

**RISK**  
MANAGEMENT

An Intensive 5-Day Training Seminar On

# Advanced Process Risk Assessment and Risk Management

28 Feb - 04 Mar 2021, Dubai  
28 Nov - 02 Dec 2021, Dubai



# Advanced Process Risk Assessment and Risk Management

## INTRODUCTION

Industrial disasters can occur through combination of small failures, culminating in a major incident. All too often the small failures and defects go unnoticed until disaster strikes. These routes to failure can be predicted and avoided.

Health, Safety and Environmental Management Systems are based on a proactive approach aimed at the prevention of incidents as well as reactive monitoring of performance (including failures). Advanced Process Risk Assessment is required for all activities that impact on health & safety, production, asset, environment and the company reputation.

**In this Advanced Process Risk Assessment & Risk Management training course you will learn how to:**

- Improve your practical skills in applying advanced risk assessment techniques relevant to the process industry
- Consider the balance of risk against cost
- Motivate your people for improved safety culture
- Appreciate the role of Risk Assessment and Control Measures in the avoidance and mitigation of major hazards
- Understand the principles of incident causation and incident investigation

## PROGRAMME OBJECTIVES

- Recognise the difference between hazard, risk and risk assessment
- Learn how to evaluate different types of risk
- Understand Control Measures and Mitigation Measures
- Develop the skills of applying advanced risk assessment techniques relevant to the process industry
- Develop a strategy for planning and implementing risk reduction action plans
- Appreciate the contribution of human error to accidents
- Be able to understand the root causes of major incidents

## WHO SHOULD ATTEND?

- Management and those with responsibilities for analysing risks and incidents
- Production, project, process, mechanical, control, maintenance and HSE Personnel
- All personnel involved in implementing the Company's HSE Management System

## TRAINING METHODOLOGY

Delegates will learn by active participation through inspiring presentation tools and interactive programme and role-playing activities, presented in a lively, enthusiastic and interesting style. Delegates will take part in topic exercises, case studies during this inclusive training programme.

## PROGRAMME SUMMARY

The purpose of this EuroMaTech training course is to provide delegates with the advanced skills and knowledge to successfully analyse new and existing risk control measures and conduct effective incident analysis. This EuroMaTech training course will show delegates how they can evaluate, determine and implement effective risk control measures to prevent serious incident occurring and / or re-occurring.

This EuroMaTech training course aims to provide hands-on experience in the application of advanced risk assessment techniques to the process industry. It includes analysis of the consequences of major hazards, in terms of fire, explosion and toxic releases. Aspects of human error in relation to accidents are analysed and included in methods for promoting a positive safety culture in your organisation.

Participants will be able to apply skills learnt from this training at a practical level to implement the Company's HSE Management System. In addition to your professional development, your organisation should be able to implement, monitor and review HSE action plans.

## IN-HOUSE TRAINING

EuroMaTech is capable of conducting this training programme exclusively for your delegates. Please e-mail us on [inhouse@euromatech.ae](mailto:inhouse@euromatech.ae) for further information and/or to receive a comprehensive proposal.

# PROGRAM OUTLINE

## DAY 01

### Advanced Risk Analysis

- Introduction
- Some Major Industrial incidents to learn from
- Principles of Risk Analysis
- The ISO 31000 International Risk Management Standard
- Consideration of the Risk Analysis Framework
- Risk Evaluation Process and Risk Assessment Techniques
- Personal Safety and Process Safety
- An introduction to the concepts of Layers of Protection (*LOPs*)
- Process Safety: Control Measures and Mitigation
- Risk Assessment Tool: *BowTie Diagrams as an Advances Risk Assessment Tool*

## DAY 02

### Advanced Incident Analysis

- Accident / Incident Causation
  - » Active Failures and Latent Conditions
  - » Barriers
  - » LOPA
  - » Review of the BowTie Diagram
- Investigating Accidents and Incidents
  - » Incident Occurrences; Eye Witness Testimonies; Analysis Team
  - » Gathering Evidence; Expert Support; Incident Sequence
  - » Preliminary Causes; Root Cause Analysis; Human Factors
  - » Risk Control Recommendations; Analysis Report
- Review the Barriers

