

# HAZARDOUS AREAS 5-DAY COMP'EX' COMPETENCE BASED COURSE



Course Length (Days)	Taught Hours	Practical Content (%)	Theoretical Content (%)
05	35	50	50

## TARGET AUDIENCE

Electrical personnel involved in the selection, installation, inspection and maintenance of electrical and instrumentation equipment for use in potentially hazardous areas onshore and offshore.

## COURSE OBJECTIVES

To raise levels of competence for personnel carrying out installation, inspection and maintenance of electrical apparatus in explosive gas atmospheres (other than mines) to internationally set standards.

## COURSE CONTENT

- General principles, ignition properties and apparatus protection
- Standards, certification and marking
- Flameproof EEx 'd' protection
- Increased safety EEx 'e' protection
- Type EEx 'n' protection
- Pressurisation EEx 'p' protection
- Intrinsic safety EEx 'i'a and 'i'b protection
- Other methods of protection, EEx 'o', EEx 'q', EEx 'm' and EEx 's'
- Combined (hybrid) methods of protection
- Wiring systems, enclosure entries, cable glanding and earthing
- Inspection and maintenance to BS EN 60079-17
- Sources of ignition
- Induction to competence validation testing
- Permit to work system and safe isolation
- Protection in the presence of combustible dusts (when requested by client)

## Competency Assessment

- EX01 Preparation and Installation of EEx 'd' 'e' 'n' and 'p' Systems
- EX02 Inspection and Maintenance of EEx 'd' 'e' 'n' and 'p' Systems
- EX03 Preparation and Installation of EEx 'i'a and 'i'b Systems
- EX04 Inspection and Maintenance of EEx 'i'a and 'i'b Systems
- EX05 Preparation and Installation of Apparatus in the presence of Combustible Dusts (when requested by client)
- EX06 Inspection and Maintenance of Apparatus in the presence of Combustible Dusts (when requested by client).

## DELIVERY

Teaching aids, apparatus, slides, videos, practical demonstrations, questionnaires, practical competency assessment.

## CERTIFICATION

Comp'EX' – Certificate of Core Competence.

Non-electrical or Instrumentation personnel who completes the course will be certified by Comp'EX' but deemed not electrically competent.

## Minimum Number of Delegates Required per Event

8

## Times of Training

08:30 to 17:00

## Venue

28B Penjuru Close, #01-06, Singapore 609130

## Special Requirements

Delegates are required to supply their own personal protective safety equipment.

## Dates and prices

Please check with course administrator.

**Note to Clients:** The option to cover those standards relevant to the Protection of Apparatus in the presence of Combustible Dusts is also available. In this case, one additional day will be required for the theory and practical assessment for EX 05 and EX 06.