## **RECOMMENDED CUTTING CONDITIONS**

Work material	Hardened steel (45-55HRC)			Hardened steel (55-62HRC)				
	AISI H13			AISI D2				
Dia. DC (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut (mm)		
0.5	40000	2000	0.03	30000	600	0.02		
1	40000	3000	0.05	20000	900	0.03		
1.5	40000	5000	0.08	18000	1100	0.05		
2	40000	5600	0.10	16000	1300	0.06		
3	34000	5600	0.15	13000	1600	0.09		
Depth of cut	≤Please refer to the list above for depth of cut.							
	≤DC							
	DC:Dia.							

- 1) If the depth of cut is shallow, the revolution and feed rate can be increased.
- 2) The above condition are for shoulder milling. For slotting φ3 or larger diameters, set the revolution, feed rate and depth of cut at 20—40% of the table figures.
- 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.

## Slot milling with small diameter tools

Work material	Hardened steel (45-55HRC)			Hardened steel (55—62HRC)					
	AISI H13			AISI D2					
Dia. DC (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut (mm)			
0.5	20000	200	0.05	15000	90	0.03			
1	15000	300	0.1	11000	110	0.05			
1.5	10000	280	0.15	7500	150	0.07			
2	8000	320	0.2	6000	190	0.1			
Depth of cut	Please refer to the list above for depth of cut.  DC:Dia.								

1) Air blow or oil mist is recommended for good chip evacuation.