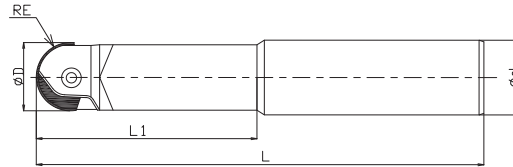


C-ABPF SERIES

Indexable End Mills for High Precision Finish



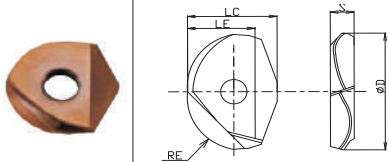
Designation	Size(mm)					Insert	Clamping Screw	Wrench
	D	d	L	L1	RE			
C-ABPF-10S10x30x150L	10	10	150	30	5	SP1W100	TSB-5842	TX10
C-ABPF-10S10x30x180L	10	10	180	30	5	SP1W100		
C-ABPF-12S12x35x165L	12	12	165	35	6	SP1W120	TSB-5843	TX20
C-ABPF-12S12x35x200L	12	12	200	35	6	SP1W120		
C-ABPF-16S16x50x200L	16	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	TSB5847	
C-ABPF-30S32x100x300L	30	32	300	100	15	SP1W300		

C-ABPF SERIES

Indexable End Mills for High Precision Finish

● Applicable Inserts

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

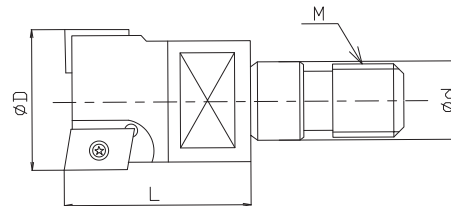
Insert	Insert No.	Size(mm)					Coated Carbide					Carbide				
		RE	D	LE	LC	S	TD300	TY622	TY625	TI960	HC200					
	SP1W100	5.0	10	5.6	12.1	2.7	●									
	SP1W120	6.0	12	6.6	14.6	3.2	●									
	SP1W160	8.0	16	9.0	16.6	4.2	●									
	SP1W200	10.0	20	11.5	20.3	5.2	●									
	SP1W250	12.5	25	14.5	24.1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

● Recommended Cutting Conditions

ISO	Workpiece material	Hardness	Grade	Cutting Speed	
				Vc (m/min)	Feed 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

MODULAR BAPM SERIES

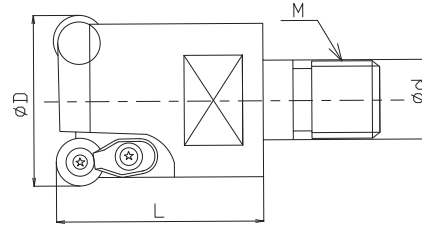
BAPM Square Shoulder Series Screwed End Mill



Designation	Size(mm)					Insert	Clamping Screw	Wrench
	D	L	d	M	Z			
BAPM-16-M8-2T-11	16	25	8.5	M8	2	APMT1135	TT1011	TTP11
BAPM-17-M8-2T-11	17	25	8.5	M8	2	APMT1135		
BAPM-20-M10-2T-11	20	27	10.5	M10	2	APMT1135		
BAPM-21-M10-2T-11	21	27	10.5	M10	2	APMT1135		
BAPM-22-M10-3T-11	22	29	10.5	M10	3	APMT1135		
BAPM-25-M12-3T-11	25	29	12.5	M12	3	APMT1135		
BAPM-26-M12-3T-11	26	29	12.5	M12	3	APMT1135		
BAPM-28-M12-4T-11	28	31.5	12.5	M12	4	APMT1135		
BAPM-30-M16-4T-11	30	30	16.5	M16	4	APMT1135		
BAPM-32-M16-4T-11	32	33	16.5	M16	4	APMT1135		
BAPM-35-M16-4T-11	35	34	16.5	M16	4	APMT1135		
BAPM-40-M16-4T-11	40	37	16.5	M16	4	APMT1135		
BAPM-25-M12-2T-16	25	35	12.5	M12	2	APMT1604	TT1016	TTP16
BAPM-26-M12-2T-16	26	35	12.5	M12	2	APMT1604		
BAPM-30-M16-3T-16	30	39	16.5	M16	3	APMT1604		
BAPM-32-M16-3T-16	32	39	16.5	M16	3	APMT1604		
BAPM-35-M16-3T-16	35	42	16.5	M16	3	APMT1604		
BAPM-40-M16-4T-16	40	43	16.5	M16	4	APMT1604		


