



**THE MACHINE:**  
**JONES & SHIPMAN J10**

**MACHINE SPECIFICATION**

- Grinding Spindle - High rigid grinding spindle with max diameter 500mm and 150mm wide
- Workhead - High taper precision roller bearings with belt drive and programmed speed. A2-6/20C spindle nose for higher rigidity. Speed range 0-1000 rpm.
- Working Table - High-rigid fully supported one-piece table
- Bed Set - Large single piece cast iron bed for rigidity and excellent dampening capacity
- Wheel Head - Robust external only wheel head featuring a belt driven motor up to 15kW. Wheel size 500mm x 150mm.
- Infeed Axis - Roller bearing guideways guaranteeing a high level of precision and low friction linear movement and superb durability of a ball screw.
- Tail Stock – High accuracy, plain bearing lever, pneumatic/hydraulic operated with fine taper correction adjustment. Air cushion equipped.
- Tableslide – Full support V-flat table slideways are precision hand scrapped for smoothness of movement and highest accuracy.

**THE INDUSTRY:**  
**TRANSMISSION SHAFTS**

Transmission shafts are rotating members and transmit power and torque from one location to another. They are found in various types of gearboxes to include both manual and automotive transmissions. Markets include automotive, aerospace, off road, power transmission, and automation.



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**THE APPLICATION:**  
**TRANSMISSION SHAFT**  
**FEATURES BEING MACHINED**

- Bearing journals
- Gear O.D.
- Seal Face
- Spline Gear

**PART TOLERANCES**

- Bearing journals are 0.0002”
- Gear O.D. 0.0005”
- Seal face 0.0003”
- Spline gear 0.0002”
- Concentricity 0.0002”
- Roundness 0.0001”
- Stock Removal all Diameters .020

**FINISH**

- Bearing journals 8 micro-inch
- Gear O.D 16 micro-inch
- Seal Face 8 micro-inch
- Spline gear 12-16 micro-inch

Transmission shafts are used in many fields. Machinery, Auto, Heavy Equipment, Marine, Aerospace so the Jones & Shipman 10 cylindrical grinding machine is an ideal solution for the production cylindrical grinding of small to midsized components. The Jones & Shipman 10 grinder can be equipped with either a straight or angular plunge wheelhead with a maximum wheel width size of 5.9”. The J10 cylindrical grinder is the perfect combination of performance-to-price and was engineered with the customer’s requirements in mind.

