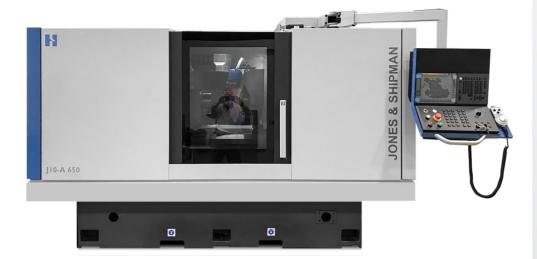
HARDINGE®



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.

Spline Gear PART TOLERANCES

Seal Face

THE APPLICATION:
TRANSMISSION SHAFT
FEATURES BEING MACHINED

Bearing journalsGear O.D.

- 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.

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.



