



TUFTS GRINDING, INC.

PRODUCTS

- Bearing Shaft Quality (BSQ)
- Boat Shaft
- Cold Finished
- Hot Roll
- Polished Rod
- Precision Ground (TG&P)
- Pump Shaft Quality (PSQ)
- Gun Barrel
- Ring Gauge Quality
- Rotor Bar

CARBON & ALLOY

- 1018
- 1045
- 10V45 – 75K Yield Micro Alloy
- 1045/50 ASTM A311 B
- 1141
- 1144 A311 B
- 12L14
- 1215
- 41410/4142
- 4140/4142 (Q&T)
- 8620

STAINLESS

- 303
- 304/304 L
- 316/316 L
- 410/416/420/431
- 17-4
- XM-19

CAPABILITIES

- Centerless Grinding
- Turning (Peeling)
- Machine Straightening
- Chamfering
- Bundle Saw Cutting up to 48'
- De-Magnetizing
- 12mm to 6" Rounds
- Lengths - 4' to 40'
- Fiber (Cardboard) Tubes Manufacturing

STANDARD DIAMETER TOLERANCES

Size Range	Cold Drawn or Turned & Polished	Turned, Ground, & Polished
0.50" to 1.50"	.004	.001
Over 1.50" to 2.50"	.005	.0015
Over 2.50" to 3.00"	.006	.002
Over 3.00" to 4.00"	.006	.003
Over 4.00" to 6.00"	.007	.004

- These tolerances are for carbon bars .25% to .55 carbon range
- All tolerances are plus .000 minus the number shown on the chart
- Tolerances for 1018 T&P bars are .001 less than T&P tolerances shown
- 1/2 Standard Tolerance is available

TYPICAL SURFACE FINISHES

- Rough Turned: 63 to 250 Ra
- Cold Drawn Bar: 32 to 63 (63 max) Ra
- Turned and Polished (T&P): 32 Ra max
- Drawn, Ground and Polished: 20 Ra max
- Turned, Ground and Polished (TG&P) or Drawn: 20 Ra max

STRAIGHTNESS

- Industry leading straightness with every bar inspected

PACKAGING

- Safety Strap Banding
- Full Length Tubes
- Tubes with Custom Logos
- Collars
- VCI Paper Wrap
- Wooden Boxes