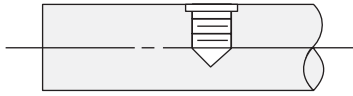


## PRECISION END MACHINING

PowerTrax™ HG hardened and ground shafting is manufactured for use with precision linear bearings and other applications requiring an accurate, round, hardened shaft or guide rod. All linear shafting can be

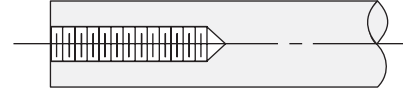
machined by Nook Industries, Inc. to any of the configurations detailed below. Templates for machining are available on our website—[www.nookindustries.com](http://www.nookindustries.com)

### RADIAL HOLES DRILLED AND TAPPED



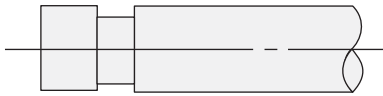
Radial drilled and tapped holes are available with either UNC or UNF Class 2B thread. The hole alignment and location tolerance is  $\pm .010$ ".

### COAXIAL HOLES



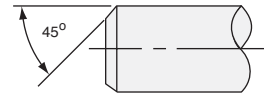
Coaxial holes are machined with concentricity of  $.005$ " centered in the shaft end for shafting 1/2 inch diameter and larger. UNC or UNF Class 2B internal threads are available. Based on tapped hole size, some ends may require annealing and will remain soft on the outside diameter.

### RETAINING RING GROOVES



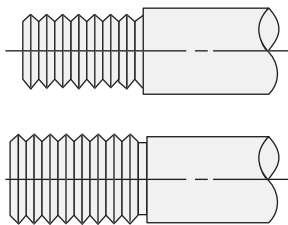
Retaining ring or other grooves area available for all diameter shafting. Annealing may require be in the machined area.

### OPTIONAL MACHINED CHAMFER



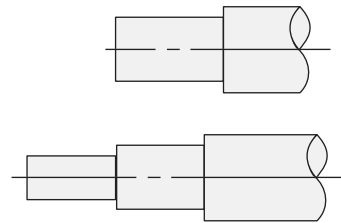
Cut shafts are supplied with Nook non-precision standard end chamfers. Specific chamfer dimensions may be specified.

### THREADED DIAMETERS



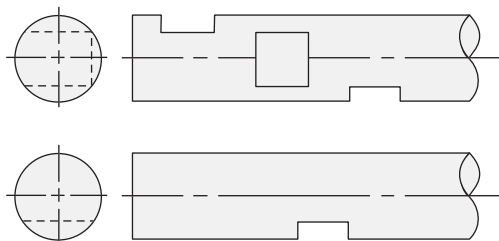
Either the major diameter or reduced diameter may be threaded to UNC or UNF Class 2A. Threaded areas will not have full depth of hardness.

### REDUCED DIAMETER



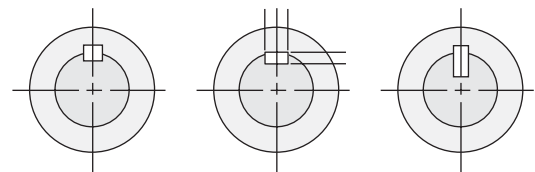
Single or multiple-step machined diameters are available. Concentricity held within  $.002$ ". The reduced diameters will not have full hardness.

### FLATS – SINGLE OR MULTIPLE



Flats have a location tolerance of  $\pm 1/64$ ". Multiple flats available on single plane or different planes with location tolerance  $\pm 1/64$ ". Contact Nook Industries, Inc. for flat length limits.

### KEYWAYS



Keyways are available for square, rectangular or ANSI Standard Woodruff keys. Keyway diameter will not have full hardness.