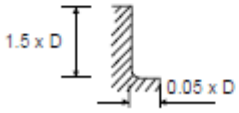
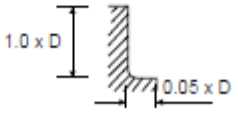
158120, 158320 (6 Flute Long, 45° Helix, Corner Radius)

MATERIAL GROUP		HRc	HIGH SPEED	Size (mm)					
				6.0	8.0	10.0	12.0	16.0	20.0
H	15	< 50	v_c (m/min)	315	315	315	315	315	315
			n	16800	12600	9980	8400	6300	5040
	16		f_z	0.06	0.081	0.1	0.1	0.1	0.101
			f (mm/min)	6090	6090	5990	5040	3780	3050
	15	50-60	v_c (m/min)	160	160	160	160	160	160
			n	8400	6300	5040	4200	3160	2520
	16		f_z	0.061	0.081	0.101	0.1	0.1	0.097
			f (mm/min)	3050	3050	3050	2520	1890	1470
	15	> 60	v_c (m/min)	80	80	80	80	80	80
			n	4200	3160	2520	2100	1580	1260
	16		f_z	0.058	0.078	0.097	0.1	0.1	0.101
			f (mm/min)	1470	1470	1470	1260	950	760

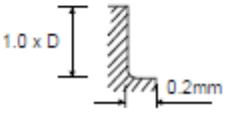
< HRc50



HRc50-60



> HRc60



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

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

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.