


## RECOMMENDED CUTTING CONDITIONS

### ■ Side milling

Work material	P								M				S		H			
	Carbon steel, Alloy steel (280–350HB), Ductile Cast Iron				Carbon steel, Alloy steel (280–350HB), Pre-hardened steel, Alloy tool steel				Austenitic stainless steels (≤200HB), Titanium alloys						Hardened Steel (45–55HRC)			
Dia. DC (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)		
1	38000	910	1.7	0.2	31000	500	1.7	0.2	25000	500	1.7	0.2	18000	290	1.7	0.05		
2	21000	1500	3.5	0.4	17000	820	3.5	0.4	14000	640	3.5	0.4	10000	320	3.5	0.1		
3	16000	1800	5	0.6	13000	940	5	0.6	11000	880	5	0.6	7400	380	5	0.15		
4	12000	1700	7	0.8	9500	950	7	0.8	8000	900	7	0.8	5600	400	7	0.2		
5	9500	1800	8.5	1	7600	1100	8.5	1	6400	900	8.5	1	4500	430	8.5	0.25		
6	8000	2100	10	1.2	6400	1300	10	1.2	5300	1100	10	1.2	3700	440	10	0.3		
8	6000	2000	13.5	1.6	4800	1400	13.5	1.6	4000	1200	13.5	1.6	2800	450	13.5	0.4		
10	4800	2100	17	2	3800	1500	17	2	3200	1100	17	2	2200	440	17	0.5		
12	4000	1900	20.5	2.4	3200	1400	20.5	2.4	2700	1100	20.5	2.4	1900	380	20.5	0.6		
16	3000	1400	27.2	3.2	2400	1100	27.2	3.2	2000	840	27.2	3.2	1400	340	27.2	0.8		
20	2400	1200	34	4	1900	840	34	4	1600	670	34	4	1100	260	34	1		

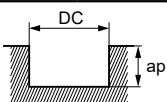
Depth of cut



### ■ Slotting

Work material	P						M			S		H		
	Carbon steel, Alloy steel (280–350HB), Ductile Cast Iron			Carbon steel, Alloy steel (280–350HB), Pre-hardened steel, Alloy tool steel			Austenitic stainless steels (≤200HB), Titanium alloys					Hardened Steel (45–55HRC)		
Dia. DC (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut ap (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut ap (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut ap (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut ap (mm)		
1	31000	620	0.5	24000	380	0.5	20000	400	0.5	9500	110	0.2		
2	17000	650	2	14000	450	2	11000	500	2	4800	130	0.4		
3	13000	940	3	10000	660	3	8500	680	3	3200	140	0.6		
4	9500	820	4	7600	600	4	6400	720	4	2400	150	0.8		
5	7600	910	5	6100	670	5	5100	710	5	1900	170	1		
6	6400	860	6	5100	630	6	4200	870	6	1600	190	1.2		
8	4800	1000	8	3800	750	8	3200	960	8	1200	190	1.6		
10	3800	910	10	3100	680	10	2500	880	10	950	150	2		
12	3200	920	12	2500	660	12	2100	860	12	800	160	2.4		
16	2400	690	16	1900	500	16	1600	380	16	600	120	3.2		
20	1900	550	20	1500	400	20	1300	310	20	480	96	4		

Depth of cut



DC: Dia.

SOLID END MILLS

SQUARE

BALL

RADIUS

TAPER

BARREL

ROUGHING