

CENTRAL SCREW PRODUCTS

Precision Components Since 1924

Volume: 250 pieces every 3 months

Material: 4140, Heat Treat to HRC 28-32

Finish: Ground journals on 2 diameters

The Challenge: The customer inquired regarding a transmission shaft that had a 2" outside diameter with two 1" journals on either side of it. The 6" long part accrued **significant material waste** when manufactured from bar stock. It had turning, milling, and multiple handlings with the machining, heat treat, and grind.

The Solution: To save the customer money, CSP began production of this part in China. **The manufacturing process was changed to near net shape forging. This removed excess material waste.** The equipment used was changed to simple, low cost equipment from expensive domestic machining centers. Material was matched along with heat treat process requirements. Additional quality requirements and gaging were implemented for in process measurements to ensure quality conformance.