

VALVE INSPECTION AND REPAIR SERVICES

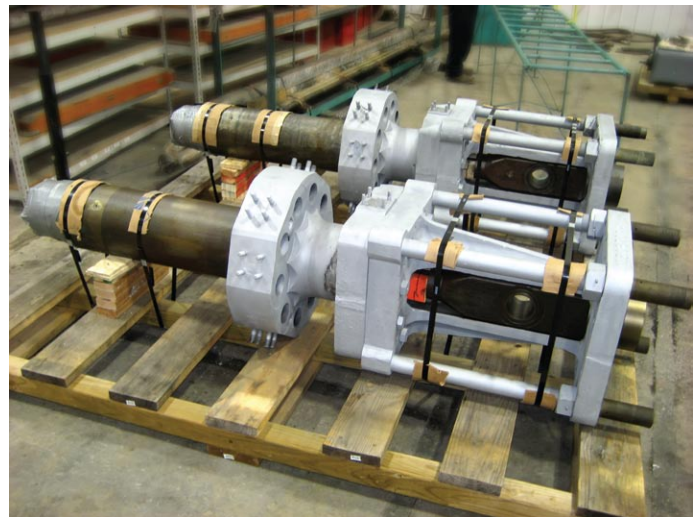
MD&A Turbine-Generator Repair Facility

Valve Inspection:

- Arranged shipping to MD&A's St. Louis Turbine-Generator Repair facility
- Incoming inspection of valve components
- Detailed dimensional checks
- Inspection supported by fully equipped machine shop
- On site blast cleaning and complete NDE service

Full Inspection of Critical Dimensions Upon Disassembly:

- IDs and ODs
- Runouts
- Clearances
- Backseat and stem to crosshead blue checks
- Bypass valve lift and axial thread clearance
- Stem to cap clearance
- Balance chamber and crosshead bushing sweeps
- Try bar checks
- Standardized recording of dimensional information on MD&A forms
- A complete incoming inspection report including dimensional data forms, NDE reports, photos and repair recommendations are provided to the client prior to any repair



Valve Repair:

- Valve repairs are initiated upon owner's approval of repair scope
- Spare parts procured by MD&A from qualified component suppliers including MD&A's Turbo Parts, LLC.
- Attention to detail, including customer's desired schedule and approved budget
- "As left" conditions of valve assemblies are communicated to customer through final report

EXAMPLE PROJECTS PERFORMED AT OUR ST. LOUIS FACILITY



CV's assembled and coated with high temperature paint on non-steampath surfaces.



Restored control valves assembled and ready for shipment.



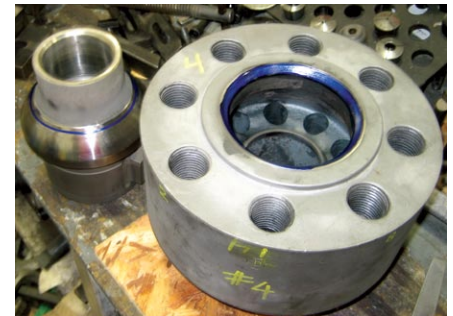
Intercept valve coarse-mesh screens replaced and ready-to-ship.



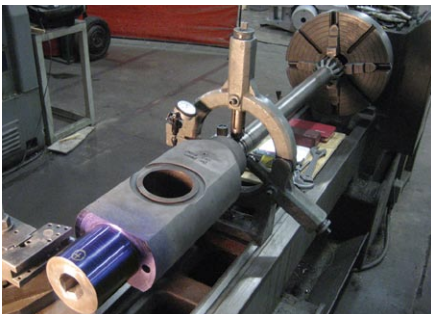
CV crosshead bushing sweep to assure concentricity following corrective action.



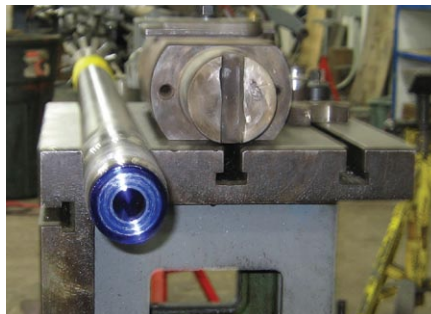
Truing cut being performed on stand for new balance chamber on control valve.



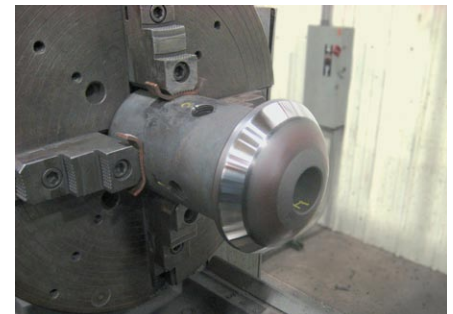
Successful blue check of MSV bypass valve and main disc.



CV crosshead and stem set up to take truing skim cut.



Successful crosshead blue check of refurbished control valve stem.



Valve disc following grinding and polishing.

MD&A TURBINE-GENERATOR REPAIR FACILITY

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