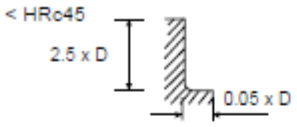
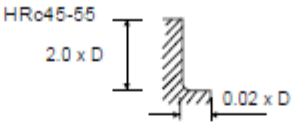
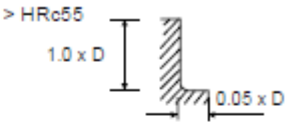
157120, 157320 (4 Flute Long Length, Corner Radius)

MATERIAL GROUP		HRc		Size (mm)							
				3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0
P	11 12	< 30	v_c (m/min)	60	65	70	75	75	80	80	85
			n	6620	5360	4580	3950	3000	2520	2060	1740
			f_z	0.006	0.01	0.012	0.014	0.019	0.023	0.022	0.023
			f (mm/min)	170	210	215	215	230	230	180	160
	13 14	30-45	v_c (m/min)	40	45	45	50	50	50	50	55
			n	4280	3410	2900	2520	1900	1640	1390	1070
			f_z	0.008	0.011	0.016	0.018	0.024	0.027	0.029	0.029
			f (mm/min)	130	150	180	180	180	180	160	125
H	15 16	45-55	v_c (m/min)	25	25	30	30	30	30	30	35
			n	2640	2150	1900	1640	1280	1010	840	670
			f_z	0.006	0.008	0.011	0.013	0.017	0.021	0.021	0.022
			f (mm/min)	65	70	85	85	85	85	70	60
	15 16	55-65	v_c (m/min)	20	20	20	20	20	20	20	20
			n	1870	1470	1260	1160	840	670	550	440
			f_z	0.004	0.006	0.008	0.011	0.015	0.019	0.018	0.02
			f (mm/min)	30	35	40	50	50	50	40	35
K	31 32 33 34		v_c (m/min)	60	65	70	75	75	80	80	85
			n	6620	5360	4580	3950	3000	2520	2060	1740
			f_z	0.006	0.01	0.012	0.014	0.019	0.023	0.022	0.023
			f (mm/min)	170	210	215	215	230	230	180	160







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

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

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.