CUTTING DATA

820601, 0000, 0001, 820801, 820901, 821001 (HSS Stub, Two Tone, Jobber, Long Series, Extra Long Series)

VDI MATERIAL GROUP			HRc	v_c (m/min)	f_n (mm/rev)													
					ø1.0 -1.9	ø2.0 -2.9	ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0
P	1-5	Non-alloy Steel	<25	**25 (22-27)**	0.01	0.025	0.05	0.055	0.063	0.08	0.10	0.13	0.145	0.16	0.18	0.20	0.23	0.24
	6-9	Low alloy Steel	25-35	**22 (20-25)**	0.009	0.02	0.045	0.05	0.06	0.075	0.095	0.125	0.14	0.15	0.17	0.21	0.22	0.23
M	12-13	Stainless Steel		**18 (15-20)**	0.01	0.025	0.05	0.055	0.063	0.08	0.10	0.13	0.145	0.16	0.18	0.20	0.23	0.24
K	15-16	Grey Cast Iron		**18 (15-20)**	0.01	0.025	0.05	0.055	0.063	0.08	0.10	0.13	0.145	0.16	0.18	0.20	0.23	0.24
N	21-24	Aluminium Si<12%		**48 (45-50)**	0.02	0.038	0.063	0.07	0.076	0.12	0.16	0.18	0.20	0.225	0.25	0.275	0.30	0.325
	29.1	Plastics, Acrylics		**23 (22-25)**	0.01	0.025	0.05	0.055	0.063	0.08	0.10	0.13	0.145	0.16	0.18	0.20	0.23	0.24

v_c - cutting speed (m/min)
n - RPM (rev/min)
f_n - feed rate (mm/rev)
ø - drill diameter (mm)

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

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

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 these charts are nominal recommendations and should be considered only as good starting points.