

RECOMMENDED CUTTING CONDITIONS

Side milling

Work material	Aluminium alloy		Aluminium cast	
	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
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		
	DC: Dia.	

Slotting

Work material	Aluminium alloy		Aluminium cast	
	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
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		
	DC: Dia.	

- 1) Water-soluble cutting fluid is recommended.
- 2) If the depth of cut is shallow, the revolution and feed rate can be increased.
- 3) Climb cutting is recommended for side milling.
- 4) These end mills do not have a centre cutting edge, therefore when entering a workpiece use a ramping process rather than vertical feed.
- 5) 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, or set the depth of cut smaller.

Using a high-speed and high-rigidity machining center

Side milling

Work material	Aluminium alloy		Aluminium cast	
	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
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		
	DC: Dia.	

Slotting

Work material	Aluminium alloy		Aluminium cast	
	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
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		
	DC: Dia.	

- 1) Water-soluble cutting fluid is recommended.
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- 3) Climb cutting is recommended for side milling.
- 4) These end mills do not have a centre cutting edge, therefore when entering a workpiece use a ramping process rather than vertical feed.
- 5) 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, or set the depth of cut smaller.