

## Bridgeport Manual Reference – Speeds & Feeds Chart

General-purpose speeds and feeds for HSS and carbide tools on Bridgeport-style manual mills.

Tool Type	Size	Aluminum (SFM)	Steel (SFM)	Brass (SFM)	Copper (SFM)	Stainless (SFM)
HSS Drill	1/8"	200	100	180	150	70
HSS Drill	1/2"	200	100	180	150	70
Carbide End Mill	1/4"	400	250	450	350	200
Carbide End Mill	1/2"	400	250	450	350	200
Face Mill	2"	600	400	700	500	300

## CNC Machine Reference – Speeds & Feeds Chart

Recommended starting points for carbide tooling in CNC mills with flood coolant and rigid setups.

Tool Type	Size	Aluminum (SFM)	Steel (SFM)	Brass (SFM)	Copper (SFM)	Stainless (SFM)
Carbide Drill	1/8"	500	350	600	450	250
Carbide Drill	1/2"	450	300	550	400	250
Carbide End Mill	1/4"	800	400	900	700	300
Carbide End Mill	1/2"	800	400	900	700	300
Indexable Face Mill	2"	1000	600	900	700	400

*Formulas:  $RPM = (SFM \times 3.82) \div \text{Tool Diameter}$  |  $\text{Feed Rate} = RPM \times \text{Chip Load} \times \text{Flutes}$*   
Adjust for rigidity, coolant, and tool condition. Always start low and increase gradually.