

MEC Conical



Large line-up for various applications



**KEEPS YOU
AHEAD**



High efficiency conical milling cutters

MEC Conical



Scan QR code for MEC 90° products

Excellent surface finish and wide range of cutters for various applications.

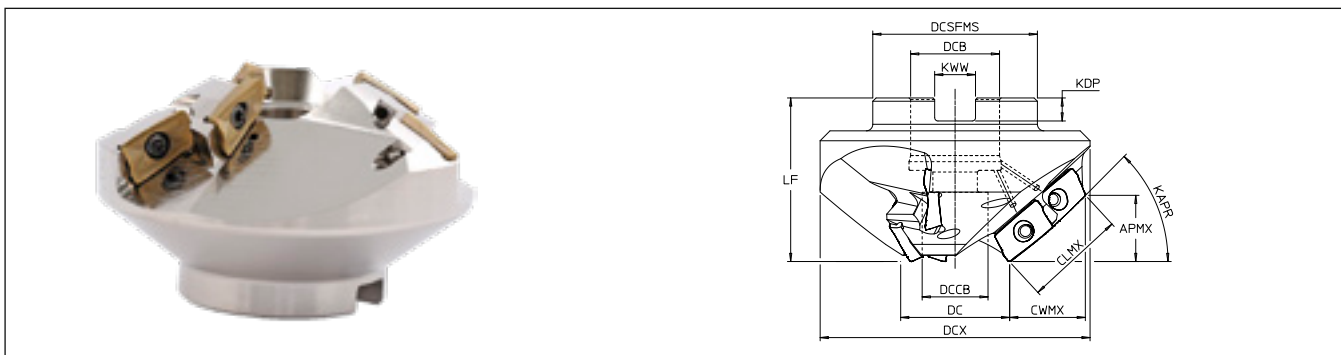
1 Low cutting force and sharp cutting performance

2 Smooth surface finish

3 Large tooling line-up



MEC Conical face mill (with coolant)



