

MSSHVVariable helix end mill, Short cut length, 4 flute,
Weldon / Cylindrical shank**MSMHV**Variable helix end mill, Medium cut length, 4 flute,
Weldon / Cylindrical shank

CARBIDE

RECOMMENDED CUTTING CONDITIONS**Shoulder milling**

Work material	Carbon steel, Cast iron, Alloy steel (–30HRC) Cf53, GG25		Alloy steel, Tool steel, Pre-hardened steel (–45HRC)		Stainless steel (–1100N/mm ²)	
Dia. (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
6	9000	2240	8000	2240	5300	1060
8	7000	1680	6000	1680	4000	960
10	5000	1440	4800	1440	3200	770
12	4000	1200	4000	1200	2700	760
16	3000	1140	3000	1140	2000	560
20	2400	860	2400	860	1600	510
Depth of cut						

D:Dia.

Slot milling

Work material	Carbon steel, Cast iron, Alloy steel (–30HRC) Cf53, GG25		Alloy steel, Tool steel, Pre-hardened steel (–45HRC)		Stainless steel (–1100N/mm ²)	
Dia. (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
6	6500	1280	4000	740	3700	440
8	5000	1150	3000	670	2800	340
10	4000	910	2500	530	2200	350
12	3500	900	2000	530	1900	300
16	2500	670	1500	390	1400	280
20	2000	610	1200	350	1100	260
Depth of cut						

D:Dia.

- 1) If the depth of cut is shallow, the revolution and feed rate can be increased.
- 2) Air blow or oil mist is recommended for good chip evacuation.
- 3) The irregular helix flute end mill has a larger effect on controlling vibration when compared to standard end mills. However, if the rigidity of the machine or the workpiece installation is poor, vibration or abnormal sound can occur. In this case, please reduce the revolution and feed rate proportionately, or set a lower depth of cut.