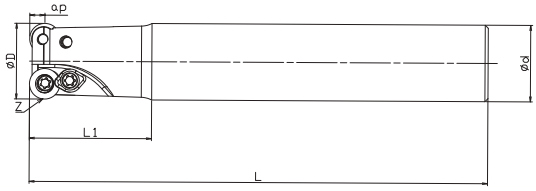
TRD SERIES

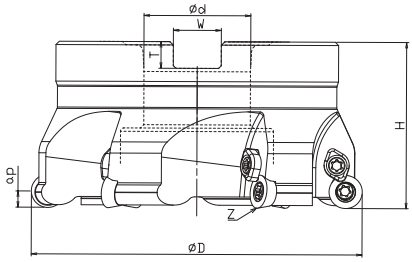
Radius Milling with Lowers Cutting Costs and Increases Effciency

★ Low cutting forces with helical cutting edge design .
★ Suitable for 11°positive angle insert, applicable to alloy steel , hardened steel and aluminium alloy.
★ Reduced chattering even with extended mlling adapters .



Endmills

Designation	Size(mm)						Insert	Clamping Screw	Wrench	Clamping Piece
	D	d	L1	L	Z	Max.ap				
TRDE4R-16R02D16RD08L150	16	16	28	150	2	4	RDKT0802M0	TR1008	TRP08	TRS08
TRDE4R-16R02D16RD08L200				200	2	4	RDKT0802M0			
TRDE4R-20R02D20RD08L150	20	20	30	150	2	4	RDKT0802M0			
TRDE4R-20R02D20RD08L200				200	2	4	RDKT0802M0			
TRDE5R-20R02D20RD10L150	20	20	30	150	2	5	RDKT10T3M0	TR1010	TRP10	TRS10
TRDE5R-20R02D20RD10L200				200	2	5	RDKT10T3M0			
TRDE5R-25R02D25RD10L150	25	25	40	150	2	5	RDKT10T3M0			
TRDE5R-25R02D25RD10L200				200	2	5	RDKT10T3M0			
TRDE6R-32R03D32RD12L150	32	32	45	150	3	6	RDKT1204M0	TR1012	TRP12	TRS12
TRDE6R-32R03D32RD12L200				200	3	6	RDKT1204M0			



Milling Cutters

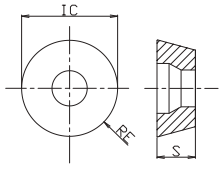
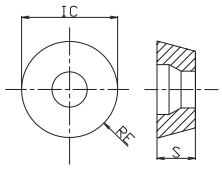
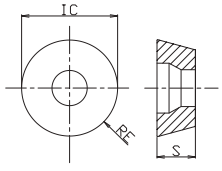
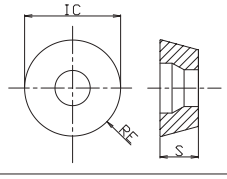
Designation	Size（mm）							Insert	Clamping Screw	Wrench	Clamping Piece
	D	d	H	W	T	Z	Max.ap				
TRDF5R-50R04RD10M22	50	22	50	10.4	6.3	4	5	RDKT10T3M0	TR1010	TRP10	TRS10
TRDF5R-63R04RD10M22	63	22	50	10.4	6.3	4	5	RDKT10T3M0			
TRDF5R-80R06RD10M27	80	27	50	12.4	7.0	6	5	RDKT10T3M0			
TRDF5R-100R06RD10M32	100	32	50	14.4	8.0	6	5	RDKT10T3M0			
TRDF6R-50R04RD12M22	50	22	50	10.4	6.3	4	6	RDKT1204M0	TR1012	TRP12	TRS12
TRDF6R-63R04RD12M22	63	22	50	10.4	6.3	4	6	RDKT1204M0			
TRDF6R-80R06RD12M27	80	27	50	12.4	7.0	6	6	RDKT1204M0			
TRDF6R-100R06RD12M32	100	32	50	14.4	8.0	6	6	RDKT1204M0			