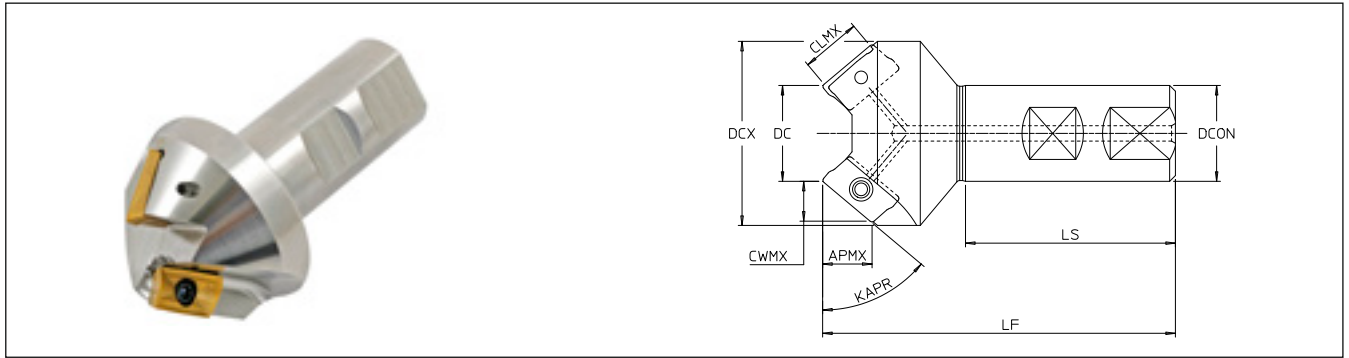
Toolholder dimensions

Description	Availability	No. of flutes	No. of stages	No. of inserts	Dimension (mm)										KAPR	Spare parts	
					DC	DCX	DCB	DCCB	LF	KDP	KWW	APMX	CWMX	CLMX		Clamp screw	Wrench
MECC 15035R-17-2-3T-M	○	3	2	6	35	97	27	20	55	7	12.4	7	29	31	15°	SB-4070TRN	DTM-15
MECC 25035R-17-2-3T-M	○				35	92	27	20	55	7	12.4	13	28	31	25°		
MECC 30035R-17-2-3T-M	○				35	90	27	20	55	7	12.4	15	26	31	30°		
MECC 35035R-17-2-3T-M	○				35	87	27	20	55	7	12.4	17	25	31	35°		
MECC 40035R-17-2-3T-M	○				35	83	27	20	53	7	12.4	19	23	31	40°		
MECC 45035R-17-2-3T-M	○				35	78	27	20	53	7	12.4	21	21	31	45°		
MECC 50035R-17-2-3T-M	○				35	80	27	20	53	7	12.4	23	19	31	50°		
MECC 55035R-17-2-3T-M	○				35	76	27	20	53	7	12.4	25	17	31	55°		
MECC 60035R-17-2-3T-M	○				35	71	27	20	53	7	12.4	26	15	31	60°		
MECC 25045R-17-2-4T-M	○	4	2	8	45	102	27	20	55	7	12.4	13	28	31	25°	SB-4070TRN	DTM-15
MECC 30045R-17-2-4T-M	○				45	99	27	20	55	7	12.4	15	26	31	30°		
MECC 35045R-17-2-4T-M	○				45	96	27	20	55	7	12.4	17	25	31	35°		
MECC 40045R-17-2-4T-M	○				45	93	27	20	55	7	12.4	19	23	31	40°		
MECC 45045R-17-2-4T-M	○				45	90	27	20	53	7	12.4	21	21	31	45°		
MECC 50045R-17-2-4T-M	○				45	84	27	20	53	7	12.4	23	19	31	50°		
MECC 55045R-17-2-4T-M	○				45	80	27	20	53	7	12.4	25	17	31	55°		
MECC 60045R-17-2-4T-M	○				45	76	27	20	53	7	12.4	26	15	31	60°		
MECC 75045R-17-2-3T-M	○	3	2	6	50	64	27	20	53	7	12.4	29	7	31	75°	SB-4070TRN	DTM-15

Coat anti-seize compound (P-37) thinly on portion of taper and thread when insert is fixed.

○: Check availability

MEC Conical cylindrical shank (with coolant)



Toolholder dimensions

Description	Availability	Number of inserts	Dimension (mm)									KAPR	Spare parts	
			DC	DCX	DCON	LF	LS	APMX	CWMX	CLMX	Clamp screw		Wrench	
MECC 30025R-17-W25-2T	○	2	25	55	25	84	56	8	14	15.5	30°	SB-4070TRN	DTM-15	
35025R-17-W25-2T	○		25	53	25	84	56	9	13	15.5	35°			
40025R-17-W25-2T	○		25	51	25	84	56	10	12	15.5	40°			
45025R-17-W25-2T	○		25	49	25	84	56	11	11	15.5	45°			
50025R-17-W25-2T	○		25	48	25	86	56	12	10	15.5	50°			
55025R-17-W25-2T	○		25	46	25	86	56	13	9	15.5	55°			
60025R-17-W25-2T	○		25	44	25	86	56	13.5	8	15.5	60°			
65025R-17-W25-2T	○		25	41	25	88	56	14	7	15.5	65°			
70025R-17-W25-2T	○		25	37	25	88	56	14.5	5	15.5	70°			
75025R-17-W25-2T	○		25	34	25	90	56	15	4	15.5	75°			
80025R-17-W25-2T	○	25	31	25	90	56	15	3	15.5	80°				
MECC 30030R-17-W32-3T	○	3	30	60	32	88	60	8	14	15.5	30°	SB-4070TRN	DTM-15	
35030R-17-W32-3T	○		30	58	32	88	60	9	13	15.5	35°			
40030R-17-W32-3T	○		30	56	32	88	60	10	12	15.5	40°			
45030R-17-W32-3T	○		30	54	32	88	60	11	11	15.5	45°			
50030R-17-W32-3T	○		30	53	32	90	60	12	10	15.5	50°			
55030R-17-W32-3T	○		30	51	32	90	60	13	9	15.5	55°			
60030R-17-W32-3T	○		30	49	32	90	60	13.5	8	15.5	60°			
65030R-17-W32-3T	○		30	46	32	92	60	14	7	15.5	65°			
70030R-17-W32-3T	○		30	42	32	92	60	14.5	5	15.5	70°			
75030R-17-W32-3T	○		30	39	32	94	60	15	4	15.5	75°			
80030R-17-W32-3T	○	30	36	32	94	60	15	3	15.5	80°				
MECC 30030R-17-W25-3T	○	3	30	60	25	84	56	8	14	15.5	30°	SB-4070TRN	DTM-15	
35030R-17-W25-3T	○		30	58	25	84	56	9	13	15.5	35°			
40030R-17-W25-3T	○		30	56	25	84	56	10	12	15.5	40°			
45030R-17-W25-3T	○		30	54	25	84	56	11	11	15.5	45°			
50030R-17-W25-3T	○		30	53	25	86	56	12	10	15.5	50°			
55030R-17-W25-3T	○		30	51	25	86	56	13	9	15.5	55°			
60030R-17-W25-3T	○		30	49	25	86	56	13.5	8	15.5	60°			
65030R-17-W25-3T	○		30	46	25	88	56	14	7	15.5	65°			
70030R-17-W25-3T	○		30	42	25	88	56	14.5	5	15.5	70°			
75030R-17-W25-3T	○		30	39	25	90	56	15	4	15.5	75°			
80030R-17-W25-3T	○	30	36	25	90	56	15	3	15.5	80°				

