Hazardous Area Management
Complying with the ATEX Directives
What is your process? Can you have combustible / flammable atmospheres?

Have you identified the potential and likelihood of a flammable or combustible atmospheres occurring?

Have you fully documented the assessment justification and assigned the correct zoning conditions for your plant?

ABB Engineering Services supplies a range of consulting services in manufacturing operations and engineering, including project implementation and management to customers in the chemical, petrochemical, oil and gas, pharmaceutical and consumer industries worldwide.

For ATEX compliance the requirements to consider are:

- Risk assessment of activities involving dangerous substances
- Technical and organisational measures to eliminate or reduce dangerous substances
- Undertaking area classification and zoning calculations
- Requirements for the design and management of hazardous area installations
- Providing a person competent in explosion protection
- Providing equipment and procedures to deal with accident and emergencies
- Providing information and training to employees

Capabilities

Our team of professional consultants have proven engineering expertise in all matters relating to:

- Risk assessment and control for both electrical and mechanical equipment
- Area classification and zone calculation
- Equipment protection systems
- Selection of the correct equipment category
- Installation and maintenance of hazardous area systems
- Supporting safety management policies and procedures

Expertise

We cover the full life cycle of the equipment including:

- Operations
- Maintenance
- Design
- Safety management

Our combined experience, practical approach and pragmatic methodologies equip us to offer effective and compliant solutions to the problems of using equipment in compliance with ATEX. Our consultants are active on a number of related British and International Standards committees.

We can provide a cost effective; technically robust service for all your hazardous area and ATEX related requirements.
Review process

We utilise a source based area classification, which ensures expenditures are minimised and targeted on aspects of greater risks. Through a fully documented process we seek to reduce the size of hazardous areas / zones thereby reducing the requirements for the use of hazardous area equipment and associated inspection costs.

The ATEX process requires operators to consider hazardous area management as a ‘cradle to grave’ concept consisting of appropriately assessed zoned areas to be at a minimum followed by correct equipment selection and management systems to ensure ongoing compliance.

Helping you to obtain compliance

We will work with you to prepare and negotiate your compliance documentation within your timescales and budget. Specifically:

- Area classification analysis to determine the scope, cost and timescale of the zoned process areas
- Provision of documentation to support installation, inspection and maintenance of categorised equipment
- Undertake system validation using knowledgeable and experienced personnel competent in the field of explosion protection
- Response to enquiries and technical queries covering the full hazardous area management lifecycle
### The services we offer

<table>
<thead>
<tr>
<th>We offer expertise in the following areas:</th>
<th>Our capabilities include:</th>
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<tbody>
<tr>
<td>■ Area classification</td>
<td>■ Asset assurance</td>
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<td>■ Process Hazard Reviews (PHR)</td>
<td>■ Asset care</td>
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<td>■ Operational risk assessments</td>
<td>■ Asset performance improvement</td>
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<td>■ Training on hazardous area classification</td>
<td>■ Business process optimisation</td>
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<td>■ Technical workshops and practical examples</td>
<td>■ Capital project management and execution</td>
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<td>■ Mechanical equipment risk assessment</td>
<td>■ Energy and utilities</td>
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<td>■ A full range of project management capability</td>
<td>■ Engineering design services</td>
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<td>■ ‘HAZAIR’ a software product developed by ABB Engineering Services for the</td>
<td>■ Environment services and IPPC</td>
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<td>management of hazardous area equipment</td>
<td>■ Manufacturing process optimisation</td>
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<td>■ A comprehensive set of ATEX compliant hazardous area project documentation</td>
<td>■ Operational plant support</td>
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<td>and management procedures</td>
<td>■ Organisation and competency development</td>
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<td>■ Safety management</td>
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<td>■ Software solutions</td>
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ABB Engineering Services is part of ABB’s Automation Technologies division serving customers in the chemicals, consumer, life sciences, manufacturing, metals, paper, petroleum and utility industries.

**UK locations**
- Warrington
- Teesside
- East Kilbride
- Derby

**International locations**
- Americas
- Asia
- Europe
- Middle East

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