**Precision Shafts**

**Bearing Quality Round Rod, Accuracy Ground (Precision Ground), Pump Shaft Quality (PSQ); Why so many choices?**

These types are readily available or can be made in any type of material; stainless, nickel, carbon, aluminum, plastic, etc...

**Bearing Quality** - Has an undersized and smooth finish for the use of Bearings

**Accuracy Ground** - Has a +/-0.0005 tolerance on the OD for screw machines and precision

**Pump Shaft Quality** - Has an undersized tolerance and straightness tolerance

**Shaft**: a rotating or oscillating round, straight bar for transmitting motion and torque, usually supported on bearings and carrying gears, wheels, or the like, as a propeller shaft on a ship, or a drive shaft of an engine.

**Bearing Quality:**

Bearing is the support and guide for a rotating, oscillating, or sliding shaft, pivot, or wheel. Bearings are made with exact size ID dimensions. Bearing Shafts are ground to a .001"-.0015" tolerance under the dimension to give a slip fit. The shaft also has a 32RMS surface finish, better is available. This finish allows for a more round bar and smooth finish, which helps the life of the shaft. The bearing should go over the ground shaft with ease and no wobble.

**Accuracy Ground:**

With tight tolerances and great surface finish, the bar is ready to use. No machining is required making it great for screw machine and precision machining applications.

**Pump Shaft Quality:**

In the stainless and nickel industries, Pump Shaft Quality (PSQ) indicates turned, ground and polished shafting used in the rotating industries. The tight diametrical tolerance achieved through grinding decreases wear and gives a more constant product with controlled properties. This product is also straightened to give minimal vibration throughout the length of the shaft. Straightness .005 TIR (total indicator run-out) in 3ft plus .0015" TIR for each foot over.