



Powered by **FE** Fuji Electric

Repair Division

Complete Turbine Repair, Consulting, and Services

RTS Repair Division refurbishes all types of OEM rotating and stationary components. We perform precision steam path rejuvenation for all major HP/IP and LP rotor, blading, diaphragm, and nozzle partition repairs/replacement. All parts are returned to OEM standards or better. Precise machining capabilities will restore OEM radial and axial locations, seal clearances, and provide for resealing to provide more efficient performance.

We can recommend a repair solution, or carry out your individual specifications from start to finish on the following items:

- ▶ Bucket removal and installation
- ▶ Tenon welding and repair
- ▶ Shroud cover repair and replacement
- ▶ Tie wire repair and replacement
- ▶ Lashing lug weld and repair
- ▶ Installation of erosion shields
- ▶ Rotor body straightening
- ▶ Complete partition repair on nozzles and diaphragms
- ▶ Total blade ring refurbishment/replacement
- ▶ Visual inspections
- ▶ Complete area checks
- ▶ T.I.R., flatness, roundness, drop, horizontal, and dishing checks
- ▶ Expert installation of seals, spill strips and shaft packing

We also provide weld build-up, machining, and refurbishment of:

- ▶ Steam seal faces, joint faces
- ▶ Appendages and set-back faces
- ▶ Packing and spill strip fits
- ▶ Radial and axial seals and crush pins
- ▶ Turbine shells and casings

RTS Field Services offers rapid response to our customers by bringing the tooling to accomplish any outage or emergency field machining task. From valve refurbishment to stud removal RTS has the right technicians and equipment to successfully complete any outage workscope.

Field Machining

- ▶ Stud removal
- ▶ Valve refurbishment
- ▶ Journal refurbishment
- ▶ Thrust collar refurbishment
- ▶ Stationary & Rotating seal replacement / refurbishment
- ▶ Portable machine shops

Technical Services

- ▶ Technical direction
- ▶ Steam path audits
- ▶ Reverse engineering
- ▶ Outage planning / scheduling / complete project management

WE PROVIDE STEAM PATH REPAIR & REPLACEMENT PROCEDURES THAT ARE PROVEN TO ENABLE NOZZLE, DIAPHRAGM, VALVE AND ROTATING BLADES TO PERFORM RELIABLY AND EFFICIENTLY FOR TODAY'S LONGER OPERATING CYCLES

Sullivan Facility Corporate Office/Repair Facility

From incoming inspections to executing extensive repairs RTS has the capability and capacity to meet your repair needs.

Located southwest of St. Louis, RTS's Sullivan Repair Facility is a 30,000 sq. ft. repair shop, fully equipped with the tooling, machining, and crane capability to handle large steam turbine rotors via our high rotor bay. Our large capacity machining and specialized welding shop enables us to handle shells, casing, and all component repairs. RTS takes pride in being able to provide our customers a full-service repair solution.

Our facilities, our quality and safety programs, and most importantly our experienced shop team provide our customers the security of knowing their components are in proficient hands.

Houston Facility Manufacturing/Repair Facility

Located within minutes of Bush Intercontinental Airport, our facility produces a wide range of precision components to power and petrochemical companies.

The Houston Facility enhances our shop and field capabilities by providing high quality turbine parts manufacturing at a competitive cost and schedule. Our reverse engineered turbine blades typically can be delivered within an existing outage window vs. extended lead times offer by unit OEMs.

Our component repair and manufacturing capabilities include advanced CMM, 8-axis grinding processes, CNC milling stations, lathes, and EDM capabilities. We also boast extensive in-house manual and automated welding capabilities.

Our Capabilities Include:

- ▶ 100,000 Lb. Crane capacity
- ▶ 14' x 14' x 26' sandblast booth
- ▶ Digitally controlled 60" x 60" x 80" electric stress relieve furnace
- ▶ Large 84" x 48" HBM capability
- ▶ Large VBM's to 108" diameter
- ▶ Full-service Machine Shop
- ▶ In-house NDT capabilities
- ▶ Rotor Turning Devices up to 100 tons
- ▶ Slow speed balancing from 5,000 lbs. to 100 tons
- ▶ Full service welding facility complete with automated TIG, MIG, and SubArc capability

Lat-Am Facility

The RTS facility, in Medellin, Colombia is ideally situated for easy import/export access. This allows us to ship our tools wherever needed. Our staff is well qualified to handle large gas and steam turbine turn-key projects.

Our Lat-Am Facility has tooling for open/close and repair projects.

This tooling includes:

- ▶ 25 and 100 Ton Portable Rotor Turning
- ▶ Devices Boring Bars
- ▶ Versa Mills
- ▶ Stud drilling machines
- ▶ Open/Close tool kits

Our locations throughout the Western Hemisphere, allow RTS to be truly global in our service reach.



www.reliableturbineservices.com

Corporate/Repair Facility

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Lat-Am Facility

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