

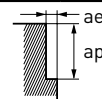
VQ4MVM

RECOMMENDED CUTTING CONDITIONS

SIDE MILLING

Material	DC	n	Vc	f	ap	ae
P Mild steel, Carbon steel, Alloy steel (180 – 280HB),	4	9500	120	1400	6	1.2
	5	7600	120	1400	7.5	1.5
	6	6400	120	1400	9	1.8
	8	4800	120	1300	12	2.4
	10	3800	120	1200	15	3
	12	3200	120	1000	18	3.6
P Pre-hardened steel (≤45HRC), Alloy tool steel	4	5600	70	490	4	0.4
	5	4500	70	500	5	0.5
	6	3700	70	500	6	0.6
	8	2800	70	520	8	0.8
	10	2200	70	460	10	1
	12	1900	70	450	12	1
M Austenitic stainless steel, Ferritic and martensitic stainless steel,	4	6400	80	470	4	0.6
	5	5100	80	470	5	0.9
	6	4200	80	580	6	1.2
S Titanium alloy	8	3200	80	630	8	1.5
	10	2500	80	660	10	1.8
	12	2100	80	610	12	2.4
M Precipitation hardening stainless steel, Cobalt chromium alloy	4	5600	70	490	4	0.8
	5	4500	70	500	5	1
	6	3700	70	500	6	1.2
	8	2800	70	520	8	1.6
	10	2200	70	460	10	2
	12	1900	70	450	12	2.4
S Heat resistant alloy	4	2400	30	120	4	0.4
	5	1900	30	120	5	0.5
	6	1600	30	130	6	0.6
	8	1200	30	130	8	0.8
	10	950	30	140	10	1
	12	800	30	140	12	1.2

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1. SMART MIRACLE coating has very low electrical conductivity; therefore, an external contact type of tool setter (electrically transmitted) may not work.
When measuring the tool length, please use an internal contact type (non-electrical type) or a laser tool setter.
2. When cutting austenitic stainless steels and titanium alloys, the use of water-soluble cutting fluid is effective.
3. If the depth of cut is shallow, the revolution and feed rate can be increased.
4. 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.