

Hazardous Area Classification Course



The classification of areas where an explosive atmosphere might arise is required to permit the proper selection and installation of equipment for use in such hazardous areas. Explosive atmospheres result from the presence of flammable gases, vapours and dusts. The aim of this 2-day course is to develop the competencies required to perform a Hazardous Area Classification.

Overview

Historically, the performance of Hazardous Area Classification (HAC) assessments has been the province of electrical and safety engineers.

In New Zealand, HAC assessments for flammable fluids and dusts are covered under AS/NZS 60079.10, which states that:

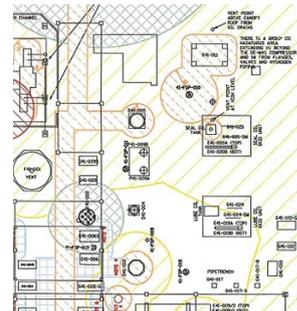
“The area classification should be carried out by those who understand the relevance and significance of properties of flammable materials and those who are familiar with the process and the equipment along with safety, electrical, mechanical and other qualified engineering personnel.”

This course is aimed at professional engineers to develop the required competencies to perform HAC.

The course will:

- Provide an introduction to the relevant gas or dust combustion, vapour/liquid equilibrium, fluid mechanics and dispersion analysis calculations.
- Provide an overview of the national and international codes and recommended practices for the classification of Hazardous Areas.
- Teach and practise a number of different techniques for establishing the degree and extent of the classified areas.
- Enable assessment of the hazardous area required for releases outside the scope of prescriptive examples.

- Provide an overview of the different design bases for the types of electrical equipment protection certifiable for use within specific hazardous areas.
- Provide guidelines on documenting the HAC assessment.



Course Content (2 days)

- Basic Combustion Concepts
- Codes, Standards and Recommended Practices
- Categorisation of Hazardous Materials: Gases, Liquids & Dusts
- Ventilation
- Electrical classification
- Methods of Area Classification
- Standard Examples
- Point-Source Releases
- Documentation Requirements



Safety Solutions Ltd are New Zealand's leading Process Safety consultants and trainers.

As part of our consultancy portfolio, Safety Solutions Ltd can perform Hazardous Area Classification assessments based on corporate, national and international standards.

Our training courses are also offered as in-house courses with industry specific examples and workshops. For more information about any of our courses please contact Safety Solutions:

E: training@safetysolutions.co.nz
W: www.safetysolutions.co.nz

Other courses by Safety Solutions

- Introduction to Process Safety Management (1 day)
- Introduction to Process Safety for Operators & Engineers (1 day)
- SIL Facilitator (2 days)
- HAZOP Participants (1 day)
- HAZOP Leader (2 days)
- Advanced HAZOP (1 day)
- Risk Assessment (2 days)

Delivered by Safety Solutions for IChemE

- Fundamentals of Process Safety (5 days)
- Layer of Protection Analysis (2 days)