Operational support
Fired equipment

ABB’s has many years’ experience of supporting clients with procurement, repairs and modifications to furnaces, boilers and other fired equipment.

Fired equipment is an important part of many industrial processes. Expensive and highly specialist, it must be correctly specified, maintained and inspected. Liable to become unreliable and possibly hazardous if not properly maintained, it is also subject to a large number of safety regulations, design codes and environmental legislation. Ageing equipment also suffers from corrosion and decreasing effectiveness, while changes of use and lack of operator expertise can also expose owners to high levels of risk.

A balance between the issues of safety, integrity, energy efficiency, reliability and extended life needs to be struck in every case.

What we offer
Our technical service covers design and specification, installation engineering, construction, commissioning, problem solving, operation, maintenance, condition assessment and refurbishment of boilers and other fired equipment.

Here are some common examples, of issues where ABB can provide support:

- Capacity limitations
- Poor energy efficiency
- High fume emissions (environmental improvements)
- Operating performance
- Physical faults
- Safety concerns
- Asset life extension
- Risk based inspection appraisal
- Poor reliability

Emergency support
ABB provide support at any stage of an equipment problem. Typical steps we would go through include:

- Assessment to determine whether the item can continue in service for a defined period
- We assess whether the problem is down to a failure or a deterioration in condition
- Specification of repairs or modifications
- Support while these repairs or modifications are being carried out: finding suppliers, reviewing job methods, inspecting their work etc.
- Training for operating and maintenance teams to prevent similar problems in the future
- We also ensure that anything we have learned from any issues will be highlighted and communicated and used to define appropriate checks on other equipment
Design / re-vamps
ABB are able to optimise life cycle costs by devising new designs or re-vamping existing ones. We can help with feasibility studies and exploring options for new or re-vamped fired equipment designs. We can carry out detailed specification, or provide technical support during the procurement, installation and commissioning of equipment.

Services include:

- FEEP support
- Independent advice
- Option evaluation
- Technical specification
- Fabricator management / interface
- Technical appraisals and purchasing assistance

Overhaul support - maximising the opportunity presented by an outage
We can support a fired equipment overhaul to take advantage of this opportunity in your production cycle.

Services include:

- Production of agreed work list
- Overhaul technical support
- Design of modification(s)
- Assessment of ongoing reliability
- Development of ongoing equipment action plans and inspection schemes

Benefits
Confidence in safety and reliability
Cradle to grave equipment service and support
Optimum life and performance for equipment
Cost efficiency
Tailor-made solutions

Why ABB?
ABB have a long track record of extensive technical knowledge of furnaces in both process and manufacturing industries.

We have wide experience and expertise of new build projects, equipment re-vamps and addressing existing plant problems.

We combine specialists in fired equipment, water treatment, chemical cleaning, process engineering, metallurgy, stress analysis and control and safety systems.

We have all the specialist skills required to find the safest, most cost-effective solutions for fired equipment.

Our engineers and consultants have operational backgrounds and make pragmatic technical judgements based on their experience. It’s an approach that ensures cost-effective, practical-to-implement solutions which work.

Accessing this expertise is cost-effective and enables the team to construct engineering justifications for the proposed action.

We’re also able to call on a broad range technical knowledge from across our services.