

## Introduction



The aims of the course are to understand the basic principles of protection in explosive atmospheres of plant and machinery based on various parts of IEC 60079 series.

The learning process will involve understanding on condition those can cause atmosphere to be explosive. Those types of explosive atmosphere and the likely hood of their present at plant and machinery are categories according to their properties and likely duration of it present at particular location.

Due to the environment and other operational conditions, that equipment installed at plant and machinery shall be able to maintain their operational requirement and safety or integrity of their present at explosive atmosphere location. Hence, every Ex-equipment at plant and machinery need to be check or inspect at regular interval.

## Program Designed for:



### Working in explosive environment;

- Trainees
- Technicians
- Supervisor
- Installers
- Auditors
- Engineers
- Managers
- Insurance Agents
- QA/QC
- Practitioners
- HSSE Practitioners
- Buyers
- Ex-equipment Sales Agent
- Inspectors
- Regulatory Authorities
- Designers
- Maintenances
- Repairers

**Minimum Pax**

**6 Pax**

## Expected Learning Outcomes



- Defining the hazard, classifying hazard materials, understanding the nature of the risk and the necessity to eliminate sources of ignition.
- Identify relationship between area classification and the various different types of Ex apparatus.
- Identify relationship between electrical equipment and gas groups and temperature classes.
- Recognise and identify the different types of certified equipment.
- Recognise the requirement visual inspection of the different types of equipment

## Your Instructor

Manggau Galawing



## Course Content



- International IECEx Certification - the way to safety compliance in Hazardous Areas
- Safe work procedure guidelines for explosive gas atmospheres
- General Principles
- Hazardous area classification
- Apparatus Grouping and Temperature Classification
- Protection classification
- Flammable dusts: zoning & equipment
- Marking of equipment
- Visual Inspection
- Protection classification
- Flammable dusts: zoning & equipment
- Marking of equipment
- Visual Inspection

## Training Methodology

Trainer/Lecturer - Provide presentation, videos, question & answers, discussion, explanation, coaching and mentoring system to ensure effective knowledge & skills transfer.

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|-----------------------------------|--------------|
| <b>Theory Session</b>             | <b>: 70%</b> |
| <b>Desk Top Practical Session</b> | <b>: 20%</b> |
| <b>Pre &amp; Post Assessment</b>  | <b>: 10%</b> |

