



MATERIAL GROUP	HARDNESS HRC		Size (mm)				
			1.0	1.2	1.5	2.0	
P	11 12	< 30	a_p (mm)	0.03	0.037	0.045	0.06
			v_c (m/min)	65	60	60	65
			n	20000	16000	13000	10000
			f_z	0.009	0.011	0.013	0.018
			f (mm/min)	700	700	700	700
	13 14	30-45	a_p (mm)	0.025	0.032	0.04	0.05
			v_c (m/min)	45	50	45	50
			n	15000	13000	10000	8000
			f_z	0.008	0.01	0.013	0.016
			f (mm/min)	500	500	500	500
H	15 16	45-55	a_p (mm)	0.015	0.018	0.022	0.03
			v_c (m/min)	30	30	30	30
			n	10000	8000	6500	5000
			f_z	0.008	0.009	0.012	0.015
			f (mm/min)	300	300	300	300
K	31 32 33 34		a_p (mm)	0.03	0.037	0.045	0.06
			v_c (m/min)	65	60	60	65
			n	20000	16000	13000	10000
			f_z	0.009	0.011	0.013	0.018
			f (mm/min)	700	700	700	700

► 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.