
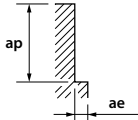


# CUTTING CONDITIONS

Milling | Endmills | Cutting conditions


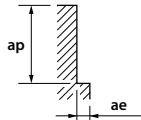
## WXL-EMS

Side milling

	Cu		~32 HRC FC250 • SS400 • S55C • NAK55		33~41 HRC SKT • SKD61 • NAK80 • HPM1 • DH		42~50 HRC SKT • SKD61 • NAK80 • HPM1 • DH															
	Ø	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)													
1	50.000	440	24.000	210	14.000	78	12.500	70														
1,5	50.000	975	16.000	310	9.250	115	8.400	105														
2	47.500	1.100	12.000	295	7.000	110	6.350	100														
2,5	38.000	1.900	9.600	480	6.200	140	5.550	125														
3	32.000	1.600	8.150	430	5.300	125	4.750	110														
4	24.000	1.700	6.050	450	4.250	135	3.700	115														
5	19.000	2.000	4.900	520	3.550	140	3.150	125														
6	16.000	2.000	4.100	520	2.950	145	2.650	130														
8	12.000	1.900	3.050	505	2.200	145	1.950	130														
10	9.500	1.900	2.450	505	1.750	145	1.550	130														
12	7.900	1.900	2.050	505	1.450	145	1.300	130														
14	6.800	1.900	1.750	495	1.250	145	1.100	125														
15	6.300	1.900	1.600	490	1.150	135	1.050	120														
16	5.900	1.800	1.500	480	1.100	130	995	115														
18	5.300	1.800	1.350	470	990	115	880	105														
20	4.700	1.700	1.200	445	890	105	795	95														
25	3.800	1.400	970	360	710	85	635	75														
30	3.100	1.100	815	300	590	70	530	60														
Max cutting depth						<table><tr><th>D</th><th>ap</th><th>ae</th></tr><tr><td>&lt;3</td><td>1,5D</td><td>0,05D</td></tr><tr><td>&gt;3</td><td>1,5D</td><td>0,1D</td></tr></table>		D	ap	ae	<3	1,5D	0,05D	>3	1,5D	0,1D	<table><tr><th>ap</th><th>ae</th></tr><tr><td>1D</td><td>0,02D</td></tr></table>		ap	ae	1D	0,02D
						D	ap	ae														
<3	1,5D	0,05D																				
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ap	ae																					
1D	0,02D																					
<div>1. Use a rigid and precise machine and holder.</div> <div>2. When chattering occurs, reduce the speed and feed simultaneously.</div> <div>3. Use a suitable cutting fluid with high smoke retardant properties.</div> <div>4. Refer to the table above to set the milling conditions in accordance with the actual situation</div>																						

## WXL-EMS

High speed side milling

	Cu		~32 HRC FC250 • SS400 • S55C • NAK55		33~41 HRC SKT • SKD61 • NAK80 • HPM1 • DH		42~50 HRC SKT • SKD61 • NAK80 • HPM1 • DH																			
	Ø	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)																	
	6	26.000	2.900	20.000	2.300	13.000	1.500	7.950	795																	
	8	19.500	3.000	14.500	2.300	9.900	1.450	5.950	795																	
	10	15.500	2.900	12.000	2.300	7.950	1.450	4.750	795																	
	12	13.000	3.000	9.900	2.300	6.600	1.450	3.950	790																	
	14	11.000	2.800	8.500	2.200	5.650	1.350	3.400	740																	
	15	10.500	2.800	7.950	2.150	5.250	1.350	3.150	730																	
	16	9.700	2.700	7.450	2.100	4.950	1.350	2.950	715																	
	18	8.600	2.700	6.600	2.100	4.400	1.300	2.650	705																	
	20	7.800	2.600	5.950	2.000	3.950	1.300	2.350	665																	
	25	6.200	2.000	4.750	1.600	3.150	1.050	1.900	560																	
	30	5.200	1.700	3.950	1.350	2.650	890	1.550	455																	
Max cutting depth	<div></div> <table><tr><th>D</th><th>ap</th><th>ae</th></tr><tr><td>D&lt;Ø8</td><td>1,5D</td><td>0,01D</td></tr><tr><td>Ø8≤D</td><td>1,5D</td><td>0,02D</td></tr></table>							D	ap	ae	D<Ø8	1,5D	0,01D	Ø8≤D	1,5D	0,02D	<table><tr><th>D</th><th>ap</th><th>ae</th></tr><tr><td>D&lt;Ø8</td><td>1D</td><td>0,01D</td></tr><tr><td>Ø8≤D</td><td>1D</td><td>0,02D</td></tr></table>	D	ap	ae	D<Ø8	1D	0,01D	Ø8≤D	1D	0,02D
								D	ap	ae																
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