Bridgeport Speeds and Feeds

Speeds (revolutions per minute)

Formula: RPM= $\dfrac{CS \times 4}{D}$

CS is surface feet per minute
D is the diameter of the cutter or stock

Material	SFPM (HSS)	Carbide
Mild steel	80	180
Cast iron	70	160
Tool steel	60	110
Bronze	90	200
Aluminum	150	350
Brass	130	300
Stainless 410	60	140
Plastic	300	

Reamers, counterbores and countersinks

Formula: RPM= $\dfrac{CS \times 4}{3D}$

Feeds (inches per minute)

Formula: IPM = FPT x N x RPM

IPM is inches per minute
FPT is feed per tooth
N is number of teeth

Material	FPT (end mill)	FPT (helical mill)
Mild steel	.005	.009
Cast iron	.007	.012
Tool steel	.003	.006
Bronze	.006	.010
Aluminum	.010	.017

Center Drill RPM

Diam	rpm
1/8	1400
3/16	1200
¼	1000
5/16	800
7/16	600