

## **WINGATE ALLOYS SHAFTING PRODUCTS**

### **METRIC CHROME PLATED & TGP SHAFT**

- Metric Diameter Hard Chromium Plated Turned, Ground and Polished Shafting
- A Corrosive Resistant Shafting for Piston Rod and Hydraulic Piston Applications
- The hardness, toughness and close tolerances are combined with the chromium plating to supply the corrosion resistance necessary for all Rod applications.
- Precision Turned, ground and polished to extremely tight diameter and straightness tolerances
- Will withstand shock and vibration to provide long life.
- Readily machinable upon delivery.
- All bars are delivered machine straightened and stress relieved to remove residual internal stresses.
- Bars are specially prepared and crated in Wood Boxes with cardboard tube for safe shipment.
- Bearing quality shaft

- **CARBON STEEL**

- 1045 TGP SHAFT

- Stocked in a wide variety of sizes
    - 75 KSI Min Yield
    - Most sizes in stock for immediate shipment
    - Can be cut for UPS if necessary

- 1050 HIGH YIELD TGP SHAFT

- 100 KSI Min Yield

- **ALLOY STEEL**

- 4140 Q&T TGP SHAFT (WINCO TGP)

- Quench & Tempered, Stress Relieved Through Hardened Alloy steel shaft with excellent mechanical properties.
    - See WINCO TGP Product Sheet

- 1141 TGP SHAFT

- 1141 is a medium-carbon steel with higher mechanical properties than other medium carbon steels, as well as free machining properties.
    - Because of the free machining properties, it is usually used in automatic screw machines. Applications: pins, studs, bolts, axles and various machine parts needing considerable machining, close finish tolerances, bright finish, and high mechanical properties.
    - Machinability rating is 70% of AISI 1212 steel

- 1144 (Stressproof-equivalent) TGP SHAFT

- 1144 is a medium-carbon steel with higher mechanical properties than other medium carbon steels, as well as free machining properties.
    - Very low distortion or warpage after machining due to a combination of its chemistry, method of manufacture, and heat treatment.
    - Relatively easy to machine, with a machinability rating of 83% of AISI 1212 steel

- **STAINLESS STEEL**

- 303
  - 303 is one of the most popular of all the free machining stainless steels. It offers good strength, corrosion resistance and great machinability.
- 304
  - One of the most widely used and oldest of the stainless steels. This was originally called 18-8 which stood for its chromium and nickel content. It possesses an excellent combination of strength, corrosion resistance and fabricability.
- 316
  - This austenitic stainless steel has an increased molybdenum content to increase its resistance to corrosion when compared to other 300 series alloys. It will resist scaling at temperatures up to 1600 F. Many of our customer use this material for heat treating applications where hot salt solution is used. 316 is also used in the marine industry because of its resistance to corrosion.
    - Improved resistance to pitting corrosion in chloride environments
- 17-4 H1150
  - Withstands corrosive attack better than any of the standard hardenable stainless steels
  - Heat Treated for increased mechanical properties and hardness.

**\*\*SEE SPREADSHEET FOR STOCK SIZES**