



MATERIAL GROUP	HRc		Size (mm)										
			3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0	25.0	
P	11 12	< 30	v_c (m/min)	108	112	123	137	153	171	188	206	223	223
			n	11500	8950	7800	7250	6100	5450	4990	4090	3550	2840
			f_z	0.019	0.026	0.033	0.046	0.088	0.089	0.112	0.136	0.15	0.15
			f (mm/min)	650	710	780	995	1245	1460	1670	1670	1600	1280
	13 14	30-40	v_c (m/min)	81	90	97	111	123	137	151	161	176	176
			n	8550	7150	6200	5900	4900	4350	4000	3200	2800	2240
f_z			0.017	0.024	0.03	0.046	0.061	0.076	0.089	0.108	0.118	0.110	
K	31 32 33		v_c (m/min)	66	65	65	64	63	64	66	65	66	65
			n	7050	5150	4150	3400	2500	2050	1750	1300	1050	830
			f_z	0.012	0.021	0.06	0.04	0.068	0.083	0.097	0.135	0.149	0.149
			f (mm/min)	255	320	370	405	510	510	510	525	470	370
N	71 72 73		v_c (m/min)	193	194	190	194	199	193	194	194	185	185
			n	20500	15400	12100	10300	7900	6150	5150	3850	2950	2360
			f_z	0.007	0.01	0.015	0.017	0.026	0.033	0.046	0.053	0.069	0.069
			f (mm/min)	450	450	535	535	615	615	710	615	615	490
STEEL													

► The feed rate for long and long reach tools should be reduced by up to 50%

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_w - radial depth of cut

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

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

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.