Gas turbine services
RWE Power International’s Technical Support Group (TSG) based at Ferrybridge offers manufacturing and engineering services to the gas turbine industry.

As well as having a wide range of experience in plant refurbishment and overhaul, in works and on-site, we have the ability to provide planned support and rapidly respond to emergent work.

We offer a comprehensive range of services across all plant areas including technical innovation, development and specific repair techniques.

We work with our customers to provide engineering solutions with the support of the wider RWE group.

Gas turbine engineering

Complete support from our Engineering groups in Swindon enables us to provide innovative engineering solutions not only to GT but to other plant areas also:

- plant life and integrity
- boilers and combustion
- turbine generators
- electrical systems
- environment
- construction and operation
- process control
- information engineering
- re-engineering
- Finite Element Analysis (FEA)

GT management integrated service provision

The elements of this cost effective whole plant service include:

- Outage management
- Refurbishment
- Re-engineered components
- Full warranty cover
- Expertise repair/ replacement advice
- Gas turbine engineering
- Inspection and diagnostics
- Project management
- Online information and remote monitoring
- GT spares management
- GT HGP life management
- Rotor de-stack
- Site maintenance teams
- Site machining
- GT combustion
- Performance optimisation

Advantages to our clients

- Comprehensive service
- Operational expertise
- Lower costs
- Value for money
- Access to developments
- Engineering priority
- Confidence in supplier
- Confidence in GT performance
- Reduced turnaround and increased plant availability

Outage management

- Full warranty cover
- Expertise advice
- Refurbishment
- Re-engineered components
- GT HGP life management
- Rotor de-stack
- Site maintenance teams
- Site machining
- GT combustion
- Performance optimisation

Gas turbine services

Providing a quality and cost effective alternative

RWE Power International

TS Ferrybridge
Old Great North Road
Knottingley
West Yorkshire
WF11 8PR

United Kingdom

Tel: +44 (0)1977 632201
Fax: +44 (0)1977 632311
Email: tsg@rwe.com
Website: www.tsg.rwepi.com

Electron

Windmill Hill Business Park
Whitehill Way
Wilton
Wiltshire
SN5 6PB

United Kingdom

Tel: +44 (0)1793 892898
Fax: +44 (0)1793 892421
Email: ele@rwepi.com
Website: www.rwepi.com

WWW: RWE.com

316/12/08
Workshops
Our workshop facility consists of three large shops with an extensive range of machine tools capable of handling components up to 120 tonnes and offering the following services:
- low speed balancing
- CMM capability
- multi-axis CNC machining
- re-engineering
- large boring capability
- emergency response
- rotor de-stacking
- sponge/grit blasting
- compressor refurbishment
- blade tip grinding
- blade resonant mass weighing.

Refurbishment
Quality repair and refurbishment of equipment is of paramount importance. Our workshops are superbly equipped to deal with a wide range of components and provide:
- the repair and refurbishment of gas turbines
- management of refurbishment programmes
- supply of engine ready components
- quality assurance.

Inspection
TSG Ferrybridge has 24 hour access to RWE’s specialist engineering services (below), which provide inspection, assessment and remedial action recommendations to get the best out of your plant:
- on-site gas turbine inspection
- cold/hot commissining
- gas turbine HIP database management
- off-site re-engineering specialists
- metallurgical
- rotor dynamics
- weld specialists
- design.

Outage site works
Our outage management and site projects teams provide comprehensive services to power plant operators and major industrial clients. Our main priority is to deliver projects safely, to time, quality and cost. We can provide:
- outage management
- emergency response
- experienced engineers
- commissioning.

Spares management
Spares parts can be manufactured and supplied to customers drawings or, where detailed manufacturing information is not available, we can manufacture components, capturing the required information from samples using the latest fixed and portable CMM tools.

Our services include the following:
- stock drawings and manufacture
- blade, vane and component manufacture
- insurance, underwritten and technical acceptance
- re-engineering programmes for blades and vanes
- cold sections spare manufacture
- compressor blade manufacture
- compressor vane/diaphragm manufacture.

Case Study
Compressor diaphragm manufacture
Following an inherent operational issue with an OEM’s compressor diaphragm design and testing of the inner gland “T” slot, RWE Power International was asked to consider the design of a completely new diaphragm that could be fitted to the gas turbine and operate at nearer the design life of 12 years or more without the need for re-work or replacement.

The new design has been constructed so that the “T” slot arrangement is replaced with a more substantial inner ring removing the potential for components to fret and wear.