

FIELD MACHINING FOR POWER GENERATION, MINING, AND INDUSTRY

Portable Milling and Drilling

- Anything from a keyway to a large horizontal joint
- Uintah Machine has five available portable milling machines

Boring Bars

- Uintah has boring bars too numerous to list.
- Bars range in size from 1 1/4" diameter up to 10" diameter.
- Our Longest Bar is 24 feet long.
- We have duplicates on most of our smaller bars.



Flange Facer

- Uintah has flange facers for up to 72" diameter.

Mining Equipment

- We can do anything on mining equipment from align boring to a complete rebuild of the equipment



Power Plant Work

- See our section devoted to our Power Plant capabilities.

Other Industries

- One of our more interesting projects was to design a setup for machining the inside faces on a synthetic diamond press.

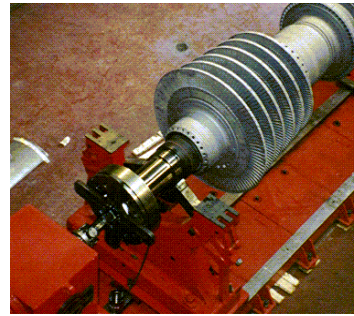


521 West Main - P.O. Box 8
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Power Generation Plant Work

Rotor Lathe Work

- Our rotor lathe swings 132".
- Lathe will take journals as long as 45' with extended ways.
- We have machined Journals, cut Spigot Fits, ground Collector Rings, and machined Shrouds using this lathe.



Rotor Thrust Collars

- These can be machined in our portable lathe.
- We have also machined them in-place without turning the rotor.



Blading and Bucket Work

- We have a working alliance with another company and joint venture this work. They do the welding and we do the machining.

Westinghouse Governor Valves

- We can weld, machine and lap the seats.
- We also replace the type of seat that takes the stellited insert which is put into the steam chest from the bottom before the leads are welded on.
- We can also build the new seats.
- We can do Steam Chest bores - welding, boring and honing.
- Top faces of Steam Chests can be faced and lapped.
- We have probably done more governor valves on Westinghouse turbines than any other job in a power plant.



Power Generation Plant Work

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GE Control Valves and Stop Valves

Boiler Feed Pumps

Nozzle Blocks Replaced

Diaphragms Removed and Replaced

- We can remove and replace the caulked in diaphragms like those found on Westinghouse turbines.
- We even built a saw to cut the caulking in an application where the caulking was not in a location such that it could even be seen, much less removed in the usual fashion.



Westinghouse Throttle Valves

- We have removed and replaced Seats.
- We can refurbish old seats.
- Gasket faces remachined.
- Spigot filts welded and remachined
- Removal of studs, holes welded, bored and threaded.

Single Point Threading

- When the hole is too big to be easily drilled and tapped, we can cut the threads with a single point boring tool.
- We can also build the thread inserts on our CNC machines.

Inlet Sleeves Built Up and Re-threaded

- Threads for bell seal retainer nuts are built up, heat treated, and then bored and threaded to new specs.



Power Generation Plant Work (Page 3)

Inlet Chambers Machined and Honed

Studs, Nuts and Washers Built New

- We build GE and Westinghouse parts from Inconel X750, 422SS, B-16, etc. We can make the new parts, remove the old, and install the new ones.



Reverse Engineering

Spring Back Seals

- We can fit your new seals to the cylinder and machine them to size.
- We can also build them new in their entirety.



“Caulked In” Seals

- We can remove the old seals, install the new ones and machine them either in the cylinder onsite, or on a VBM in the shop.



Gears and Turning Gear Boxes

- We can rebuild the turning gear apparatus in its entirety.
- We have also been called upon to remachine in the teeth on the turning gear of an AC turbine.

Valve Bonnets, Assemblies

- Parts Rebuilt.
- Stems and bushings removed.
- Holes bored and/or honed.
- New bushings fitted and installed.
- Spiral wound gasket modifications.



Power Generation Plant Work

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Flange Facer Work

- Uintah has flange facers for up to 72" diameter.



Gasket Modifications on RHSV and IV

- Modifications to Westinghouse Reheat Stop Valves and Interceptor Valves so that they will accept the new spiral wound gaskets.

Coupler Bolt and Drive Pin Holes

- We can bore and hone the coupler holes in-place.
- We can also bore and hone the drive pin holes on the new Westinghouse BB33/65 units with the rotors still in the cylinders.



Valve Stems

- Made from 422 Stainless Steel or other material, nitrided as required.

Valve Bushings

- Made from Nitralloy, 422 Stainless Steel, etc.

Valve Seats

- Built or Refurbished.
- Stellite overlays applied and machined.
- New seat inserts can be built from scratch.



Power Generation Plant Work

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Gland and Oil Seals

- Restripped and sized.

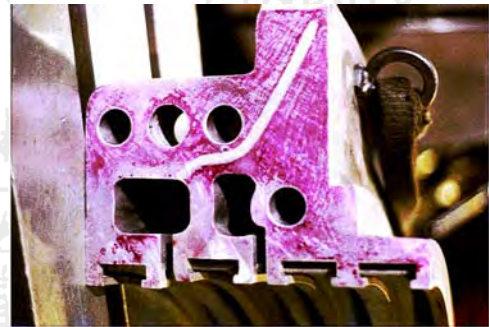


Parts List

- Uintah Machine has access to a database listing of over 100,000 part numbers, mostly Westinghouse, for which we can supply parts. Please inquire.