○: Check availability

Applicable inserts

Insert	Description	Dimension (mm)					Angle (°)		Cermet TN100M	CVD coated carbide CA6535	MEGACOAT NANO carbide PR1535	MEGACOAT carbide		DLC coated carbide PDL025	Uncoated carbide GW25
		W1	S	D1	L	RE	AS	AN				PR1225	PR1210		
	BDMT 170404ER-JT	9.6	4.9	4.4	17.0	0.4	18°	13°		●	●	●	●		
	170408ER-JT	9.6	4.9	4.4	17.0	0.8	18°	13°	●	●	●	●	●		
	BDMT 170404ER-JS	9.6	4.9	4.4	17.0	0.4	18°	13°		●	●	●			
	170408ER-JS	9.6	4.9	4.4	17.0	0.8	18°	13°		●	●	●			
	BDGT 170404FR-JA	9.6	4.9	4.4	17.0	0.4	18°	13°					●	●	
	170408FR-JA	9.6	4.9	4.4	17.0	0.8	18°	13°					●	●	

Recommended cutting conditions – MEC Conical ★ 1st recommendation ☆ 2nd recommendation

JT chipbreaker

Workpiece material	Recommended insert grades (Vc: m/min)					Recommended feed rate (fz: mm/t)				
	Cermet	MEGACOAT NANO	MEGACOAT		CVD coated carbide	Lead angle				
	TN100M	PR1535	PR1225	PR1210	CA6535	15°	30°	45°	60°	80°
Carbon steel	☆ 120 – 160 – 200	☆ 120 – 180 – 250	★ 120 – 180 – 250	—	—	0.31 – 0.58 – 0.97	0.16 – 0.3 – 0.5	0.11 – 0.21 – 0.35	0.09 – 0.17 – 0.29	0.08 – 0.15 – 0.25
Alloy steel	☆ 100 – 140 – 180	☆ 100 – 160 – 220	★ 100 – 160 – 220	—	—	0.31 – 0.58 – 0.77	0.16 – 0.3 – 0.4	0.11 – 0.21 – 0.28	0.09 – 0.17 – 0.23	0.08 – 0.15 – 0.2
Mold steel	☆ 80 – 120 – 150	☆ 80 – 140 – 180	★ 80 – 140 – 180	—	—	0.31 – 0.46 – 0.77	0.16 – 0.24 – 0.4	0.11 – 0.17 – 0.28	0.09 – 0.14 – 0.23	0.08 – 0.12 – 0.2
Austenitic stainless steel	—	☆ 100 – 160 – 200	☆ 100 – 160 – 200	—	—	0.31 – 0.46 – 0.58	0.16 – 0.24 – 0.3	0.11 – 0.17 – 0.21	0.09 – 0.14 – 0.17	0.08 – 0.12 – 0.15
Martensitic stainless steel	—	☆ 150 – 200 – 250	—	—	★ 180 – 240 – 300	0.31 – 0.46 – 0.77	0.16 – 0.24 – 0.4	0.11 – 0.17 – 0.28	0.09 – 0.14 – 0.23	0.08 – 0.12 – 0.2
Precipitation hardened stainless steel	—	★ 90 – 120 – 150	—	—	—	0.31 – 0.46 – 0.77	0.16 – 0.24 – 0.4	0.11 – 0.17 – 0.28	0.09 – 0.14 – 0.23	0.08 – 0.12 – 0.2
Gray cast iron	—	—	—	★ 120 – 180 – 250	—	0.31 – 0.7 – 0.97	0.16 – 0.36 – 0.5	0.11 – 0.25 – 0.35	0.09 – 0.21 – 0.29	0.08 – 0.18 – 0.25
Nodular cast iron	—	—	—	★ 100 – 150 – 200	—	0.31 – 0.58 – 0.77	0.16 – 0.3 – 0.4	0.11 – 0.21 – 0.28	0.09 – 0.17 – 0.23	0.08 – 0.15 – 0.2
Ni-base heat resistant alloy	—	★ 20 – 30 – 50	—	—	☆ 20 – 30 – 50	0.31 – 0.46 – 0.58	0.16 – 0.24 – 0.3	0.11 – 0.17 – 0.21	0.09 – 0.14 – 0.17	0.08 – 0.12 – 0.15
Titanium alloy	—	☆ 40 – 60 – 80	—	☆ 30 – 50 – 70	—	0.31 – 0.58 – 0.77	0.16 – 0.3 – 0.4	0.11 – 0.21 – 0.28	0.09 – 0.17 – 0.23	0.08 – 0.15 – 0.2

