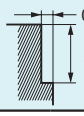
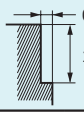
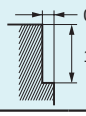
MSSHD
High power, Short cut length, 4 flute

MSMHD
High power, Medium cut length, 4 flute

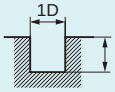
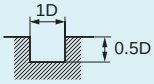
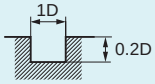
RECOMMENDED CUTTING CONDITIONS

Shoulder milling

Work material	Carbon steel, Cast iron, Alloy steel (−30HRC) Cf53, GG25		Alloy steel, Tool steel, Pre-hardened steel X40CrMoV51		Austenitic stainless steel, Titanium alloy X5CrNi1810, X5CrNiMo17122, Ti6Al4V		Hardened steel (45−55HRC) X40CrMoV51		Heat resistant alloys Inconel718	
Dia. (mm)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)
2	15000	550	10000	340	10000	320	6400	160	4800	100
3	11000	800	7400	500	7400	480	4800	250	4000	170
4	8000	900	5600	540	5600	520	3600	270	3200	240
5	6400	1000	4500	600	4500	580	2900	300	2600	240
6	5800	1100	3700	640	3700	600	2400	320	2100	230
8	4400	1100	2800	660	2800	600	1800	330	1600	220
10	3500	1000	2200	640	2200	560	1400	320	1300	200
12	2900	1000	1900	640	1900	530	1200	320	1100	170
16	2200	800	1400	500	1400	450	900	250	800	130
20	1800	750	1100	460	1100	440	720	230	640	100
25	1400	600	900	400	900	380	570	200	510	80
Depth of cut										

D:Dia.

Slotting

Work material	Carbon steel, Cast iron, Alloy steel (−30HRC) Cf53, GG25		Alloy steel, Tool steel, Pre-hardened steel X40CrMoV51		Austenitic stainless steel, Titanium alloy X5CrNi1810, X5CrNiMo17122, Ti6Al4V		Hardened steel (45−55HRC) X40CrMoV51		Heat resistant alloys Inconel718	
Dia. (mm)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)
2	12000	400	7000	200	7000	100	4200	80	2300	40
3	9000	600	5300	300	5300	150	3200	130	1900	70
4	7200	720	4000	360	4000	180	2400	140	1400	95
5	5800	720	3200	360	3200	180	1900	150	1100	95
6	5000	800	2700	400	2700	200	1600	160	950	95
8	3700	800	2000	400	2000	200	1200	170	720	90
10	3000	720	1600	360	1600	180	960	160	570	80
12	2500	720	1300	360	1300	180	800	160	480	70
16	2000	600	1000	280	1000	150	600	130	360	50
20	1600	540	800	250	800	130	480	120	290	40
25	1300	480	640	220	640	120	380	100	230	35
Depth of cut										

D:Dia.

1) When cutting austenitic stainless steels, the use of water-soluble cutting fluid is effective.
2) If the depth of cut is shallow, the revolution and feed rate can be increased.
3) 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.