Recommended Cutting Conditions

■ Side milling

(inch)

			Nickel-based Heat Resistant Super Alloy				
Workpiece Material			Inconel718, Inconel713C, WASPALOY etc.				
D	DC		Revolution	Feed Rate	Depth of Cut	Depth of Cut	
(mm)	(inch)	Flutes	(SFM)	(IPM)	ар	ae	
3	.118	4	4200	13.4	.177	.012	
4	.157	4	3200	10.2	.236	.016	
5	.197	4	2500	11.8	.295	.020	
6	.236	4	2100	9.8	.354	.024	
8	.315	6	1600	11.4	.472	.031	
10	.394	6	1300	12.2	.591	.039	
12	.472	6	1100	10.2	.709	.047	
Depth of cut			ae dap				

■Slot milling

(inch)

		,			(Inch)	
			Nickel-based Heat Resistant Super Alloy			
Workpiece Material			Inconel718, Inconel713C, WASPALOY etc.			
DC		Number of		Feed Rate	Depth of Cut	
(mm)	(inch)	Flutes	(SFM)	(IPM)	ар	
3	.118	4	3200	10.2	.059	
4	.157	4	2400	7.5	.079	
5	.197	4	1900	9.1	.098	
6	.236	4	1600	7.5	.118	
8	.315	6	1200	5.5	.157	
10	.394	6	1000	4.7	.197	
12	.472	6	800	5.5	.236	
Depth of cut			DC			

Note 1) For heat resistant super alloy, the use of water-soluble coolant is effective.

Note 2) Chattering can still occur if the machine rigidity and clamping method are insufficient. In these cases the feed and speed should be reduced proportionately.

Note 3) If the depth of cut is shallow, the revolution and feed rate can be increased.