

## RECOMMENDED CUTTING CONDITIONS

### Side milling

Work material	Carbon steel, Cast iron, Alloy steel (–30HRC)		Alloy steel, Tool steel, Pre-hardened steel		Austenitic stainless steel, Titanium alloy		Hardened steel (45–55HRC)		Heat resistant alloys	
	AISI 1050, AISI No 35 B, AISI P20		AISI H13, AISI W1-10, AISI P21		AISI 304, AISI 306, Ti-6Al-4V		AISI H13		Inconel718	
Dia. DC (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)
<b>2</b>	11000	370	7000	230	7000	210	5000	100	3800	55
<b>3</b>	8000	550	5100	320	5100	300	3800	190	2500	80
<b>4</b>	6200	620	4000	350	4000	340	3000	210	1900	110
<b>5</b>	5000	670	3200	370	3200	360	2400	220	1500	110
<b>6</b>	4200	750	2600	400	2600	390	2000	220	1300	110
<b>8</b>	3200	780	2000	420	2000	400	1500	230	960	100
<b>10</b>	2500	690	1600	410	1600	380	1200	210	760	100
<b>12</b>	2100	670	1300	380	1300	340	1000	190	640	80
<b>16</b>	1600	570	1000	320	1000	280	750	170	480	65
<b>20</b>	1200	470	800	290	800	260	600	150	380	50
Depth of cut										

DC: 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.