

## RECOMMENDED CUTTING CONDITIONS

Work material	Hardened steel (45–55HRC) AISI H13 etc.				Hardened steel (55–62HRC) AISI D2 etc.				Hardened steel (62–70HRC) AISI W1, AISI M2 etc.			
	DC (mm)	Revolution (min <sup>-1</sup> )	Table feed (mm/min) (IPM)		Depth of cut ae (mm)	Revolution (min <sup>-1</sup> )	Table feed (mm/min) (IPM)		Depth of cut ae (mm)	Revolution (min <sup>-1</sup> )	Table feed (mm/min) (IPM)	
<b>1</b>	40000	1200	47.2	0.05	40000	800	31.5	0.03	32000	500	19.7	0.02
<b>2</b>	40000	2000	78.7	0.1	24000	1000	39.4	0.05	16000	600	23.6	0.05
<b>3</b>	32000	3800	149.6	0.2	16000	1900	74.8	0.1	11000	1200	47.2	0.05
<b>4</b>	24000	4400	173.2	0.2	12000	2200	86.6	0.1	8000	1300	51.2	0.05
<b>6</b>	16000	5800	228.3	0.3	8000	2900	114.2	0.2	5300	1800	70.9	0.1
<b>8</b>	12000	5800	228.3	0.4	6000	2900	114.2	0.2	4000	1800	70.9	0.1
<b>10</b>	9600	5800	228.3	0.5	4800	2900	114.2	0.3	3200	1800	70.9	0.2
<b>12</b>	8000	4800	189.0	0.6	4000	2400	94.5	0.3	2700	1500	59.1	0.2
<b>16</b>	6000	3600	141.7	0.8	3000	1800	70.9	0.5	2000	1100	43.3	0.3
<b>20</b>	4800	2900	114.2	1.0	2400	1400	55.1	0.5	1600	880	34.6	0.3
<b>25</b>	3800	2300	90.6	1.0	1900	1100	43.3	0.5	1300	720	28.3	0.3

  

Depth of cut	Hardened steel (45–55HRC) AISI H13 etc.				Hardened steel (55–62HRC) AISI D2 etc.				Hardened steel (62–70HRC) AISI W1, AISI M2 etc.			

### Slot milling with small diameter tools

Work material	Hardened steel (45–55HRC) AISI H13 etc.				Hardened steel (55–62HRC) AISI D2 etc.			
	DC (mm)	Revolution (min <sup>-1</sup> )	Table feed (mm/min) (IPM)		Depth of cut ap (mm)	Revolution (min <sup>-1</sup> )	Table feed (mm/min) (IPM)	
<b>1</b>	15000	300	11.8	0.1	9500	110	4.3	0.05
<b>2</b>	8000	320	12.6	0.2	4800	190	7.5	0.1

  

Depth of cut	Hardened steel (45–55HRC) AISI H13 etc.				Hardened steel (55–62HRC) AISI D2 etc.			

- 1) If the depth of cut is smaller than this table, feed rate can be increased.
- 2) If the rigidity of the machine or the workpiece installation is very low, or chattering is generated, please reduce the revolution and the feed rate proportionately.