TRD SERIES

Radius Milling with Lowers Cutting Costs and Increases Effciency

Applicable Inserts

Usage Classification											
★1st Choice ☆2nd Choice	P	Steel	★								
	M	Stainless	★								
	K	Cast iron	★								
	N	Non-ferrous					★				
	S	Superalloys									
	H	Hard materials		★							

Insert		Insert No.	Size(mm)			Coated Carbide				Carbide				
			IC	S	RE	TY602	TY622	TY625	TI960	HC200				
 General Chipbreaker		RDKT0802M0	8	2.4	4	●								
		RDKT10T3M0	10	4.0	5	●								
		RDKT1204M0	12	4.8	6	●								
		RDMT0802M0	8	2.4	4	●								
		RDMT10T3M0	10	4.0	5	●								
		RDMT1204M0	12	4.8	6	●								
 Stainless Steel Chipbreaker		RDKT0802M0-ST	8	2.4	4	●								
		RDKT10T3M0-ST	10	4.0	5	●								
		RDKT1204M0-ST	12	4.8	6	●								
		RDKT0802M0-TR	8	2.4	4		●							
		RDKT10T3M0-TR	10	4.0	5		●							
		RDKT1204M0-TR	12	4.8	6		●							
		RDKT0802M0	8	2.4	4					●				
		RDKT10T3M0	10	4.0	5					●				
		RDKT1204M0	12	4.8	6					●				

TRD SERIES

Radius Milling with Lowers Cutting Costs and Increases Effciency

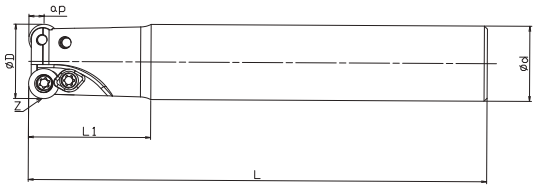
Recommended Cutting Conditions

ISO	Workpiece material	Hardness	Grade	Cutting Speed Vc（m/min）	Feed fz（mm/t）
P	Low Carbon Steel	≤HB180	TY602	120-220	0.15-0.30
	High Carbon and Alloy Steel	HB180-280		70-150	0.15-0.30
	Alloy Steel	HB280-350		70-150	0.15-0.30
M	Stainless Steel	≤HB200		120-200	0.10-0.25
K	Gray Cast Iron	HB150-250		140-220	0.15-0.30
	Ductile Cast Iron	HB150-250		150-240	0.15-0.30
N	Aluminum	—	HC200	300-800	0.07-0.55
H	Hardened Material	≤HRC55	TY622	40-80	0.22-0.40

