

MS45C

End mill, Short cut length, 4 flute

MS4MC

End mill, Medium cut length, 4 flute

CARBIDE

RECOMMENDED CUTTING CONDITIONS

Work material	Carbon steel, Cast iron, Alloy steel, Pre-hardened steel Cf53, GG25			Hardened steel (45—55HRC) X40CrMoV51		
	Dia. (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)
1	40000	3000	0.06	32000	2400	0.06
1.5	40000	4500	0.12	32000	3600	0.08
2	30000	4500	0.18	24000	3600	0.10
2.5	24000	3900	0.25	19000	3000	0.13
3	20000	3500	0.30	16000	2700	0.15
4	15000	3000	0.40	12000	2400	0.20
5	12000	2400	0.50	9000	1800	0.25
6	10000	2100	0.60	7000	1500	0.30
8	8000	1500	0.80	5600	1100	0.40
10	6400	1400	1.00	4500	950	0.50
12	5400	1200	1.00	3800	860	0.50
16	2400	550	3.00	1200	120	0.80
20	1900	480	4.00	1000	100	1.00
Depth of cut	</					

- 1) If the depth of cut is shallow, the revolution and feed rate can be increased.
- 2) When slotting with end mills with $\phi 3$ or larger, reduce the revolution to 50—70% and the feed rate to 40—60%.
- 3) When drilling, please set the feed rate at 1/3 or below the values above.
- 4) If the rigidity of the machine or the work materials installation is very low, or chattering and noise are generated, reduce the revolution and feed rate proportionately.