

CUTTING DATA

MATERIAL	CUTTING SPEED SFM		FEED IN/REV.				
	COOLANT DELIVERY		DRILL DIAMETER				
	FLOOD	THROUGH TOOL	≥ .812	.845-1.000	1.031-1.188	1.219-1.688	1.750 & OVER
CARBON STEEL 10xx-15xx/1018,1212,1551	250-400	575-800	.002	.004	.005	.006	.008
ALLOY STEEL 21xx-92xx/4130,4340,8620	230-350	550-700	.002	.004	.005	.006	.008
300 SERIES Stainless Steel /304,316,17-4PH	230-350	450-580	.0025	.003	.0035	.004	.0045
400 SERIES Stainless Steel /410,430	230-350	490-620	.0025	.003	.0035	.004	.0045
CAST IRON	250-360	600-750	.004	.0055	.006	.007	.008
DUCTILE/NODULAR CAST IRON	230-270	460-590	.004	.0055	.006	.007	.008
ALUMINUM & NON-FERROUS	325-400	650-1150	.006	.008	.0085	.010	.012

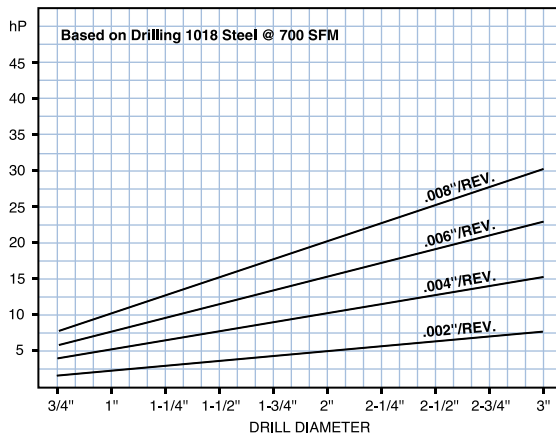
Cutting Speed:

Feed Rate:

$$RPM = \frac{SFM \times 3.82}{DRILL \ \varnothing}$$

$$IPM = RPM \times IPR \ (IN./REV.)$$

HORSE POWER REQUIREMENTS

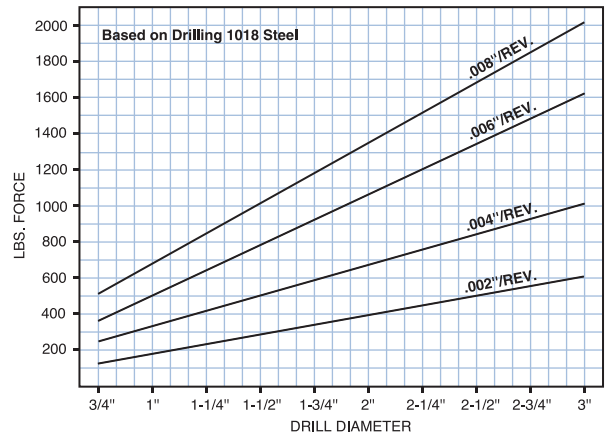


$$hP = \frac{(.785)(D^3)(RPM)(IPR)}{K}$$

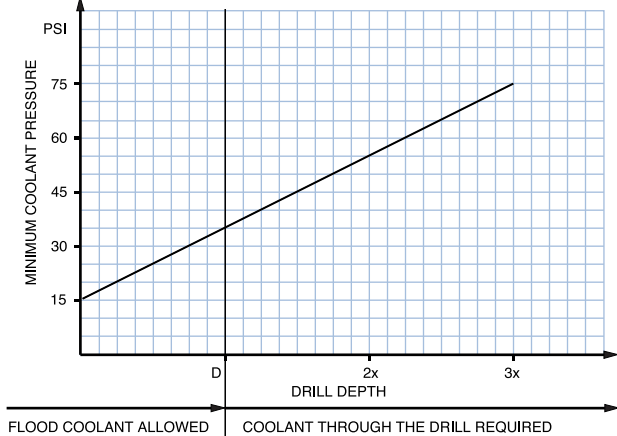
K Values

Carbon Steel 1018, 1212	1.6
Alloy Steel 4130, 8620	1.3
Stainless Steel 304, 316	1.0
Cast Iron	1.7
Nodular Cast Iron	1.5
Aluminum & Non-Ferrous	3.4

THRUST REQUIREMENTS

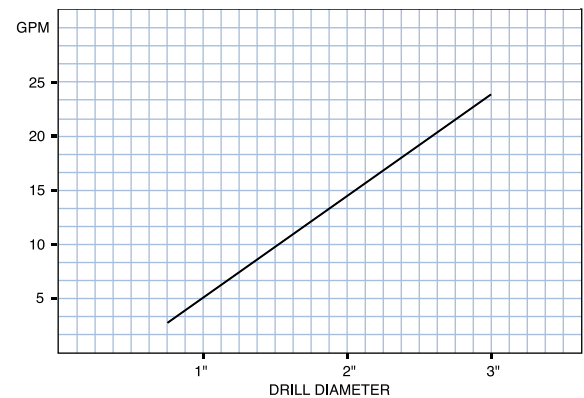


COOLANT REQUIREMENTS*



* NOTE: FOR COOLANT REQUIREMENTS AND COOLANT VOLUME, ADD 10-20% FOR VERTICAL DRILLING OPERATIONS.

COOLANT VOLUME*



CAUTION

A disc is generated during through-boring operations. In case of rotating workpieces, there is an accident hazard due to the development of centrifugal force. Therefore, always work with safety guards.

