

RECOMMENDED CUTTING CONDITIONS

Side milling

Work material	Aluminium alloy		Aluminium cast		
	Dia. DC (mm)	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				
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Slotting

Work material	Aluminium alloy		Aluminium cast		
	Dia. DC (mm)	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				
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- 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		
	Dia. DC (mm)	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				
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Slotting

Work material	Aluminium alloy		Aluminium cast		
	Dia. DC (mm)	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				
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- 3) Climb cutting is recommended for side milling.
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- 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.