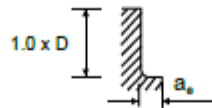




MATERIAL GROUP	HARDNESS HRC		Size (mm)										
			1.0	1.2	1.5	2.0	3.0	4.0	6.0	8.0	10.0	12.0	
P	13 14	< 35	a_p (mm)	0.008	0.009	0.011	0.024	0.036	0.048	0.123	0.168	0.21	0.252
			v_c (m/min)	83	101	112	122	135	145	179	181	188	188
			n	26480	23780	23760	18440	14310	11520	9500	7300	6000	5000
			f_z	0.002	0.003	0.003	0.004	0.006	.0009	0.013	0.019	0.023	0.022
			f (mm/min)	230	295	300	310	325	405	510	550	550	430
H	15 16	35-45	a_p (mm)	0.008	0.007	0.008	0.018	0.027	0.036	0.095	0.126	0.158	0.189
			v_c (m/min)	54	64	39	78	87	93	113	114	126	126
			n	17280	17010	14580	12420	9270	7380	6000	4550	4000	3340
			f_z	0.002	0.003	0.004	0.005	0.007	0.01	0.018	0.024	0.027	0.028
			f (mm/min)	165	215	220	225	250	290	430	430	430	380
	16 16	45-55	a_p (mm)	0.005	0.005	0.007	0.014	0.022	0.029	0.076	0.101	0.126	0.151
			v_c (m/min)	33	40	43	49	53	58	74	76	76	75
			n	10560	10530	9180	7780	5670	4640	3930	3020	2420	2000
			f_z	0.002	0.003	0.003	0.004	0.005	0.007	0.013	0.017	0.021	0.02
			f (mm/min)	90	115	115	120	120	130	200	200	200	160
K	31 32 33 34		a_p (mm)	0.008	0.009	0.011	0.024	0.036	0.048	0.123	0.168	0.21	0.252
			v_c (m/min)	83	101	112	122	135	145	179	181	188	188
			n	26480	23780	23760	18440	14310	11520	9500	7300	6000	5000
			f_z	0.002	0.003	0.003	0.004	0.006	.0009	0.013	0.019	0.023	0.022
			f (mm/min)	230	295	300	310	325	405	510	550	550	430



► The data shown is based on medial length tools. Please adjust machining conditions according to length.

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_r - 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.