



Material Group	V _c (m/min)	f _n (mm/rev)																																																																																				
		ø13.0 -15.5	ø16.0 -18.5	ø19.0 -21.5	ø22.0 -24.5	ø25.0 -28.5	ø28.0 -31.5	ø32.0 -35.5	ø36.0 -39.5	ø40.0 -43.5	ø44.0 -47.5	ø48.0 -51.5	ø52.0 -55.5	ø56.0 -59.5	ø60.0																																																																							
P	11	20 (18-22)	0.17	0.20	0.23	0.24	0.25	0.26	0.28	0.30	0.31	0.32	0.33	0.35	0.38	0.40																																																																						
	12																																																																																					
	13	15 (13-18)															0.15	0.18	0.21	0.22	0.23	0.24	0.26	0.28	0.29	0.30	0.31	0.33	0.36	0.38																																																								
	14																																																																																					
M	21	18 (15-20)																													0.17	0.20	0.23	0.24	0.25	0.26	0.28	0.30	0.31	0.32	0.33	0.35	0.38	0.40																																										
	22																																																																																					
K	31	18 (15-20)																																											0.17	0.20	0.23	0.24	0.25	0.26	0.28	0.30	0.31	0.32	0.33	0.35	0.38	0.40																												
	32																																																																																					
	33																																																																																					
S	41	10 (8-12)																																																									0.09	0.11	0.13	0.14	0.15	0.16	0.18	0.18	0.19	0.19	0.20	0.21	0.22	0.23														
	42																																																																																					
N	71	45 (40-50)																																																																							0.26	0.28	0.30	0.32	0.34	0.36	0.38	0.40	0.42	0.44	0.46	0.48	0.49	0.50
	72																																																																																					
	73																																																																																					
O	81	22 (20-25)	0.26	0.28	0.30	0.32	0.34	0.36	0.38	0.40	0.42	0.44	0.46	0.48	0.49	0.50																																																																						
	82																																																																																					

v_c - cutting speed (m/min)

n - RPM (rev/min)

f_n - feed rate (mm/rev)

ø - drill diameter (mm)

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

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

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.