Cutting with coolant is recommended for Ni-base heat resistant alloy and titanium alloy.

JS chipbreaker

Workpiece material	Recommended insert grades (Vc: m/min)			Recommended feed rate (fz: mm/t)				
	MEGACOAT NANO	MEGACOAT	CVD coated carbide	Lead angle				
	PR1535	PR1225	CA6535	15°	30°	45°	60°	80°
Carbon steel	☆ 120 – 180 – 250	★ 120 – 180 – 250	—	0.31 – 0.58 – 0.7	0.16 – 0.3 – 0.36	0.11 – 0.21 – 0.25	0.09 – 0.17 – 0.21	0.08 – 0.15 – 0.18
Alloy steel	☆ 100 – 160 – 220	★ 100 – 160 – 220	—	0.31 – 0.46 – 0.58	0.16 – 0.24 – 0.3	0.11 – 0.17 – 0.21	0.09 – 0.14 – 0.17	0.08 – 0.12 – 0.15
Mold steel	☆ 80 – 140 – 180	★ 80 – 140 – 180	—	0.31 – 0.39 – 0.46	0.16 – 0.2 – 0.24	0.11 – 0.14 – 0.17	0.09 – 0.12 – 0.14	0.08 – 0.1 – 0.12
Austenitic stainless steel	★ 100 – 160 – 200	☆ 100 – 160 – 200	—	0.31 – 0.39 – 0.46	0.16 – 0.2 – 0.24	0.11 – 0.14 – 0.17	0.09 – 0.12 – 0.14	0.08 – 0.1 – 0.12
Martensitic stainless steel	☆ 150 – 200 – 250	—	★ 180 – 240 – 300	0.31 – 0.39 – 0.46	0.16 – 0.2 – 0.24	0.11 – 0.14 – 0.17	0.09 – 0.12 – 0.14	0.08 – 0.1 – 0.12
Precipitation hardened stainless steel	☆ 90 – 120 – 150	—	—	0.31 – 0.39 – 0.46	0.16 – 0.2 – 0.24	0.11 – 0.14 – 0.17	0.09 – 0.12 – 0.14	0.08 – 0.1 – 0.12
Ni-base heat resistant alloy	★ 20 – 30 – 50	—	☆ 20 – 30 – 50	0.31 – 0.39 – 0.46	0.16 – 0.2 – 0.24	0.11 – 0.14 – 0.17	0.09 – 0.12 – 0.14	0.08 – 0.1 – 0.12
Titanium Alloy	☆ 40 – 60 – 80	—	—	0.31 – 0.39 – 0.46	0.16 – 0.2 – 0.24	0.11 – 0.14 – 0.17	0.09 – 0.12 – 0.14	0.08 – 0.1 – 0.12

Cutting with coolant is recommended for Ni-base heat resistant alloy and titanium alloy.

JA chipbreaker

Workpiece material	Recommended insert grades (Vc: m/min)		Recommended feed rate (fz: mm/t)				
	DLC coated carbide	Carbide	Lead angle				
	PDL025	GW25	15°	30°	45°	60°	80°
Aluminium alloys (Si 13% or below)	200 – 1,000	200 – 800	0.19 – 1.16	0.1 – 0.6	0.07 – 0.42	0.06 – 0.35	0.05 – 0.3

If it needs to be special

If you need different diameter, number of flutes or other specification; we are happy to receive your inquiry.

