RECOMMENDED CUTTING CONDITIONS

| ■Side milling (mm) | | | | | | | | |
|--------------------|---------------------|---|-----------------------|--------------------|--------------------|--|--|--|
| Workpiece Material | | Nickel-Based Heat Resistant Super Alloy | | | | | | |
| | | | | | | | | |
| | | Inconel718, Inconel713C, WASPALOY etc. | | | | | | |
| DC | Number of Flutes | Revolution (min ⁻¹) | Feed rate (mm/min) | Depth of cut ap | Depth of cut ae | | | |
| 3 | 4 | 4200 | 340 | 4.5 | 0.3 | | | |
| 4 | 4 | 3200 | 260 | 6 | 0.4 | | | |
| 5 | 4 | 2500 | 300 | 7.5 | 0.5 | | | |
| 6 | 4 | 2100 | 250 | 9 | 0.6 | | | |
| 8 | 6 | 1600 | 290 | 12 | 0.8 | | | |
| 10 | 6 | 1300 | 310 | 15 | 1 | | | |
| 12 | 6 | 1100 | 260 | 18 | 1.2 | | | |
| Depth of cut | | ae | | | | | | |

| ■ Slot | (mm) | | | | | |
|--------------------|------------------|---|-----------------------|--------------------|--|--|
| Workpiece Material | | Nickel-Based Heat Resistant Super Alloy Inconel718, Inconel713C, WASPALOY etc. | | | | |
| DC | Number of Flutes | Revolution (min ⁻¹) | Feed rate (mm/min) | Depth of cut ap | | |
| 3 | 4 | 3200 | 260 | 1.5 | | |
| 4 | 4 | 2400 | 190 | 2 | | |
| 5 | 4 | 1900 | 230 | 2.5 | | |
| 6 | 4 | 1600 | 190 | 3 | | |
| 8 | 6 | 1200 | 220 | 4 | | |
| 10 | 6 | 1000 | 180 | 5 | | |
| 12 | 6 | 800 | 140 | 6 | | |
| Depth of cut | | DC | | | | |

Note 1) The use of water-soluble coolant is effective for heat resistant super alloys.

Note 2) Vibration damping end mills are more effective in suppressing chatter and vibration compared to general end mills, but these may still occur if the rigidity of the machine or the workpiece material is low. In this case, please adjust the spindle speed, feed rate, and depth of cut according to the table above.

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