

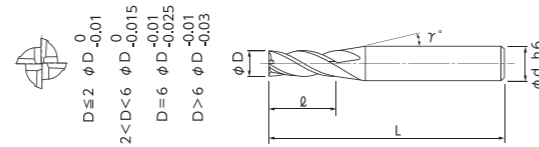
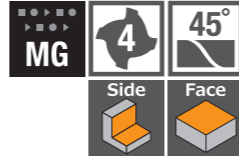
MUGEN COATING 4-Flute LEAD45 End Mill

Total 14 sizes

Recommended Milling Conditions

- Carbon Steel **P**
- Alloy Steel **P**
- Prehardened Steel **P**
- Hardened Steel ~ 55 HRC **H**

For various work materials. L/D=5.
Suitable for side milling with 4-flute



$D \pm 2 \phi D \begin{matrix} 0 \\ -0.01 \end{matrix}$
 $2 < D \leq 6 \phi D \begin{matrix} 0 \\ -0.015 \end{matrix}$
 $D = 6 \phi D \begin{matrix} -0.01 \\ -0.025 \end{matrix}$
 $D > 6 \phi D \begin{matrix} -0.01 \\ -0.03 \end{matrix}$

● L/D=5 and helix 45° to minimize the milling deflection even though the long cutting length design.

- Stainless Steel **M**
- Aluminium Alloy **N**
- Copper **N**
- Resin **O**

Unit : mm

Code No.	Dia. (D)	Length of Cut (L)	Neck Taper Angle (γ)	Shank Dia. (d)	Overall Length (L)
08-00095-00100	1	5	12°	4	45
08-00095-00150	1.5	7.5	12°	4	45
08-00095-00200	2	10	12°	4	50
08-00095-00250	2.5	12.5	12°	4	50
08-00095-00300	3	15	12°	6	55
08-00095-00350	3.5	17.5	12°	6	60
08-00095-00400	4	20	12°	6	60
08-00095-00450	4.5	22.5	12°	6	65
08-00095-00500	5	25	12°	6	65
08-00095-00550	5.5	27.5	12°	6	75
08-00095-00600	6	30	-	6	75
08-00095-00800	8	40	-	8	90
08-00095-01000	10	50	-	10	100
08-00095-01200	12	60	-	12	105

How to Order When you order, indicate MX445 (D). ※(γ) is reference value.

Work Material	Carbon Steels S50C		Alloy Steels SCM·SKD·SUS		Prehardened Steels HPM·NAK		Copper	
	Cutting Speed	15~25m/min	10~20m/min	10~15m/min	15~35m/min			
Dia.	Side Milling		Side Milling		Side Milling		Side Milling	
	Spindle Speed	Feed	Spindle Speed	Feed	Spindle Speed	Feed	Spindle Speed	Feed
	min ⁻¹	mm/min	min ⁻¹	mm/min	min ⁻¹	mm/min	min ⁻¹	mm/min
1	6,400	100	4,800	60	4,000	55	8,000	150
1.5	4,200	100	3,200	60	2,700	55	5,300	170
2	3,200	100	2,400	70	2,000	60	4,000	190
2.5	2,500	120	1,900	70	1,600	60	3,200	200
3	2,100	130	1,600	75	1,300	70	2,700	210
3.5	1,800	140	1,400	75	1,100	70	2,300	210
4	1,600	160	1,200	90	1,000	80	2,000	240
4.5	1,400	170	1,100	90	900	85	1,800	240
5	1,300	170	1,000	100	800	90	1,600	240
5.5	1,200	170	900	100	700	95	1,400	240
6	1,100	190	800	110	700	100	1,300	240
8	800	160	600	100	500	90	1,000	220
10	600	150	500	100	400	85	800	200
12	500	140	400	90	300	80	700	200
Depth of Cut (D: Dia.)	Side Milling a_e $\phi 1 \sim 2.5 = 0.03D$ $\phi 3 \sim 6 = 0.06D$ $\phi 8 \sim 12 = 0.08D$						Side Milling $0.06D$	
Notes	※1 Use cutting fluid with smoke retardant. ※2 Adjust both spindle speed and feed at the same rate. ※3 Adjust milling conditions according to the volume of Depth of Cut and rigidity of the machine.							

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