EMR SERIES

EMR Round Dowel Milling Cutter Bar

★ Suitable for a variety of economical inserts, high cost performance



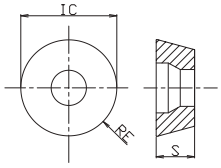
Designation	Size(mm)							Insert	Clamping Screw	Wrench	Clamping Piece
	D	d	L1	L2	L	Z	Max.ap				
EMR-4R-C12-12-130L-1T	12	12	40	-	130	1	4	RPMT08T2	TT1008	TTP08	TTS08
EMR-4R-C12-13-130L-1T	13	12	40	-	130	1	4	RPMT08T2			
EMR-4R-C16-16-150L-2T	16	16	40	-	150	2	4	RPMT08T2			
EMR-4R-C15-16-150L-2T	16	15	40	-	150	2	4	RPMT08T2			
EMR-4R-C16-16-200L-2T	16	16	40	100	200	2	4	RPMT08T2			
EMR-4R-C15-16-200L-2T	16	15	40	-	200	2	4	RPMT08T2			
EMR-4R-C16-17-150L-2T	17	16	40	-	150	2	4	RPMT08T2			
EMR-4R-C16-17-200L-2T	17	16	50	-	200	2	4	RPMT08T2			
EMR-4R-C20-20-150L-2T	20	20	50	-	150	2	4	RPMT08T2			
EMR-4R-C19-20-150L-2T	20	19	50	-	150	2	4	RPMT08T2			
EMR-4R-C20-20-200L-2T	20	20	50	100	200	2	4	RPMT08T2			
EMR-4R-C19-20-200L-2T	20	19	50	-	200	2	4	RPMT08T2			
EMR-4R-C20-21-150L-2T	21	20	50	-	150	2	4	RPMT08T2			
EMR-4R-C20-21-200L-2T	21	20	50	-	200	2	4	RPMT08T2			
EMR-5R-C20-30-110L-2T	30	20	40	-	110	2	5	RPM□10□3	TT1011	TTP10	TTS10
EMR-5R-C20-20-150L-2T	20	20	50	-	150	2	5	RPM□10□3			
EMR-5R-C20-20-200L-2T	20	20	50	100	200	2	5	RPM□10□3			
EMR-5R-C20-21-150L-2T	21	20	50	-	150	2	5	RPM□10□3			
EMR-5R-C20-21-200L-2T	21	20	50	-	200	2	5	RPM□10□3			
EMR-5R-C25-25-150L-2T	25	25	50	-	150	2	5	RPM□10□3			
EMR-5R-C20-25-150L-2T	25	20	50	-	150	2	5	RPM□10□3			
EMR-5R-C24-25-150L-2T	25	24	50	-	150	2	5	RPM□10□3			
EMR-5R-C25-25-200L-2T	25	25	75	-	200	2	5	RPM□10□3			
EMR-5R-C25-25-250L-2T	25	25	60	115	250	2	5	RPM□10□3			
EMR-5R-C20-25-200L-2T	25	20	50	-	200	2	5	RPM□10□3			
EMR-5R-C24-25-200L-2T	25	24	50	-	200	2	5	RPM□10□3			
EMR-5R-C24-25-250L-2T	25	24	50	-	250	2	5	RPM□10□3			
EMR-5R-C25-26-150L-2T	26	25	50	-	150	2	5	RPM□10□3			
EMR-5R-C25-26-200L-2T	26	25	50	-	200	2	5	RPM□10□3			
EMR-5R-C25-26-250L-2T	26	25	50	-	250	2	5	RPM□10□3			
ERP-6R-C32-32-150L-2T	32	32	50	-	150	2	6	RPMT1204	TT1012	TRP12	TRS12
ERP-6R-C32-32-200L-2T	32	32	50	-	200	2	6	RPMT1204			
ERP-6R-C32-35-150L-3T	35	32	50	-	150	3	6	RPMT1204			
ERP-6R-C32-35-200L-3T	35	32	50	-	200	3	6	RPMT1204			

EMR SERIES

EMR Round Dowel Milling Cutter Bar

Applicable Inserts

Usage Classification											
★1st Choice ☆2nd Choice	P	Steel	★								
	M	Stainless	★								
	K	Cast iron	★								
	N	Non-ferrous									
	S	Superalloys									
	H	Hard materials		★							

Insert		Insert No.	Size(mm)			Coated Carbide				Carbide				
			IC	S	RE	TI960	TH910	TY602	TY622	HC200				
		RPMT08T2M0-MT1	8	2.78	4	●								
		RPMW1003MT	10	3.18	5	●	●							
		RPMT10T3MT	10	3.97	5	●	●							
		RPMT1204M0-MT1	12	4.76	6	●	●							

