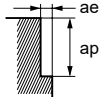


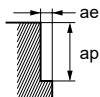
RECOMMENDED CUTTING CONDITIONS

■ Side milling

Work material	P						P					
	Carbon steel, Alloy steel (180–280HB), Alloy tool steel (≤350HB), Mild steel (≤180HB)						Prehardened steel (35–45HRC)					
Dia. DC (mm)	Cutting speed (m/min)	Main spindle revolution (min ⁻¹)	Feed per tooth (mm/t)	Table feed per Min. (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)	Cutting speed (m/min)	Main spindle revolution (min ⁻¹)	Feed per tooth (mm/t)	Table feed per Min. (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)
3	150	16000	0.15	9600	0.12	1.5	135	14000	0.15	8400	0.12	1.5
4	150	12000	0.20	9600	0.16	2.0	135	11000	0.20	8800	0.16	2.0
6	150	8000	0.35	11000	0.24	3.0	135	7200	0.35	10000	0.24	3.0
8	150	6000	0.35	13000	0.32	4.8	135	5400	0.35	11000	0.32	4.8
10	150	4800	0.40	12000	0.40	6.0	135	4300	0.40	10000	0.40	6.0
12	150	4000	0.45	11000	0.48	7.2	135	3600	0.45	9700	0.48	7.2

Depth of cut 

Work material	H			M			H					
	Hardened steel (40–55HRC), Ferritic and martensitic stainless steel (>200HB), Precipitation hardening stainless steel (<450HB)						Hardened steel (55–62HRC)					
Dia. DC (mm)	Cutting speed (m/min)	Main spindle revolution (min ⁻¹)	Feed per tooth (mm/t)	Table feed per Min. (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)	Cutting speed (m/min)	Main spindle revolution (min ⁻¹)	Feed per tooth (mm/t)	Table feed per Min. (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)
3	120	13000	0.15	7800	0.12	1.5	80	8500	0.10	3400	0.12	1.5
4	120	9500	0.21	8000	0.16	2.0	80	6400	0.15	3800	0.16	2.0
6	120	6400	0.35	9000	0.24	3.0	80	4200	0.30	5000	0.24	3.0
8	120	4800	0.35	10000	0.32	4.8	80	3200	0.30	5800	0.32	4.8
10	120	3800	0.40	9100	0.40	6.0	80	2500	0.35	5300	0.40	6.0
12	120	3200	0.45	8600	0.48	7.2	80	2100	0.40	5000	0.48	7.2

Depth of cut 

Note 1) When ramping, it is recommended to reduce the feed rate by 50%. The recommended ramping angle is 1 deg.

Note 2) When the overhang is longer than 5xD, reduce the spindle speed by 30% and the feed rate by 50%.