

RECOMMENDED CUTTING CONDITIONS

Shoulder milling

| Work material | Aluminium alloy A7075 | | Aluminium cast AC4B | |
|---------------|-----------------------|---------------------------------|---------------------|---------------------------------|
| | Dia. (mm) | Revolution (min ⁻¹) | Feed rate (mm/min) | Revolution (min ⁻¹) |
| 10 | 19000 | 8600 | 9500 | 3400 |
| 12 | 16000 | 8200 | 8000 | 3200 |
| 16 | 12000 | 7600 | 6000 | 3100 |
| 18 | 10500 | 7200 | 5300 | 2900 |
| 20 | 9500 | 7100 | 4800 | 2900 |
| 22 | 8500 | 6900 | 4300 | 2800 |
| 25 | 7500 | 6800 | 3800 | 2700 |

Depth of cut $\leq 0.5D$ $\leq 1D$ D:Dia.

Slotting

| Work material | Aluminium alloy A7075 | | Aluminium cast AC4B | |
|---------------|-----------------------|---------------------------------|---------------------|---------------------------------|
| | Dia. (mm) | Revolution (min ⁻¹) | Feed rate (mm/min) | Revolution (min ⁻¹) |
| 10 | 19000 | 6800 | 9500 | 2700 |
| 12 | 16000 | 6500 | 8000 | 2600 |
| 16 | 12000 | 6100 | 6000 | 2400 |
| 18 | 10500 | 5800 | 5300 | 2400 |
| 20 | 9500 | 5700 | 4800 | 2300 |
| 22 | 8500 | 5500 | 4300 | 2200 |
| 25 | 7500 | 5400 | 3800 | 2200 |

Depth of cut $\leq 1D$ D:Dia.

- 1) If the rigidity of the machine or the workpiece installation is very low, or chattering and noise are generated, please reduce the revolution and the feed rate proportionately, or set a smaller depth of cut.
- 2) If the depth of cut is shallow, the revolution and feed rate can be increased.
- 3) Water-soluble cutting fluid is recommended.
- 4) Climb cutting is recommended for side milling.

Using a high-speed and high-rigidity machining centre

Shoulder milling

| Work material | Aluminium alloy A7075 | | Aluminium cast AC4B | |
|---------------|-----------------------|---------------------------------|---------------------|---------------------------------|
| | Dia. (mm) | Revolution (min ⁻¹) | Feed rate (mm/min) | Revolution (min ⁻¹) |
| 10 | 30000 | 11000 | 19000 | 5400 |
| 12 | 30000 | 12000 | 16000 | 5300 |
| 16 | 24000 | 12000 | 12000 | 4900 |
| 18 | 21000 | 12000 | 10500 | 4700 |
| 20 | 19000 | 11000 | 9500 | 4600 |
| 22 | 17000 | 11000 | 8500 | 4300 |
| 25 | 15000 | 11000 | 7500 | 4300 |

Depth of cut $\leq 0.5D$ $\leq 1D$ D:Dia.

Slotting

| Work material | Aluminium alloy A7075 | | Aluminium cast AC4B | |
|---------------|-----------------------|---------------------------------|---------------------|---------------------------------|
| | Dia. (mm) | Revolution (min ⁻¹) | Feed rate (mm/min) | Revolution (min ⁻¹) |
| 10 | 30000 | 8600 | 19000 | 4300 |
| 12 | 30000 | 9900 | 16000 | 4300 |
| 16 | 24000 | 9700 | 12000 | 4000 |
| 18 | 21000 | 9500 | 10500 | 3800 |
| 20 | 19000 | 9100 | 9500 | 3700 |
| 22 | 17000 | 8700 | 8500 | 3400 |
| 25 | 15000 | 8600 | 7500 | 3400 |

Depth of cut $\leq 0.75D$ D:Dia.

- 1) If the rigidity of the machine or the workpiece installation is very low, or chattering and noise are generated, please reduce the revolution and the feed rate proportionately, or set a smaller depth of cut.
- 2) If the depth of cut is shallow, the revolution and feed rate can be increased.
- 3) Water-soluble cutting fluid is recommended.
- 4) Climb cutting is recommended for side milling.