



MATERIAL GROUP	HRC		Size (mm)							
			6.0	8.0	10.0	12.0	16.0	20.0	25.0	
P	< 40	11	v_c (m/min)	40	40	40	40	40	40	40
		12	n	2230	1670	1330	1110	840	670	540
		13	f_z	0.035	0.045	0.055	0.06	0.065	0.07	0.074
		14	f (mm/min)	470	450	440	400	33	280	240
H	40-50	15	v_c (m/min)	30	30	30	30	30	30	30
		16	n	1670	1250	1000	840	630	500	400
		15	f_z	0.035	0.044	0.05	0.054	0.061	0.067	0.071
		16	f (mm/min)	350	330	300	270	230	200	170
	50-60	15	v_c (m/min)	25	25	25	25	25	25	25
		16	n	1390	1050	840	690	530	420	340
		15	f_z	0.03	0.038	0.046	0.051	0.053	0.06	0.064
		16	f (mm/min)	250	240	230	210	170	150	130
	60-65	15	v_c (m/min)	20	20	20	20	20	20	20
		16	n	1110	840	680	560	420	320	270
		15	f_z	0.03	0.036	0.039	0.045	0.052	0.063	0.069
		16	f (mm/min)	200	180	160	150	130	120	95

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:
$$n = \frac{v_c \times 1000}{\pi \times \phi}$$

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

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.