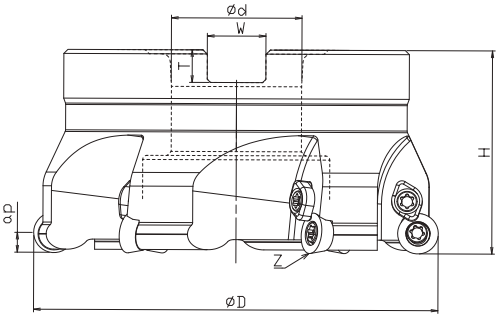
Recommended Cutting Conditions

ISO	Workpiece material	Hardness	Grade	Cutting Speed	Feed
				Vc (m/min)	fz (mm/t)
P	Low Carbon Steel	≤HB180	TI960	120-220	0.15-0.30
	High Carbon and Alloy Steel	HB180-280		70-150	0.15-0.30
	Alloy Steel	HB280-350		70-150	0.15-0.30
M	Stainless Steel	≤HB200		120-200	0.10-0.25
K	Gray Cast Iron	HB150-250		140-220	0.15-0.30
	Ductile Cast Iron	HB150-250		150-240	0.15-0.30
H	Hardened Material	≤HRC50	TH910	40-80	0.22-0.40

EMR SERIES

EMR Round Dowel Mill

★ Suitable for 11° positive angle insert tip
★ Working with very economical insert
★ Large space for chipping, excellent chip removal performance
★ Taper design with high rigidity
★ Customized aluminium milling cutter is available



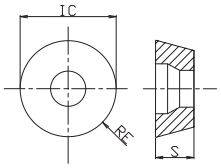
Designation	Size(mm)							Insert	Clamping Screw	Wrench	Clamping Piece
	D	d	H	W	T	Z	Max.ap				
EMR-5R-50-22-4T	50	22	50	10.4	6.3	4	5	RPMW1003 RPMT10T3	TW1010 TT1011	TTP10	TTS10
EMR-5R-63-22-4T	63	22	50	10.4	6.3	4	5				
EMR-5R-80-27-6T	80	27	50	12.4	7	6	5				
EMR-5R-100-32-6T	100	32	50	14.4	7	6	5				
EMR-5R-125-40-7T	125	40	63	16.4	9	7	5				
EMR-5R-160-40-8T	160	40	63	16.4	9	8	5				
ERP-6R-50-22-4T	50	22	50	10.4	6.3	4	6	RPMT1204	TT1012	TRP12	TRS12
ERP-6R-63-22-4T	63	22	50	10.4	6.3	4	6				
ERP-6R-80-27-6T	80	27	50	12.4	7	6	6				
ERP-6R-100-32-6T	100	32	50	14.4	8	6	6				

EMR SERIES

EMR Round Dowel Mill

Applicable Inserts

Usage Classification											
★1st Choice ☆2nd Choice	P	Steel	★								
	M	Stainless	★								
	K	Cast iron	★								
	N	Non-ferrous									
	S	Superalloys									
	H	Hard materials		★							

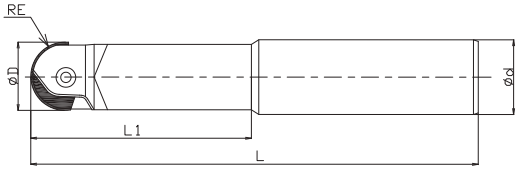
Insert		Insert No.	Size(mm)			Coated Carbide				Carbide				
			IC	S	RE	TI960	TH910	TY602	TY622	HC200				
		RPMW1003MT	10	3.18	5	●	●							
		RPMT10T3MT	10	3.97	5	●	●							
		RPMT1204M0-MT1	12	4.76	6	●	●							

Recommended Cutting Conditions

ISO	Workpiece material	Hardness	Grade	Cutting Speed	Feed
				Vc （m/min）	fz （mm/t）
P	Low Carbon Steel	⩽HB180	TI960	120-220	0.10-0.35
	High Carbon and Alloy Steel	HB180-280		70-150	0.10-0.35
	Alloy Steel	HB280-350		70-150	0.10-0.35
M	Stainless Steel	⩽HB200		120-200	0.10-0.30
K	Gray Cast Iron	HB150-250		140-220	0.15-0.30
	Ductile Cast Iron	HB150-250		150-240	0.15-0.30
H	Hardened Material	⩽HRC50	TH910	40-80	0.10-0.30

