GE Rotor Welding

With over 570 rotor welding projects completed, GE has the experience you can rely on

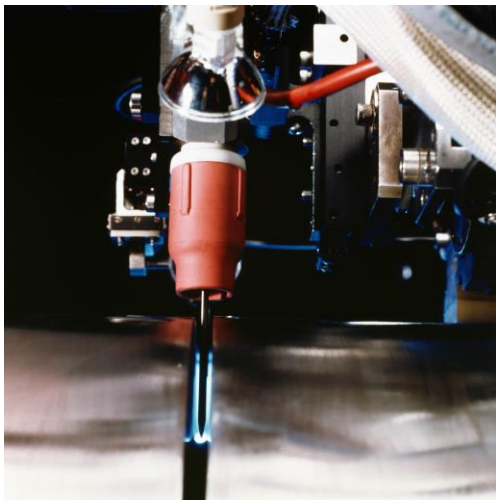
Reliability – Combining outstanding rotor weld experience with world-class technical knowledge, Global Repair Solutions (GRS) provides rotor weld repairs on both steam turbines and generators that provide the reliability our customers have come to expect.

Key Features

With the integration of Alstom Thermal Services into GE Power Services, two world-class rotor weld repair providers have combined within GRS. GRS provides leading edge technical know-how to return damaged rotors back into service with both long- and short-term solutions. GRS has experience recovering rotors with:

- Shaft journal scouring due to loss of oil event
- Thrust runner damage due to loss of oil event
- Seal restoration & upgrades
- Stress corrosion cracking in LP dovetails
- Low cycle fatigue in L-0 dovetails
- High temp HP & IP dovetails creep
- Thermal fatigue rotor groove cracking

GRS offers all classes of weld repairs. Our portfolio consists of patented and proprietary technologies tailored to different locations on your rotor. From journals to forging replacement segments and specialized heat treatment processes, GRS will partner with you to maintain your rotors in your mature fleet.



Welding Capabilities

Our experienced GRS team is ready to meet your rotor repairs needs, including:

- High Pressure (HP) Rotor 12% Chrome repair
- Low Pressure (LP) Wheel 12% Chrome repair
- Rotor Journal repair
- Partial rotor section welded replacement
- Rotor wheel, thrust, and coupling damage repair
- Submerged Arc Welding, and Gas Tungsten Arc Welding
- FineLine* Rotor Dovetail repair.

Key Benefits

- **Use your existing rotor** – Significant lead-time, and potential cost savings when compared to rotor replacement
- **Proprietary technology** - Restores your rotor back to design intent.
- **Repair only what needs to be fixed** - Flexible repair options that can pinpoint partial section, component, and spot welding
- **FineLine* rotor dovetail repair** - Replaces forging with forging + welds located in lower stress location for improved service life of repair.
- *Additional details on the back of this page*

To learn more about this offering, contact your GE sales representative or visit ge.com/power.

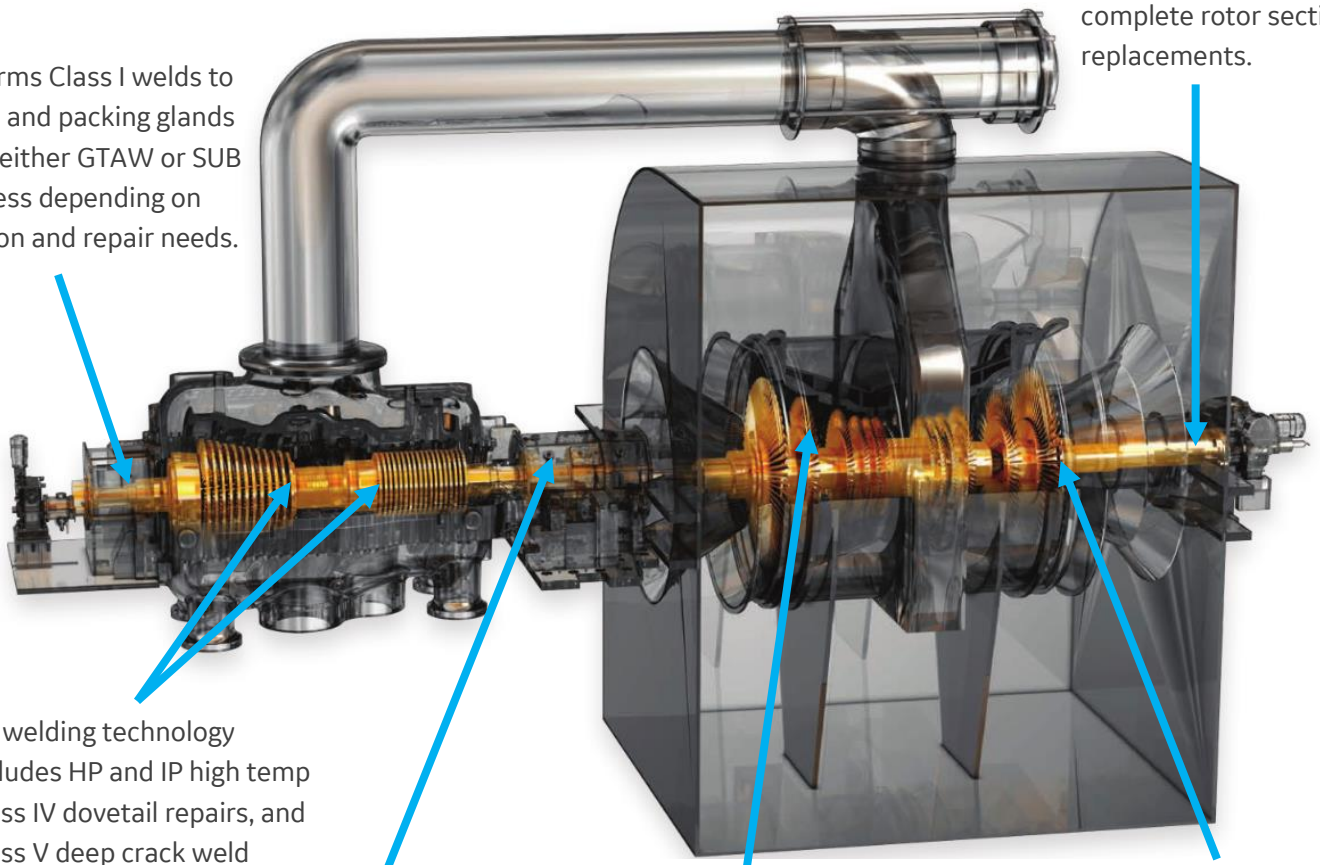
Welding classes per Hartford Steam Boiler

Fact sheet

GEA33903 (07/2018)

GE performs all classes of weld repairs including Class VI complete rotor section replacements.

GE performs Class I welds to Journals, and packing glands applying either GTAW or SUB Arc process depending on application and repair needs.



GE welding technology includes HP and IP high temp Class IV dovetail repairs, and Class V deep crack weld repairs. Either via GTAW, or SUB Arc weld repair process.

Class I welds on thrust runners and bearing journals are possible with GE technology.

GE performs Class 3 welds on axial entry dovetails where only a few dovetails are damaged. A cost-effective alternative to repairing the entire wheel.

GE has a long successful record and experience in both Class IV & Class VII, wheel weld repairs to mitigate Stress Corrosion Cracking (SCC), and to restore unit life.

Contact GE if your plant's situation does not match any referenced solutions. GE repair experts can partner with you to develop specialized solutions.

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