

Introduction to Process Safety for Operators & Engineers



Process plants are complex and the hazards associated with their operation are not easily identified and managed. However, as recurring process safety incidents show, it is imperative that the hazards and risks related to process plants are identified and adequately managed. This course is aimed at operators and engineers of process plants and offers an overview of the various aspects of process safety across the whole life cycle of process plants.

Overview

In the past years there has been a lot of focus on occupational safety. However, as recurring incidents across the world show, this has done very little to improve process safety. How is process safety different from occupational safety?

Personal or occupational safety hazards, such as slips, trips and falls usually affect one individual worker at a time. Process safety hazards on the other hand may cause major accidents involving the release of potentially dangerous materials, fires and explosions, or both. Process safety incidents can have catastrophic effects and can result in multiple injuries and fatalities, as well as substantial economic, property and environmental damage.

Process safety management focuses on the design and engineering of facilities, hazard assessments, incident investigation, management of change, inspection, testing and maintenance of equipment, effective process controls and alarms, operating and maintenance procedures, training of personnel, and human factors.

Significant incidents on process plants in the past have shown that incidents can be caused by failures at any level and discipline associated with their design and operation.

The one day course will provide operators and engineers with an overview of process safety principles and their application across the life cycle of a process plant. The focus of this course will be adjusted to the representation of operators and engineers among the participants.



Course Content (1 day)

- History and Importance of Process Safety
- Legal Framework
- Process Safety Models
- Hazard Identification
- Elements of Process Safety
- Risk Assessment & ALARP
- Inherent Safety & IPF
- Operations & Human Factors
- Management of Change
- Ageing Plants
- Process Safety Management & KPIs

Maximum number of attendees: 30



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

As part of our consultancy portfolio, Safety Solutions Ltd can offer support across the whole life cycle of a process plant, from hazard identification and risk assessment to alarm management, process safety audits and incident investigation.

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 for Management (1 day)
- Hazardous Area Classification (2 days)
- HAZP Participants (1 day)
- HAZOP Leader (2 days)
- Advanced HAZOP (1 day)
- SIL Facilitators (2 days)
- Risk Assessment (2 days)

Delivered by Safety Solutions for IChemE

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