C-ABPF SERIES

Indexable End Mills for High Precision Finish



CARBIDE SHANK TYPE

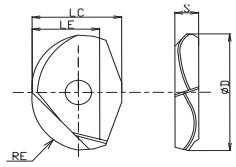
Designation	Size(mm)					Insert	Clamping Screw	Wrench
	D	d	L	L1	RE			
C-ABPF-10S10x30x150L	10	10	150	30	5	SP1W100	TSB-5842	TX10
C-ABPF-10S10x30x180L	10	10	180	30	5	SP1W100		
C-ABPF-12S12x35x165L	12	12	165	35	6	SP1W120	TSB-5843	TX20
C-ABPF-12S12x35x200L	12	12	200	35	6	SP1W120		
C-ABPF-16S16x50x200L	16	16	200	50	8	SP1W160	TSB-5844	
C-ABPF-16S16x50x250L	16	16	250	50	8	SP1W160		
C-ABPF-20S20x70x220L	20	20	220	70	10	SP1W200	TSB-5845	TX25
C-ABPF-20S20x70x250L	20	20	250	70	10	SP1W200		
C-ABPF-20S20x70x300L	20	20	300	70	10	SP1W200		
C-ABPF-25S25x100x200L	25	25	200	100	12.5	SP1W250	TSB-5846	TX30
C-ABPF-25S25x100x250L	25	25	250	100	12.5	SP1W250		
C-ABPF-25S25x100x300L	25	25	300	100	12.5	SP1W250		
C-ABPF-30S32x100x250L	30	32	250	100	15	SP1W300	TSB-5847	
C-ABPF-30S32x100x300L	30	32	300	100	15	SP1W300		

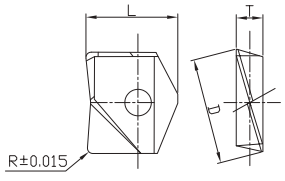
C-ABPF SERIES

Indexable End Mills for High Precision Finish

Applicable Inserts

Usage Classification										
★ 1st Choice ☆ 2nd Choice	P	Steel	★							
	M	Stainless								
	K	Cast iron								
	N	Non-ferrous								
	S	Superalloys								
	H	Hard materials	☆							

Insert		Insert No.	Size(mm)					Coated Carbide				Carbide			
			RE	D	LE	LC	S	TD300	TY622	TY625	TI960	HC200			
		SP1W100	5.0	10	5.6	12.1	2.7	●							
		SP1W120	6.0	12	6.6	14.6	3.2	●							
		SP1W160	8.0	16	9.0	16.6	4.2	●							
		SP1W200	10.0	20	11.5	20.3	5.2	●							
		SP1W250	12.5	25	14.5	24.1	6.2	●							
		SP1W300	15.0	30	18.5	29.2	7.2	●							

Insert		Insert No.	Size(mm)				Coated Carbide					Carbide			
			L	D	T	R	TD300	TY622	TY625	TI960	HC200				
		SP1Q100-R1.0	12.0	10	2.7	1.0	●								
		SP1Q120-R1.0	14.6	12	3.2	1.0	●								
		SP1Q160-R1.0	16.6	16	4.2	1.0	●								
		SP1Q200-R1.0	19.9	20	5.2	1.0	●								
		SP1Q250-R1.0	22.6	25	6.2	1.0	●								
		SP1Q300-R1.0	27.2	30	7.2	1.0	●								

Recommended Cutting Conditions

ISO	Workpiece material	Hardness	Grade	Cutting Speed	Feed
				Vc（m/min）	fz（mm/t）
P	Carbon Steel	≤HB300	TD300	160-200	0.1-0.25
	Alloy Steel	HB200-300		160-200	0.1-0.25
	Mold Steel	HRC≤55		120-160	0.1-0.25