

167123, 167323, 168123, 168323, 169123, 169323 (4&5 Flute Multi Helix, Corner Radius)



SLOTTING

MATERIAL GROUP	HRC		Size (mm)						
			6.0	8.0	10.0	12.0	16.0	20.0	
P	< 25	11	v_c (m/min)	225	225	225	225	225	225
		12	n	12000	9000	7200	6000	4500	3600
			f_z	0.032	0.046	0.057	0.064	0.067	0.074
			f (mm/min)	1550	1650	1650	1540	1500	1330
	25-40	13	v_c (m/min)	200	205	200	205	205	200
		14	n	10800	8100	6400	5400	4100	3200
			f_z	0.026	0.036	0.046	0.053	0.051	0.056
			f (mm/min)	1100	1180	1180	1140	1050	900
K	< 25	31	v_c (m/min)	225	225	225	225	225	225
		32	n	12000	9000	7200	6000	4500	3600
			f_z	0.032	0.046	0.057	0.064	0.067	0.074
			f (mm/min)	1550	1650	1650	1540	1500	1330
	25-40	33	v_c (m/min)	200	205	200	205	205	200
		34	n	10800	8100	6400	5400	4100	3200
			f_z	0.026	0.036	0.046	0.053	0.051	0.056
			f (mm/min)	1100	1180	1180	1140	1050	900

< HRc25

1.0 x D

> HRc25

0.8 x D

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

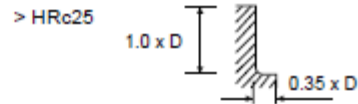
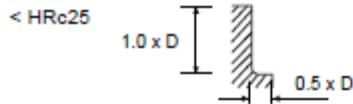
To calculate RPM from cutting speed: $n = \frac{v_c \times 1000}{\pi \times \varnothing}$

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.



MATERIAL GROUP	HRc		Size (mm)						
			6.0	8.0	10.0	12.0	16.0	20.0	
P	< 25	11	v_c (m/min)	300	300	300	300	300	300
		12	n	15800	11900	9500	8000	6000	4800
			f_z	0.041	0.057	0.071	0.08	0.082	0.089
			f (mm/min)	2570	2700	2700	2570	2450	2140
	25-40	13	v_c (m/min)	270	270	270	270	270	270
		14	n	14300	10700	8500	7100	5400	4300
			f_z	0.032	0.046	0.057	0.065	0.065	0.07
			f (mm/min)	1850	1950	1950	1850	1750	1500
K	< 25	31	v_c (m/min)	300	300	300	300	300	300
		32	n	15800	11900	9500	8000	6000	4800
			f_z	0.041	0.057	0.071	0.08	0.082	0.089
			f (mm/min)	2570	2700	2700	2570	2450	2140
	25-40	33	v_c (m/min)	270	270	270	270	270	270
		34	n	14300	10700	8500	7100	5400	4300
			f_z	0.032	0.046	0.057	0.065	0.065	0.07
			f (mm/min)	1850	1950	1950	1850	1750	1500



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

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.