Glands

- Rebuilt.

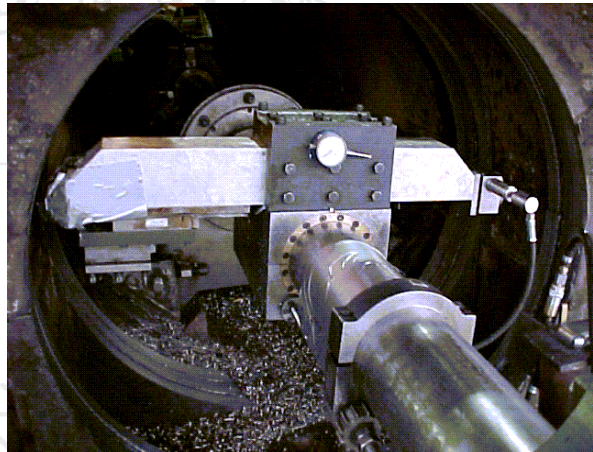


Servo Parts & Modifications

- Linear bearing Modifications to the 150# Westinghouse servo motors and some of the internal parts.

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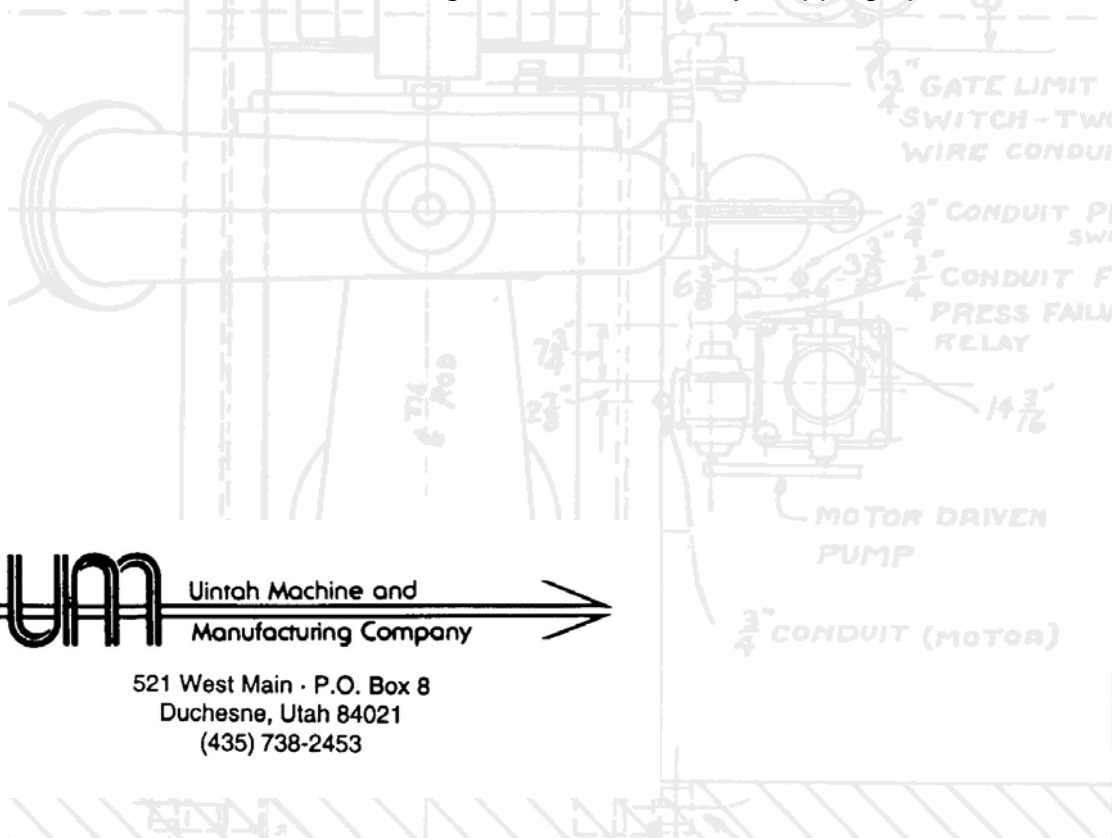


Power Generation Plant Work

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Portable Machine Shop

- Uintah has built a portable machine shop in an 8 x 40' freight container.
- This shop is equipped with a lathe, vertical and horizontal milling machine, welder, work bench, small bridge crane inside, hydraulic drill and power unit, and whatever other equipment we think we will need when we send it out.
- It is also equipped with a pretty good assortment of nuts, bolts, washers, all-thread, set screws, drills, taps, and all types of cutting tools.
- While we built this shop for our own convenience when we are on long jobs with no good machine shop services in the vicinity, as frequently happens here in west, our customers have found what an advantage it can be to have a shop onsite during an outage.
- Of course, most power plants have a shop of their own, but during an outage, they always seem to have their machinists busy doing something else, so that there is no one left to take care of the little things that are constantly cropping up.



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