

Machinery safety and design verification services



Effective management of the hazards associated with the safe operation and maintenance of machinery is a regulatory requirement.

ABB understands the challenges faced by operating companies when it comes to complying with the regulatory requirements as the owner / operator / maintainer of work equipment. Addressing these challenges requires a methodical approach to ensure that equipment is purchased, operated, maintained and modified in a compliant manner. Above all, ensuring that the risks to personnel are As Low As Reasonably Practicable (ALARP) should underpin the central safety requirements needed to support sustainable and safe operations.

Modifying and producing any machine, requires operating companies to ensure that they have met the regulatory requirement of conducting an EU conformity assessment. Meeting this need may require them to employ design verification expertise in order to ensure that the Essential Health & Safety Requirements (EHSRs) contained in the supply of machinery (safety) regulations have been satisfied.

In order to satisfy the EHSRs, companies will need to identify the applicable harmonised standards (types A, B and C) that apply and ensure that their machinery / equipment conforms. This in turn, may require machine / equipment OEMs to introduce additional safety features, controls and identify specific PPE requirements.

What we offer

ABB's rotating equipment and functional safety specialists have extensive experience of acting as purchaser, operator and maintainer of machine systems in addition to their carrying-out independent safety assessments of customer owned equipment. From critical, high-hazard and high power through to non-critical, low-hazard and low power equipment, ABB provide a consistent approach to managing safety and reliability.

ABB identifies the 'gaps' that need closing between the OEM's regulatory obligations under the supply of machinery (safety) regulations and their legal duties under the Provision and Use of Work Equipment Regulations (PUWER). In doing so, they:

- Identify the applicable EHSRs and assess conformance with the relevant harmonised standards
- Confirm compliance with relevant UK Legislation and EU product directives
- Carry out machinery risk assessments and evaluate risk reduction measures via the use of protection systems (task and hazard identification)
- Support the completion of a CE conformity assessment and preparation of declaration of conformance



- Provide guidance on managing residual risks
- Assist in the preparation of Safe Systems of Work (SSoW) procedures and provide training

Benefits

Through closely working with our customers' project and/or operations teams, we:

- Determine the hazard / risk level associated with the installation, operation, maintenance, modification and disposal of equipment / machinery
- Where required, provide bespoke assistance or full documentation for the compliance with the CE marking / certification process of equipment / machinery covering simple machinery to complex assemblies
- Where products are subject to product safety legislation, we can support the 'responsible person' to self-certify a products' conformity with all directives that apply

Where certain products (e.g. specific higher risk machinery and gas appliances) we can further support the responsible person with the involvement of an accredited notified body to verify independently the product's compliance, and in some cases the manufacturer's quality and manufacturing system.

Why ABB?

ABB offers the unique combination of world-class technical consultancy, professional engineering and proven operational experience. Moreover:

- ABB has extensive experience working in the process and manufacturing industries covering operations, maintenance and reliability, availability, asset management and safety
- ABB have a proven track record in auditing machines legislation compliance and providing awareness training on PUWER and the supply of machinery (safety) regulations
- ABB are well-versed in working alongside our customers' operations and maintenance staff when resolving machinery safety-related issues
- ABB expertise uncovers opportunities, delivers tailored solutions and accelerates the pace of change for our customers' businesses