

PROCESS SAFETY MANAGEMENT

Introduction

Knowledge of process safety concepts and tools is essential for those who design, operate, and maintain hazardous systems. This course presents basic principles of safety management that will help design better systems, identify hazards, effectively participate in hazard analyses and understand how to implement safety in the plant life cycle. It also highlights relevant codes and standards that go with engineering, construction and operation of plants. The target audience is executives of design engineering companies, operations and technical services in a plant. Two day to five day modules can be customized according to the client's needs and detailing required.



Course content

No.	TOPIC	DESCRIPTION
1.	The Basic Concepts	<ul style="list-style-type: none"> • Definitions and terminologies • Types and examples of hazards • How to identify hazards • Toxicological and ecological information • Flammability and explosion • Safety in plant life cycle • Codes and standards
2.	Case Histories	<ul style="list-style-type: none"> • Frequently encountered oversights in design and operation leading to accidents • Case – 1 lacunae in process design and engineering • Case – 2 safety in construction • Case – 3 safety in operation and maintenance • Lessons from the case studies • Case study – safety in plant life cycle
3.	Process Hazard Analysis	<ul style="list-style-type: none"> • Identification of hazards • Overview of basic risk assessment methodologies • HAZOP – What it is and how to conduct it • FMEA • Fault Tree analysis • Corrective actions
4.	Safety Practices in the Hydrocarbon Industry	<ul style="list-style-type: none"> • Safety in transportation of natural gas • Safety features in storage and transportation of LNG • Handling of LPG • Storage and handling of hazardous chemicals • Case studies • Relevant codes and standards
5.	Safety Management	<ul style="list-style-type: none"> • Safety Management in Design Stage • Safety Management in Construction Stage • Safety Management in Operation • Developing Emergency Response Plan

Methodology of presentation

- Microsoft Power Point with colorful slides packed with information, Video Clips.
- Highly interactive with total involvement of the participants.
- Interesting and Interactive Quiz Sessions, group tasks for better assimilation.