EBD

Diameter ϕ40~50mm | 90° With R 10mm

P Steel | K Cast Iron | H Hard Materials

Radius Milling | Pocketing | Ramping | Profiling

For medium to rough engraving of steel and cast iron dies

Tolerance on R ±0.2

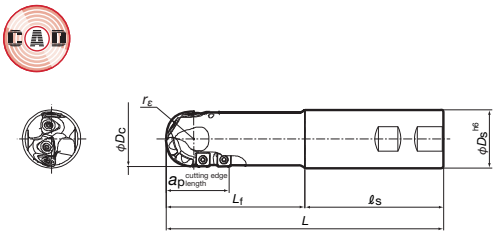


Fig.1

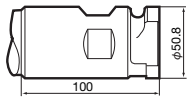
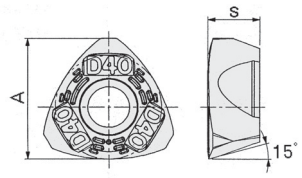


Fig.2
Combination shank

	Cat. No.	Stock	No. of inserts	Dimensions (mm)							Applicable inserts	Shank type	Clamping screw	Wrench
				øDc	L	Lf	ℓs	ap	rε	øDs				
Standard type	EBD040SSE	●	4+3	40(20)	200	100	100	45	20	42	ZDMT4005-MJ SCMT09T308-23	Fig.1	CSTB-4M	T-15T
	EBD050SSE	●		50(25)				59	25		ZDMT5006-MJ		CSTB-5	T-20T
	EBD050SCE	●								50.8	SCMT120408-23	Fig.2		
Long shank type	EBD040MSE	●		40(20)	250	150		45	20	42	ZDMT4005-MJ SCMT09T308-23	Fig.1	CSTB-4M	T-15T
	EBD050MSE	●		50(25)				59	25		ZDMT5006-MJ		CSTB-5	T-20T
	EBD050MCE	●								50.8	SCMT120408-23	Fig.2		

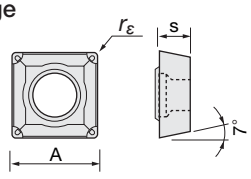
Standard cutting

For R-edge



* The figure shows ZDMT4005-MJ.

For peripheral edge

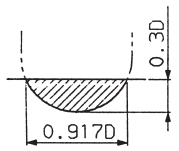
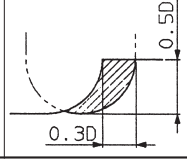
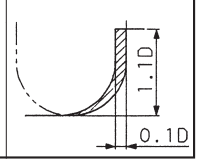


	Cat. No.	Accuracy	Honing	Grade			Dimensions (mm)		
				Coated			A	s	rε
				AH120					
R-edge	ZDMT4005-MJ	M	With	●			13	5.5	—
	ZDMT5006-MJ			●			16.2	6.5	—
Peripheral edge	SCMT09T308-23			●			9.525	3.97	0.8
	SCMT120408-23			●			12.7	4.76	0.8

Standard cutting conditions

Work material	Insert grade	Machining type	Cutting speed vc (m/min)	Table feed vf (mm/min)	
				Tool dia.:ø40	Tool dia.:ø50
Carbon steels (JIS S55C, etc.) < 300 HB	AH120	(1)	180(150~210)	490(400~570)	390(330~460)
		(2)	200(170~230)	480(410~550)	380(330~440)
		(3)	160(130~190)	260(210~300)	200(160~240)
Alloy steels (JIS SCM440, etc.) < 300 HB	AH120	(1)	160(130~190)	430(350~510)	350(280~410)
		(2)	180(150~210)	430(360~500)	340(290~400)
		(3)	140(110~170)	220(180~270)	180(140~220)
Die steels (JIS SKD61, etc.) < 300 HB	AH120	(1)	140(110~170)	380(300~460)	300(240~370)
		(2)	160(130~190)	380(310~460)	310(250~360)
		(3)	120(90~150)	190(140~240)	150(120~190)
Cast irons (JIS FC250, etc.)	AH120	(1)	200(170~230)	640(510~680)	510(410~540)
		(2)	220(190~250)	600(510~680)	480(410~540)
		(3)	180(150~210)	340(290~400)	280(230~320)
Hardened steels Prehardened steels < 45 HRC	AH120	(1)	90(70~110)	210(160~260)	170(130~210)
		(2)	100(80~120)	200(160~250)	160(130~200)
		(3)	60(50~90)	100(80~120)	80(60~120)

Machining types

(1) Grooving	(2) Shouldering at shallow depth of cut	(3) Shouldering at deep depth of cut
		

Notes:
- Cutting speeds shown in the left table are of the most outer diameter of the tool.
- The values of the cutting speeds and feeds shown in the table are of under general cutting conditions. The values should be modified depending on the power and rigidity of the machine to be used, and work holding conditions.
- When using the long shank type, the depth of cut, pick feed, cutting speed, and table feed should be reduced to 70 %-90 % of the values shown in the tables.

● : Stocked in Japan.