

# Steam turbine and gas compressor repair, upgrade and spare parts



**Turbomachinery engineering, incorporating Allen Steam Turbines, a major part of the Weir Power & Industrial division, specializes in the manufacture of spare parts, field overhaul and workshop repair of steam turbines and high speed, centrifugal and axial gas compressors.**

## **Workshop repair**

Workshop repairs are carried out at our specialist facilities. Our workshops support on-site activities while flexible work patterns ensure fast turn-around times. Repair scope can range from standard overhauls on turbines and auxiliaries through to the application of specialist component repair and rotor re-blades, underpinned by our team of design and technical support engineers.

## **Inventory management and spare parts supply**

We can replenish spare parts with either original design or re-engineered components made with meticulous attention to detail and allied to more than 100 years' experience in the design and manufacture of high speed rotating machinery.

Re-engineered components can be made quickly where the original manufacturer is either no longer able to supply parts or offer an unacceptable lead time. Where corrosion or erosion are evident, we will review the original design and propose alternative materials and configuration to extend component life.

## **Field overhauls**

We will minimize machine downtime when shutdowns are planned in advance with our project managers who can work with your operations and maintenance staff to:

- Develop risk assessments
- Create detailed method statements and inspection criteria
- Quantify manpower needs to reduce downtime
- Review special tooling requirements
- Identify spare parts requirements and manufacture and source these in advance

Techniques such as boroscope inspection and full spectrum vibration analysis are available to assess the condition of a machine's internals, often eliminating the need to remove the top half cylinder and rotor.



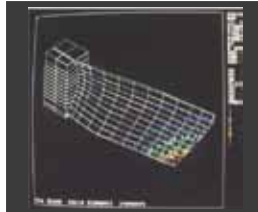
# Our expertise in aerodynamics, rotordynamics, mechanical design and materials technology can improve equipment reliability and availability

## Upgrading and re-rating plant

Our expertise in upgrading and re-rating machinery means we can offer long term solutions to customers that extend the operating life of their equipment.

Our expertise covers a broad spectrum of turbomachinery design and analysis, including;

- dynamics & structural engineers
- aerodynamic & thermodynamic engineers
- noise & vibration specialists
- mechanical design engineers
- materials engineers



Our noise and vibration specialists will undertake on-site trouble shooting which may involve in-situ balancing or might identify areas of concern to be rectified at the next outage. Where inherent problems exist our dynamics, mechanical design and materials specialists will work with you to create a solution.

These disciplines can be integrated to provide a complete re-rate service whether it is to up-rate or de-rate an existing machine for modified conditions, either for the same site or where a machine is being relocated.

## Call us today

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