



MATERIAL GROUP	HRc		Size (mm)							
			6.0	8.0	10.0	12.0	16.0	20.0	25.0	
P	11 12	< 30	v_c (m/min)	295	290	290	300	300	300	340
			n	15600	11600	9200	8000	6000	4900	4300
			f_z	0.05	0.067	0.063	0.075	0.1	0.113	0.1
			f (mm/min)	2320	2320	2320	2400	2400	2160	2150
	13 14	30-45	v_c (m/min)	235	230	240	225	240	225	250
			n	12400	9200	7600	6000	4900	3600	3200
			f_z	0.023	0.03	0.028	0.033	0.04	0.039	0.039
			f (mm/min)	840	840	840	800	780	560	620
H	15 16	45-55	v_c (m/min)	65	60	65	65	60	65	70
			n	3400	2400	2000	1680	1200	1000	800
			f_z	0.025	0.033	0.036	0.039	0.033	0.038	0.036
			f (mm/min)	260	240	290	260	160	150	160
	15 16	55-65	v_c (m/min)	45	45	40	45	40	40	45
			n	2400	1800	1300	1200	800	660	600
			f_z	0.026	0.033	0.037	0.04	0.034	0.038	0.033
			f (mm/min)	190	180	190	190	110	100	100
M	21 22		v_c (m/min)	160	160	160	160	165	150	170
			n	8400	8300	5100	4200	3300	2400	2160
			f_z	0.023	0.03	0.028	0.034	0.039	0.038	0.038
			f (mm/min)	570	570	570	570	510	360	410
K	31 32 33 34		v_c (m/min)	295	290	290	300	300	300	340
			n	15600	11600	9200	8000	6000	4900	4300
			f_z	0.05	0.067	0.063	0.075	0.1	0.113	0.1
			f (mm/min)	2320	2320	2320	2400	2400	2160	2150

v_c - cutting speed (m/min)
 n - RPM (rev/min)
 f_z - feed rate (mm/tooth)
 f - feed rate (mm/rev)
 z - No. of teeth
 a_p - axial depth of cut
 a_e - radial depth of cut

To calculate RPM from cutting speed: $n = \frac{v_c \cdot 1000}{\pi \cdot \phi}$

To calculate cutting speed from RPM: $v_c = \frac{n \cdot \pi \cdot \phi}{1000}$

All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points.