Global Horizon
TRAINING CENTER

# *Training Course:*
# *Advanced Risk and Incident Analysis*

*10 - 14 February 2025*
*Zanzibar(Tanzania)*
*Golden Tulip Zanzibar Resort*

# Training Course:
# Advanced Risk and Incident Analysis

Training Course code: MA234576 From: 10 - 14 February 2025 Venue: Zanzibar(Tanzania) - Golden Tulip Zanzibar Resort
Training Course Fees: 5950  Euro

## Introduction

An essential part of risk and incident analysis is to provide management with decision making criteria for determining and subsequently establishing an organization's range of acceptable, tolerable and unacceptable risk category levels for the effective management of all their significant health, safety and process risks. Such tools are essential for avoiding major industrial incidents that can result in death, destruction, and commercial losses.

In this EuroMaTech training course, delegates will advance their knowledge and skills by:

- Understanding the importance and role of risk and incident analysis
- Learning the principles of risk management and assessment process
- Being able to analyze risks and incidents and consider the underlying causes
- Learning how to select/implement pro-active incident prevention measures
- Appreciating the roles and importance of managing Leading and Lagging Indicators
- Understanding pre and post risk and incident management

## Course Objective:

This Advanced Risk & Incident Analysis training course aims to enable participants to achieve the following objectives:

- Gaining an appreciation of risk and incident analysis techniques
- Understanding the role and the importance of "Barriers" in avoiding incidents and mitigating their consequence
- Identification of potential plant, process and work task-related risks

- Developing and implementing Risk Management programs
- Understanding how to carry out comprehensive incident analysis using evaluation tools, including root cause analysis RCA
- Appreciating the roles of Leading and Lagging Indicators in incident avoidance
- Develop skills for analyzing new and existing risk control measures and improving incident analysis techniques of pre and post risk and incident management arrangements

## Training Methodology

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

## Target Competencies

The purpose of this Advanced Risk & Incident Analysis training course is to provide delegates with the advanced skills and knowledge to successfully analyze 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 incidents occurring and/or re-occurring.

## Target Audience

- Management and those with responsibilities for analyzing risks and incidents
- Production, process, maintenance, and HSE personnel
- Line-management involved in planning and/or implementing the organization□s risk and incident analysis programs

## Course Outline:

### Day 1 Advanced Risk Analysis

- Principles of Risk Analysis
- Control Measures and Mitigation

- Consideration of the Risk Analysis Framework
- Risk Evaluation Process and Risk Assessment Techniques
- Roles of Health & Safety and Process Management Systems
- An introduction to the concepts Barriers and of Layers of Protection LOPs

### Day 2 Advanced Incident Analysis Part 1

- Learning from Incidents - Review of Case Studies
    - Gas Leak & Explosion; Liquid Leak & Explosion; Pipe Failures
    - A study of some large health and safety incidents
- Accident and Incident Analysis
    - 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

### Day 3 Advanced Incident Analysis Part 2

- Human Factors Environment
- Sensory and Perceptual Processes
- Individuals - Psychology and Differences

- Perception and Decision Making
- Human Error
- Incident Analysis using a series of case studies:
    - PVC monomer plant fire and explosion
- Improving Human Reliability

### Day 4 Advanced Risk and Incident Analysis Programme

- Development of the Bow Tie Method
- Incident Analysis using a series of case studies:
    - Process design issues - Propylene Fire and Explosion
    - Failure to understand the Process - Reactive Hazards Explosions
    - Deviations in Process Control - A serious Ethylene Oxide Explosion
- Incident Re-occurrence - Organisations Have No Memory

### Day 5 Advanced Risk and Incident Prevention Programme

- Incident Analysis using a series of case studies:
    - So much went wrong - A major oil refinery fire and explosion
- Emergency Response Analysis
- Pro-Active Incident Prevention Measures
- Pre & Post Risk and Incident Management

- Key Points Summary

# Registration form on the Training Course: Advanced Risk and Incident Analysis

Training Course code: MA234576 From: 10 - 14 February 2025 Venue: Zanzibar(Tanzania) - Golden Tulip Zanzibar Resort Training Course Fees: 5950  Euro

Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

## Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
Telephone / Mobile: .....
Personal E-Mail: .....
Official E-Mail: .....

## Company Information

Company Name: .....
Address: .....
City / Country: .....

## Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
Telephone / Mobile: .....
Personal E-Mail: .....
Official E-Mail: .....

## Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
- ☐ Please invoice me
- ☐ Please invoice my company

## Easy Ways To Register

| | | | |
|---|---|---|---|
| Telephone: +201095004484 to provisionally reserve your place. | Fax your completed registration form to: +20233379764 | E-mail to us : info@gh4t.com or training@gh4t.com | Complete & return the booking form with cheque to:Global Horizon 3 Oudai street, Aldouki, Giza, Giza Governorate, Egypt. |