



# FULLERTON

## S P E E D S / F E E D S

Material	Speed SFM	Feed (IPR)			SMPM	Feed (MMPR)		
		.1250	.2500	.5000		3.00mm	6.00mm	12.00mm
High Si Aluminum >10%	75-200	.0040	.0080	.0120	22-60	.1016	.2032	.3048
Low Si Aluminum <10%	100-300	.0050	.0100	.0150	30-91	.1270	.2540	.3810
Composites	-	-	-	-	-	-	-	-
Plastics	-	-	-	-	-	-	-	-
Brass & Copper	75-150	.0030	.0040	.0060	22-45	.0762	.1016	.1524
Graphite	-	-	-	-	-	-	-	-
Cast Iron								
Soft	75-150	.0050	.0080	.0120	22-45	.1270	.2032	.3048
Medium	60-100	.0050	.0080	.0120	18-30	.1270	.2032	.3048
Malleable	40-100	.0030	.0060	.0100	12-30	.0762	.1524	.2540
Bronze	65-125	.0030	.0040	.0060	19-38	.0762	.1016	.1524
Hardened Steels	30-90	.0020	.0020	.0040	9-27	.0508	.0508	.1016
Steels								
Low Carbon	60-125	.0030	.0060	.0100	18-28	.0762	.1524	.2540
Medium Carbon	100-150	.0030	.0050	.0080	30-45	.0762	.1270	.2032
Stainless Steels								
Free Machining	50-90	.0050	.0080	.0120	15-27	.1270	.2032	.3048
Work Hardening	30-75	.0030	.0060	.0100	9-22	.0762	.1524	.2540
Super Alloys	40-80	.0025	.0035	.0055	12-24	.0635	.0889	.1397
Titanium								
Soft	50-125	.0030	.0060	.0100	15-38	.0762	.1524	.2540
Hard	20-60	.0020	.0040	.0080	6-18	.0508	.1016	.2032

### Stock Removal

Sufficient amount of stock should be left in the work area to permit the reamer to cut rather than to burnish or glaze.

The amount of stock removal for machine reaming:

Reamer Diameter	Suggested Stock Removal
.2500"	.008" - .010"
.2501" - .5000"	.012" - .015"
.5001" - 1.0000"	.017" - .020"
1.001" - 1.5000"	.020" - .025"

The use of coolants will help produce a superior finish when reaming.

**Not Recommended for Composites, Plastics, or Graphite.** The parameters listed for tool series that are stocked uncoated are based on running an uncoated tool. If a coating is applied to the tools, the SFM can be increased by approximately 25%. All speed and feed recommendations should be considered only as a starting point. Start with conservative speeds and feeds while analyzing the rigidity of the process, then cautiously progress incrementally to achieve optimum performance.