## DAY 03

### Environmental Risks and the Human Factors in Accident Causation

- Overview of Environmental Hazards, Risks and Risk Management
- Barriers and Environmental Risks
- Brief overview of Human Factors in Incident Causation
  - » Sensory and Perceptual Processes
  - » Individuals – *Psychology and Differences*
  - » Perception and Decision Making
- Human factors, including errors and violations
- Improving Human Reliability: *reducing the likelihood of errors and violations*

## DAY 04

### Fires, Explosions and Toxic Releases

- Types of Fires (*including pool fires, jet fires, etc*)
  - » Fault tree analysis
- Explosions (*LEL, UEL, and dust explosions*)
- Pressure Explosion
- The DSEAR Risk Assessment
- Toxic Releases
- Incident Re-occurrence – *Organisations Have No Memory*

## DAY 05

### Health and Safety Culture

- Hazard Report and Near Miss Reporting
  - » What are the barriers to these?
- Introduction to Safety Culture
- Techniques for improving safety culture
- The role of the HSE Management System

## QUALITY CERTIFICATIONS & ACCREDITATIONS

EuroMaTech is proud to be associated with the following accreditation bodies:



The PMI® Registered Education Provider logo is a registered mark of the Project Management Institute, Inc.

# Advanced Process Risk Assessment and Risk Management

✓	Date	Venue	Fee(\$)
	28 Feb - 04 Mar 2021	Dubai	US\$4,950
	28 Nov - 02 Dec 2021	Dubai	US\$4,950

*This fee is inclusive of instruction materials, documentation, lunch, coffee/tea breaks & snack. All Fees are subject to 5% Value Added Tax (VAT).\**

## Your Details

Name (Mr/Ms):.....  
 Position:..... Organisation:.....  
 Address:.....  
 .....  
 City / Country: .....  
 Telephone / Fax: .....

## Mode Of Payment

- Please find enclosed a cheque made payable to EuroMaTech  
 Please invoice me  
 Please invoice my company as follows:

Contact Name: .....  
 Company Name: .....  
 Address:.....

### Documentation

High Quality material has been prepared by the Seminar Leader for distribution to delegates. In addition, a special note pad to facilitate note taking will be provided.

### Certificates

A Certificate of Completion will be issued to those who attend & successfully complete the programme.

### Schedule

Our Course timings commences at 08:30 and concludes at 14:00, followed by lunch on a daily basis.

### Hotel Accommodation

EuroMaTech has negotiated special rates for a limited number of rooms in the hotel. Early registration will help to secure a room at the reduced rate.

### Registration & Payment

Please complete the registration form on this page & return it to us indicating your preferred mode of payment. For Further Information, Contact Your Nearest EuroMaTech Office.

### Cancellation Policy

Request for seminar cancellation must be made in writing & received at EuroMaTech three weeks prior to the seminar date. A U.S.\$250/- processing fee will be charged per delegate for each cancellation. Thereafter, we regret that we are unable to refund any fees due, although in such cases we would be happy to welcome a colleague who would substitute for you.

### Disclaimer

EuroMaTech reserves the right to alter the content, location of the Seminar, or the identity of the speakers in case of events beyond our control.

**\*VAT Announcement:** The Government of UAE have introduced Value Added Tax (VAT) on goods and services from 01-January-2018. In compliance with the legislation issued by the UAE Government, we will be applying a 5% VAT on the fees for all our programs and services offered from January 2018 as applicable and stipulated in the FTA circulars.

## Contact Us:

### U.K. Office:

109 Mount Pleasant  
 Liverpool L3 5TF, United Kingdom  
 Telephone: +44 151 709 7100  
 Fax: +44 151 709 7181

### Middle East Office:

P.O. Box 74693  
 Dubai, United Arab Emirates  
 Telephone: +971 4 4571 800  
 Fax: +971 4 4571 801

### Email Address:

info@euromatech.ae

### Website:

www.euromatech.com



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