

MSTAR END MILLS

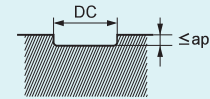
CARBIDE

MS4XL

End mill, Short cut length, 4 flute, Long neck

RECOMMENDED CUTTING CONDITIONS

Work material		Carbon steel, Cast iron, Alloy steel, Pre-hardened steel AISI 1050, AISI No 35 B, AISI P20, AISI P21			Work material		Carbon steel, Cast iron, Alloy steel, Pre-hardened steel AISI 1050, AISI No 35 B, AISI P20, AISI P21		
Dia. DC (mm)	Neck length LU (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut ap (mm)	Dia. DC (mm)	Neck length LU (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut ap (mm)
1	4	40000	3000	0.04	3.5	15	20000	3000	0.6
	8	36000	2400	0.03		25	11000	1600	0.15
	12	20000	1000	0.02		35	5500	800	0.06
	16	10000	500	0.005	4	12	18000	3000	1
1.2	6	40000	3000	0.05		20	12000	2000	0.5
	10	36000	2400	0.04		30	8000	1300	0.2
	12	20000	1200	0.03		40	4200	700	0.08
	16	12000	600	0.01		50	2400	400	0.03
1.5	6	40000	3200	0.06	5	16	14000	2700	1
	12	32000	2400	0.05		25	9500	1800	0.5
	16	16000	1100	0.03		35	6400	1200	0.2
	20	10000	600	0.01		50	3200	600	0.05
1.8	6	40000	3600	0.08	6	20	11000	2200	1.2
	12	32000	2800	0.06		30	8000	1600	0.6
	20	12000	1000	0.02		40	5400	1100	0.25
	25	7000	600	0.01		50	3200	640	0.15
2	6	40000	4000	0.1	8	30	8000	1600	1.6
	12	32000	3200	0.07		50	4000	800	0.5
	16	24000	2400	0.05		70	2000	400	0.2
	20	12000	1200	0.03	10	40	6400	1300	2
	30	5000	500	0.01		60	3200	640	0.6
2.5	8	32000	4000	0.2	80	1600	320	0.3	
	25	9000	1100	0.04	3	8	25000	3600	0.4
	50	2500	300	0.005		16	18000	2500	0.2
3	25	12000	1700	0.1		30	7000	800	0.05
	30	7000	800	0.05					



DC: Dia.

ap: Depth of Cut in the Axial Direction

1) If the depth of cut is shallow, the revolution and feed rate can be increased.

2) Cutting condition may be considerably different due to the overhang (milling depth), depth of cut, and machine tools. Please see the above table as a standard.

SOLID END MILLS