

106365 (6 Flute, 45° Helix)



MATERIAL GROUP	HARDNESS HRC		Size (mm)						
			6.0	8.0	10.0	12.0	16.0	20.0	
<b>P</b>	13 14	< 35	v <sub>c</sub> (m/min)	105	108	108	107	106	106
			n	5560	4200	3360	2840	2100	1680
			f <sub>z</sub>	0.06	0.079	0.099	0.099	0.1	0.1
			f (mm/min)	2000	2000	2000	1680	1260	1010
<b>H</b>	15 16	35-45	v <sub>c</sub> (m/min)	73	74	73	75	74	73
			n	1370	2940	2320	2000	1480	1160
			f <sub>z</sub>	0.059	0.078	0.098	0.097	0.099	0.099
			f (mm/min)	3880	1370	1370	1160	880	690
	16 16	45-55	v <sub>c</sub> (m/min)	30	29	31	32	32	31
			n	1580	1160	1000	840	640	500
			f <sub>z</sub>	0.022	0.03	0.035	0.036	0.034	0.037
			f (mm/min)	210	210	210	180	130	110
<b>K</b>	31 32 33 34		v <sub>c</sub> (m/min)	105	106	106	107	106	106
			n	5560	4200	3360	2840	2100	1680
			f <sub>z</sub>	0.06	0.079	0.099	0.099	0.1	0.1
			f (mm/min)	2000	2000	2000	1680	1260	1010
< HRc35			HRc35 - 45			> HRc45			

v<sub>c</sub> - cutting speed (m/min)  
 n - RPM (rev/min)  
 f<sub>z</sub> - feed rate (mm/tooth)  
 f - feed rate (mm/rev)  
 z - No. of teeth  
 a<sub>p</sub> - axial depth of cut  
 a<sub>r</sub> - 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.