification of tools

Type		Dimensions(inch)					
		ØD/ØD1	ød	L	L1	apmax	Z (Number of teeth)
FMR11	-1.00"-XP1.00"-RD10-03C	1.000	1.000	4.500	1.500	0.197	3
	-1.25"-XP1.25"-RD10-03C	1.250	1.250	5.000	1.500	0.197	3
	-1.50"-XP1.25"-RD10-04C	1.500	1.250	5.000	1.500	0.197	4
	-1.25"-XP1.25"-RD12-03C	1.250	1.250	5.000	1.500	0.236	3
	-1.50"-XP1.25"-RD12-04C	1.500	1.250	5.000	1.500	0.236	4
	-1.00"-XP1.00"-RP10-03C	1.000	1.000	4.500	1.500	0.197	3
	-1.25"-XP1.25"-RP10-03C	1.250	1.250	5.000	1.500	0.197	3
	-1.50"-XP1.25"-RP10-04C	1.500	1.250	5.000	1.500	0.197	4
	-1.25"-XP1.25"-RP12-03C	1.250	1.250	5.000	1.500	0.236	3
	-1.50"-XP1.25"-RP12-04C	1.500	1.250	5.000	1.500	0.236	4

D

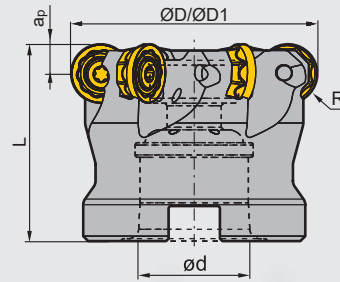
Spare parts

Diameter ØD	Insert specification	Insert screw	Wrench	Sketch of installation
				
Ø1.00"~Ø1.50"	R□□□10□□-H/M/MM	I60M3.5×8	WT15IP	
	R□□□12□□-H/M/MM			

Face milling tools



FMR11 **P** **M** **K** **S**



Specification of tools

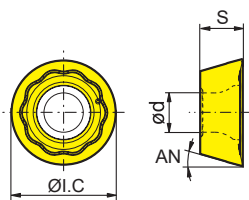
Type		Dimensions(inch)				
		ØD/ØD1	ød	L	apmax	Z (Number of teeth)
FMR11	-2.00"-A0.75"-RD10-07C	2.000	0.750	1.750	0.197	7
	-2.50"-A0.75"-RD10-08C	2.500	0.750	1.750	0.197	8
	-2.00"-A0.75"-RD12-06C	2.000	0.750	1.750	0.236	6
	-2.50"-A0.75"-RD12-07C	2.500	0.750	1.750	0.236	7
	-3.00"-A1.00"-RD12-08C	3.000	1.000	2.000	0.236	8
	-2.00"-A0.75"-RP10-07C	2.000	0.750	1.750	0.197	7
	-2.50"-A0.75"-RP10-08C	2.500	0.750	1.750	0.197	8
	-2.00"-A0.75"-RP12-06C	2.000	0.750	1.750	0.236	6
	-2.50"-A0.75"-RP12-07C	2.500	0.750	1.750	0.236	7
	-3.00"-A1.00"-RP12-08C	3.000	1.000	2.000	0.236	8

Spare parts

Diameter ØD	Insert specification	Insert screw	Wrench	Sketch of installation
				
Ø2.00"~Ø2.50"	R□□□10□□-H/M/MM	I60M3.5×8	WT15IP	
	R□□□12□□-H/M/MM			
Ø3.00"	R□□□12□□-H/M/MM	I60M4×8.4	WT15IS	



Selection of inserts



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

	Good working conditions	General working conditions	Reverse working conditions
P Steel	😊😊	😞😞😞😞😞😞	😊😊
M Stainless steel	😞😞	😞😞😞😞😞	😞😞😊😊
K Cast iron		😞😞😞😞	😞
N Ferrite materials			😞😞
S Heat-resistant steel		😊😞😞😞😞😞	😞😞

Insert shape	Type	Dimensions(inch)				Coated grade										Cermet		Cemented carbide				
		ØI.C	S	ød	AN	YBC302	YBM253	YBD152	YBD203	YBD252	YBG105	YBG202	YBG205	YBG205H	YB9320	YBG302	YBS203	YBS303	YNG151	YNG151C	YD101	YD201
	RPMW10T3MO-H	0.394	0.156	0.161	11°					●				●								
	RPMW1204MO-H	0.472	0.187	0.173	11°					●				●								
	RDMW10T3MO-H	0.394	0.156	0.161	15°					●				●								
	RDMW1204MO-H	0.472	0.187	0.173	15°					●				●								
	RPMT10T3MO-M	0.394	0.156	0.161	11°									●			●	●				
	RPMT1204MO-M	0.472	0.187	0.173	11°									●			●	●				
	RDMT10T3MO-M	0.394	0.156	0.161	15°					●				●			●	●				
	RDMT1204MO-M	0.472	0.187	0.173	15°					●				●			●	●				
	RPMT10T3MO-MM	0.394	0.156	0.161	11°									●			●	●				
	RPMT1204MO-MM	0.472	0.187	0.173	11°									●			●	●				
	RDMT10T3MO-MM	0.394	0.156	0.161	15°									●			●	●				
	RDMT1204MO-MM	0.472	0.187	0.173	15°									●			●	●				

● Recommended grade ○ Produce according to order

Recommended cutting parameters

Workpiece material		Hardness HB	Insert grade	Cutting parameters	
				V(SFPM)	f(IPT)
P	Low-carbon steel, Soft steel	≤180	YBG205H	880(650-1150)	0.008(0.004-0.016)
	High-carbon steel, Alloy steel	180-280	YBG205H	780(590-1150)	0.008(0.004-0.016)
	Alloy tool steel	280-350	YBG205H	720(550-1100)	0.008(0.004-0.016)
M	Stainless steel	≤270	YBG205H	520(360-880)	0.008(0.004-0.016)
K	Cast iron	180-250	YBD252	700(400-1000)	0.008(0.004-0.016)
S	Hard-to-cut material	≤400	YBS203 YBS303	320(200-400)	0.006(0.004-0.012)