



Field System Machining Inc.
Setting Industry Standards Worldwide
 specializing in field machining processes
800-789-2814

SPECIALIZING IN

JOURNAL/SHAFT MACHINING:

- Tooling, Grinding & Polishing of Journals, Collector Rings, Thrust Faces, Hydrogen Seals. (Applicable to Turbines, Generators, Motors, Pumps, Drive Shafts, & Propulsion Shafts).
- Welding & Reconditioning of damaged or worn shafts.
- Reverse engineering of old shafts and manufacturing of new replacement shafts and components.

The most advanced shaft & journal restoration process available to industry today!

BORE MACHINING:

- Line boring all types.
- Turbine casings and inner cylinders, nozzle blocks, bearing seats, valves all types and sizes.
- Manways and valve bodies & seats.
- Upper, intermediate & lower seal and wear ring/surfaces.
- Gate valve sealing faces, wicket gate bores and discharge & throat rings.
- Pump and compressor housings & cylinders.
- Gearboxes of all types.
- Equipment stands/frames.
- Stern tubes and rudder and drive shaft bushings.
- **Overboring capabilities-2" to unlimited**
- **Bore capabilities-2 3/4" up to 12"**
- **Bottle Bore capabilities up to 14", but we can go as large as you need.**

STEEL MILLS:

- Gear Boxes for Mill Stands.
- Table Roll Bores.
- Coiler Roll Bores.
- Crane Pin Bores.
- Cylinder Bores.
- Coupling bolt holes of all kinds.

MILLING:

- T-slot and keyway cutting.
- Horizontal joint milling for turbines, pumps, etc.
- Machining of support ledges for generator spider assembly (Hydro power units.)
- Machining foundations for engines, pumps, generators, compressors motors, etc.
- Machining of platens, die blocks, hammers, anvils, rails, etc.

STEEL MILLS:

- Milling Housing Posts (Windows) on Mill Stands.
- Milling Bottom Pads on Mill Stands.
- Milling Platens.
- Milling Rails.
- Pinch Roll Housings.
- Table Roll Pockets.
- Knife Block Seats on Shears.

HONING, DRILLING & WELDING:

- Drilling/Honing in all positions.
- Tapping, internal/external threading.
- Counter-Boring and spot facing
- **Honing capabilities from 2 ¾" up to 12", and up to 40' long**

- **FLANGE FACE MACHINING:**

- Turbine Casings, pressure vessels, heat exchangers, process reactors, etc.
- Coupling flanges (Elliptical, Oval and Circular configuration can be accommodated).
- Hand Hole, manway flanges, access doors, valves all types and sizes.

STEAM PATH REPAIR:

- Complete turbine parts and service.
- Stationary components:
Refurbishment of nozzles and diaphragms.
Refurbishment of blade rings and blade replacement.
Replacement and machining of seals and packing.
Complete shop and on-site NDE.
Computerized area checks.
- Rotor Components:
- Replacement of blades and buckets.
Replacement and repair of erosion shields.
Replacement and repair of tie wires.
Weld repairs to lashing lugs.
Complete welding capabilities and refurbishment to tenons.
Shroud band /cover replacement.
- Complete welding and heat treating capabilities on:
Joints.
Integral root radial seals.
Partitions & blade rings.
Set-back faces.
Crush pins.
Packing and seal hook fits.
- Steam Path Repair Assessments (Alternative repair recommendations in lieu of often unnecessary & costly replacement parts.)

FORGING INDUSTRY:

- Hammers
- Presses
- Upsetters

PULP AND PAPER INDUSTRY:

- Roll Grinding
- Journal Machining
- Manway Openings

SHOP CAPABILITIES:

- Lathes, milling machines, grinding machines, large turning capabilities up to 88" diameter.
- Reverse engineering and manufacturing services available.