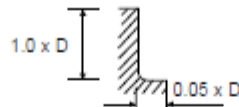




MATERIAL GROUP	HRc		Size (mm)									
			2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	
P	11 12	< 30	v_c (m/min)	85	100	115	120	125	125	125	125	135
			n	13870	10700	9070	7560	6670	5040	3910	3290	2640
			f_z	0.008	0.009	0.019	0.024	0.03	0.042	0.047	0.047	0.046
			f (mm/min)	340	385	685	720	790	850	730	625	490
	13 14	30-45	v_c (m/min)	55	65	70	70	75	75	75	75	80
			n	9070	6670	5540	4540	4030	3020	2400	2020	1630
			f_z	0.006	0.009	0.019	0.024	0.030	0.038	0.038	0.037	0.037
			f (mm/min)	205	240	420	430	490	455	360	300	240
H	15 16	45-55	v_c (m/min)	40	40	45	45	45	50	50	50	55
			n	6050	4030	3530	2780	2400	2020	1630	1390	1090
			f_z	0.002	0.004	0.005	0.008	0.01	0.016	0.017	0.017	0.016
			f (mm/min)	60	70	70	85	95	130	110	95	70
	15 16	55-65	v_c (m/min)	-	20	20	25	25	25	25	25	25
			n	-	2280	1780	1510	1320	1010	820	670	530
			f_z	-	0.008	0.01	0.012	0.013	0.017	0.018	0.022	0.017
			f (mm/min)	-	70	70	70	70	70	60	60	35
K	31 32 33 34		v_c (m/min)	85	100	115	120	125	125	125	125	135
			n	13870	10700	9070	7560	6670	5040	3910	3290	2640
			f_z	0.008	0.009	0.019	0.024	0.03	0.042	0.047	0.047	0.046
			f (mm/min)	340	385	685	720	790	850	730	625	490



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

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

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

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.