An integrated approach to improving combustion safety controls.

Problems with the reliability and integrity of combustion safety equipment often cause losses and disruption for operators of fired equipment. Other problems for owners are continuous pressure on operational costs and increasingly complex statutory demands. Both these factors constitute a source of owner uncertainty about the status of burner management systems.

Our approach

The project definition

- Review existing system - identify concerns and issues for improvement. Apply best practice.
- Assess current and future operational arrangements – identify requirements for operator interfaces and communications with other systems.
- Assess risks and quantify if required to determine and assign Safety Integrity Level (SIL) requirements.
- Prepare User Requirement Specification (URS) for burner management system and combustion control hardware and obtain competitive quotations.
- Prepare project definition including P&ID and cost estimate and agree with client.
- Prepare detail engineering designs and specifications
- Perform reliability calculations to confirm achieved SIL
- Procure burner management system and field hardware
- Factory acceptance test hardware and software
- Pre-shutdown installation
- Shutdown installation and site acceptance testing
- System commissioning
ABB offer a range of burner management solutions:

- We can review the existing system, identify concerns and issues for improvements applying best practice
- We can assess current and future operational arrangements: identifying requirements for operator interfaces and communications with other systems
- We can assess and quantify the risks, in order to determine and assign Safety Integrity Level (SIL) requirements (if appropriate)
- We can prepare the User Requirement Specification (URS) for burner management systems and combustion control hardware and obtain competitive quotations
- We can prepare a project definition including P&ID’s and cost estimates
- We can prepare detailed engineering designs and specifications
- We can assist with system commissioning
- We can support equipment breakdowns: getting equipment back on-line quickly and determining the root causes of failures

Benefits
- Reductions in operations and maintenance costs.
- Enhanced reliability
- Assurance of regulatory compliance and best practice
- Solutions to persisting problems
- We simplify projects by supporting all aspects of system definition, burner management system, field equipment, risk analysis, installation, testing and commissioning support

Why ABB?
At ABB, we specialise in fired equipment and control. We are widely recognised for our extensive record of effective solution delivery.

We have huge experience of operational, safety and reliability problems in burner management systems, having dealt with reliability issues on all types of boilers, fired heaters, reformers and incinerators.

Our experts have a strong operational background which means we can offer advice and solutions independent of equipment suppliers, as well as tailor-made solutions for plants.