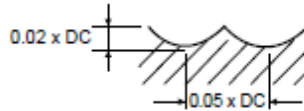


101950 (4 Flute B/N centre match)

MATERIAL GROUP	HARDNESS HRC		Size (mm)								
			3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0
P	13 30-45	v_c (m/min)	340	340	340	340	340	340	340	340	340
		n	36090	27070	21655	18045	13535	10825	9020	6765	5410
		f_z	0.071	0.08	0.09	0.101	0.116	0.128	0.144	0.144	0.145
		f (mm/min)	10250	8660	7795	7290	6280	5540	5195	3895	3140
H	15 45-55	v_c (m/min)	285	285	285	285	285	285	285	285	285
		n	30255	22690	18150	15125	11345	9075	7560	5670	4535
		f_z	0.06	0.07	0.081	0.092	0.103	0.111	0.125	0.126	0.129
		f (mm/min)	7260	6350	5880	5565	4670	4030	3780	2855	2340
	15 55-60	v_c (m/min)	230	230	230	230	230	230	230	230	230
		n	24415	18310	14650	12205	9155	7325	6100	4575	3660
		f_z	0.05	0.06	0.071	0.082	0.093	0.104	0.115	0.119	0.119
		f (mm/min)	4880	4395	4160	4000	3405	3045	2805	2175	1740
	15 60-65	v_c (m/min)	210	210	210	210	210	210	210	210	210
		n	22290	16720	13375	11145	8360	6685	5570	4180	3340
		f_z	0.045	0.055	0.067	0.077	0.089	0.095	0.096	0.096	0.097
		f (mm/min)	4010	3675	3585	3430	2975	2540	2140	1605	1295
	15 65-70	v_c (m/min)	145	145	145	145	145	145	145	145	145
		n	15390	11545	9235	7695	5770	4615	3845	2885	2305
		f_z	0.04	0.05	0.062	0.072	0.082	0.094	0.096	0.096	0.097
		f (mm/min)	2460	2305	2290	2215	1890	1735	1475	1105	895



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

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

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.