Fired equipment
Safety assessments

Companies are under increasing pressure to achieve continuous process safety improvement more quickly and efficiently. With ageing assets, tighter standards and increasing stakeholder expectations, finding a time efficient methodology for hazard identification and risk assessments can be a challenge.

For fired equipment with well-known hazards and code based safety protection systems, studies such as HAZOP are time intensive and therefore not the most efficient method to review key safety features addressed by combustion safety codes. A code based safety assessment is often the best solution.

What we offer
A code based safety assessment determines the protective functions required for a particular item of equipment and the extent to which they are provided and functioning reliably.

This will usually require:
- Reviewing the requirements of various codes and standards to determine which are applicable
- Reviewing the site installation to determine which of the required safety functions are provided by instrumented systems
- Checking that the provided safety loops have appropriate set-points and are suitably documented, tested and maintained
- Checking that the safety logic is processed correctly and reliably in a suitable logic processor
- Reviewing the site operating practice to determine which of the required safety functions are provided by operations, maintenance and inspection personnel
- Checking that the personnel provided safety functions are being performed reliably and are correctly documented
- Preparing a summary of compliance and deficiencies against the code requirements and good practice
- Evaluating the implications of the deficiencies
- Recommending appropriate practical improvements
ABB also helps clients to convert the improvement recommendations into an action plan and can design and implement the recommended improvements.

Benefits
The safety assessment provides:

- Compliance assurance
- A stand-alone ALARP review.
- A firm foundation for Safety Integrity Level (SIL) analysis for COMAH sites (and other sites) that need to use quantified risk reduction.
- A basis for practical safety improvements
- A basis for safety system asset investment decisions
- Opportunities for operational cost savings

Why ABB?
The ABB fired equipment safety assessment features a unique blend of specialist fired equipment and process safety expertise.

ABB’s specialists in fired equipment have many years’ experience in the design, construction, testing and operation of fired equipment including its safety protection systems.

ABB’s process safety consultants are widely recognised in the oil, gas and chemical industries for their expertise in Process Hazard Assessment (PHA), Layer of Protection Analysis (LOPA) and other safety management techniques.

The result is a safety assessment with pragmatic technical judgements but that meets the highest requirements of the sector.