
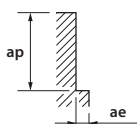


CUTTING CONDITIONS

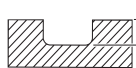
Milling | Endmills | Cutting conditions

UP-PHS

Side milling

	C≤0,2% - GG SS400 • S55C • FC250 ~750 N/mm2		~30 HRC SCM • SKT • SKS • SKD		30~38 HRC SKT • SKD • NAK55 • HPM1		38~45 HRC-SUS SUS304 • SKD		45~55 HRC Tiall									
	100 (m/min)		78 (m/min)		66 (m/min)		62 (m/min)		60 (m/min)									
Ø	S (min ⁻¹)	F (mm/min)	S (min ⁻¹)	F (mm/min)	S (min ⁻¹)	F (mm/min)	S (min ⁻¹)	F (mm/min)	S (min ⁻¹)	F (mm/min)								
3	10.600	1.170	8.300	900	7.000	650	6.600	670	6.350	580								
4	7.950	1.200	6.200	980	5.250	650	4.950	700	4.750	620								
5	6.350	1.260	4.950	1.000	4.200	700	3.950	750	3.800	640								
6	5.300	1.500	4.150	1.100	3.500	840	3.300	800	3.200	650								
8	4.000	1.500	3.100	1.100	2.650	790	2.450	770	2.400	660								
10	3.200	1.320	2.500	1.000	2.100	720	1.950	700	1.900	630								
12	2.650	1.320	2.050	1.000	1.750	680	1.650	650	1.600	570								
Max cutting depth							<table><tr><td>ap</td><td>ae</td></tr><tr><td>1,5D</td><td>0,1D</td></tr></table>		ap	ae	1,5D	0,1D	<table><tr><td>ap</td><td>ae</td></tr><tr><td>1D</td><td>0,05D</td></tr></table>		ap	ae	1D	0,05D
							ap	ae										
1,5D	0,1D																	
ap	ae																	
1D	0,05D																	
<div>1. Use a rigid and precise machine and holder.</div> <div>2. Adjust speed and feed when cutting depth is large or when machining with low rigidity tooling.</div> <div>3. Use a suitable cutting fluid with high smoke retardant properties.</div> <div>4. During dry (no fluid) milling, please use air blow to remove disposable chips from the milling area and to eliminate chip packing.</div>																		

Slotting

	C≤0,2% - GG SS400 • S55C • FC250 ~750 N/mm2		~30 HRC SCM • SKT • SKS • SKD		30~38 HRC SKT • SKD • NAK55 • HPM1		38~45 HRC-SUS SUS304 • SKD		45~55 HRC Tiall	
Vc	72 (m/min)		54 (m/min)		41 (m/min)		47 (m/min)		42 (m/min)	
Ø	S (min ⁻¹)	F (mm/min)	S (min ⁻¹)	F (mm/min)	S (min ⁻¹)	F (mm/min)	S (min ⁻¹)	F (mm/min)	S (min ⁻¹)	F (mm/min)
3	7.600	570	5.700	480	4.400	315	4.950	360	4.450	380
4	5.700	570	4.300	480	3.300	315	3.750	400	3.350	430
5	4.600	650	3.400	500	2.600	330	2.950	430	2.650	460
6	3.800	650	2.900	500	2.200	350	2.500	450	2.250	480
8	2.900	660	2.200	520	1.650	380	1.850	465	1.650	480
10	2.300	610	1.700	480	1.300	330	1.500	430	1.350	450
12	1.900	610	1.400	430	1.100	315	1.200	400	1.100	420
Max cutting depth									ap = 0,2D	