MODULAR EMRM SERIES

EMRM Round Nose Series Screwed End Mill




Designation	Size(mm)					Insert	Clamping Screw	Wrench
	D	L	d	M	Z			
EMRM-4R16-M8-2T	16	25	8.5	M8	2	RPMT08T2	TT1008	TTP08
EMRM-4R17-M8-2T	17	25	8.5	M8	2	RPMT08T2		
EMRM-4R20-M10-2T	20	27	10.5	M10	2	RPMT08T2		
EMRM-4R21-M10-2T	21	27	10.5	M10	2	RPMT08T2		
EMRM-4R25-M12-3T	25	29	12.5	M12	3	RPMT08T2		
EMRM-4R26-M12-3T	26	29	12.5	M12	3	RPMT08T2		
EMRM-4R30-M16-4T	30	31	16.5	M16	4	RPMT08T2		
EMRM-4R32-M16-4T	32	32	16.5	M16	4	RPMT08T2		
EMRM-4R35-M16-4T	35	34	16.5	M16	4	RPMT08T2		
EMRM-4R40-M16-5T	40	34	16.5	M16	5	RPMW1003		
EMRM-5R25-M12-2T	25	32	12.5	M12	2	RPMW1003	TT1011	TTP10
EMRM-5R26-M12-2T	26	32	12.5	M12	2	RPMW1003		
EMRM-5R30-M16-2T	30	35	16.5	M16	2	RPMW1003		
EMRM-5R32-M16-3T	32	35	16.5	M16	3	RPMW1003		
EMRM-5R35-M16-3T	35	37	16.5	M16	3	RPMW1003		
EMRM-5R40-M16-4T	40	39	16.5	M16	4	RPMW1003		
EMRM-6R25-M12-2T	25	34	12.5	M12	2	RPMT1204	TT1012	TRP12
EMRM-6R26-M12-2T	26	35	12.5	M12	2	RPMT1204		
EMRM-6R30-M16-2T	30	36	16.5	M16	2	RPMT1204		
EMRM-6R32-M16-2T	32	36	16.5	M16	2	RPMT1204		
EMRM-6R35-M16-3T	35	38	16.5	M16	3	RPMT1204		
EMRM-6R40-M16-3T	40	38	16.5	M16	3	RPMT1204		

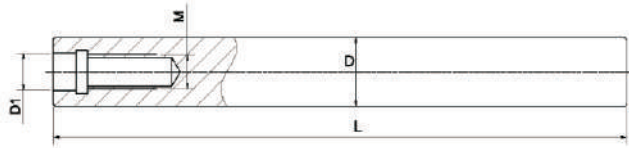
End Mills with Exchangeable Heads

Square	Designation	Size(mm)				
		Diameter	Flute Length	Neck Diameter	Tread Size	Z
	HHD1004	10	10	9.7	M05	4
	HHD1204	12	12	11.7	M06	4
	HHD1604	16	16	15.7	M08	4
	HHD2004	20	20	19.5	M10	4
	HHD2504	25	25	24.5	M12	4

Ball Nose	Designation	Size(mm)				
		Radius	Flute Length	Neck Diameter	Tread Size	Z
	HSB1002	R5.0	10	9.7	M05	2
	HSB1202	R6.0	12	11.7	M06	2
	HSB1602	R8.0	16	15.7	M08	2
	HSB2002	R10.0	20	19.5	M10	2
	HSB2502	R12.5	25	24.5	M12	2
	HSB1004	R5.0	10	9.7	M05	4
	HSB1204	R6.0	12	11.7	M06	4
	HSB1604	R8.0	16	15.7	M08	4
	HSB2004	R10.0	20	19.5	M10	4
	HSB2504	R12.5	25	24.5	M12	4

Corner Radius	Designation	Size(mm)				
		Diameter xCorner R	Flute Length	Neck Diameter	Tread Size	Z
	HRTA100054	10x0.5R	10	9.7	M05	4
	HRTA100104	10x1R	10	9.7	M05	4
	HRTA100204	10x2R	10	9.7	M05	4
	HRTA120054	12x0.5R	12	11.7	M06	4
	HRTA120104	12x1R	12	11.7	M06	4
	HRTA120204	12x2R	12	11.7	M06	4
	HRTA160104	16x1R	16	15.7	M08	4
	HRTA160204	16x2R	16	15.7	M08	4
	HRTA200104	20x1R	20	19.5	M10	4
	HRTA200204	20x2R	20	19.5	M10	4
	HRTA250104	25x1R	25	24.5	M12	4
	HRTA250204	25x2R	25	24.5	M12	4

Tungsten Anti-Vibration Milling Arbor



Designation	Size(mm)				
	Model	L	D1	D	M
MFT-10-100-M5	Φ 10mm*100L*M5	100	5.5	10	M5
MFT-10-150-M5	Φ 10mm*150L*M5	150	5.5	10	M5
MFT-12-100-M6	Φ 12mm*100L*M6	100	6.5	12	M6
MFT-12-150-M6	Φ 12mm*150L*M6	150	6.5	12	M6
MFT-12-200-M6	Φ 12mm*200L*M6	200	6.5	12	M6
MFT-16-100-M8	Φ 16mm*100L*M8	100	8.5	16	M8
MFT-16-150-M8	Φ 16mm*150L*M8	150	8.5	16	M8
MFT-16-200-M8	Φ 16mm*200L*M8	200	8.5	16	M8
MFT-16-250-M8	Φ 16mm*250L*M8	250	8.5	16	M8
MFT-20-100-M10	Φ 20mm*100L*M10	100	10.5	20	M10
MFT-20-150-M10	Φ 20mm*150L*M10	150	10.5	20	M10
MFT-20-200-M10	Φ 20mm*200L*M10	200	10.5	20	M10
MFT-20-250-M10	Φ 20mm*250L*M10	250	10.5	20	M10
MFT-20-300-M10	Φ 20mm*300L*M10	300	10.5	20	M10
MFT-25-100-M12	Φ 25mm*100L*M12	100	12.5	25	M12
MFT-25-150-M12	Φ 25mm*150L*M12	150	12.5	25	M12
MFT-25-200-M12	Φ 25mm*200L*M12	200	12.5	25	M12
MFT-25-250-M12	Φ 25mm*250L*M12	250	12.5	25	M12
MFT-25-300-M12	Φ 25mm*300L*M12	300	12.5	25	M12
MFT-32-150-M16	Φ 32mm*150L*M16	150	17.0	32	M16
MFT-32-200-M16	Φ 32mm*200L*M16	200	17.0	32	M16
MFT-32-250-M16	Φ 32mm*250L*M16	250	17.0	32	M16
MFT-32-300-M16	Φ 32mm*300L*M16	300	17.0	32	M16
MFT-32-350-M16	Φ 32mm*350L*M16	350	17.0	32	M16