



CompEx - Ex11 - Mechanical



Course Aim

This course aims to equip delegates with the knowledge needed to safely prepare, install, inspect and maintain mechanical equipment in hazardous areas. It covers relevant regulations, area classification, and equipment selection practices, while ensuring competency through both theory and practical assessments.



Who Should Attend?

This qualification is designed for mechanical engineers who are responsible for inspecting, installing and maintaining non-electrical (mechanical) equipment where gases, vapours, and/or dust may pose a hazard.



Course Duration

This is a 3 day course.



Maximum Delegates

Maximum attendees: 10 delegates.



Certification

Upon successful completion, delegates will be awarded a CompEx Certificate in Core Competence.

This certification is valid for 5 years.



Pre-Requisites

Delegate must be a competent practicing mechanical or multi-skilled operative.

A mechanical or electro-mechanical engineer who has previous practical experience.

Delegates must possess a prior CompEx certification paired with a sponsor letter from their employer.





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Agenda

- Hazardous areas overview
- Ignition sources of gas and dust
- Introduction to Area classification
- Categories, EPLs & Marking
- Equipment for use in hazardous areas
- Repairs & Modifications
- Requirements for ATEX and IECEx non-electrical equipment and assemblies
- EN1127-1 and identifying ignition hazards
- Failure examples for ATEX and IECEx Non-Electrical
- Performing ignition risk assessments (worked examples)
- ISO 80079-36/37 overview and the relationship with IEC60079-0 (Ex h)
- Concepts Ex d, p, c, k, b
- Selection and use of gaskets, flanges, bolts and pipe integrity

Assessments:

Typically involves both online and practical assessments, these cover the CompEx units ExF and Ex11. There are two practical assessments:

- Ex11 - Flange Integrity Installation and leak test
- Ex11 - Pumpset inspections (visual and detailed)