



# Training Course: Advanced Process HAZOP

12 - 16 May 2025 London (UK) Landmark Office Space - Oxford Street

www.gh4t.com



## Training Course: Advanced Process HAZOP

Training Course code: LS32456 From: 12 - 16 May 2025 Venue: London (UK) - Landmark Office Space - Oxford Street Training Course Fees: 5250 I Euro

### Introduction

It is universally recognised that for any company to succeed it must take a proactive approach to risk management. Over the last few years Companies and a number of Countries legislators have been focusing on Process Safety as a method to reduce the risks posed by hazardous industries. Process Hazard Analysis PHA is recognised as being a critical tool in the implementation of a successful risk management system.

As Hazard and Operability HAZOP studies are now recognised world-wide as being the qualitative risk assessment methodology of choice in the Process Industries, there will be additional focus on this specific aspect of Process Hazard Analysis.

#### The delegates will learn:

- How to Apply Advanced Risk Assessment Techniques
- Mechanics of Dispersion, Fire, Explosion and Toxic Releases
- The Concept of Quantified Risk Assessment [QRA]
- Hazard and Operability HAZOP Study Methodology
- HAZOP Team Leadership

## **Objectives of Process HAZOP**

- Understand the concepts of Risk Assessment and Risk Management
- Understand the estimation and evaluation of risks Qualitative, Semi-Quantitative and Quantified Risks
- Techniques for Hazard Identification and Analysis Check-Lists, Risk Profiling, HAZOP, FMEA and Task-Based Risk Assessment
- Cause-Consequences Analysis The Role of Fault Trees and Event Trees in Accident Prevention
- Understand HAZOP studies their benefits and their short comings
- Understand the requirements of a Team Leader or Facilitator, scribe and team members during HAZOP studies
- Be able to facilitate a HAZOP study

## Who Should Attend?

- HSE Technical Personnel
- Project Engineers
- Maintenance Personnel
- Process Engineers involved in design and modification
- Instrumentation and Control Engineers

## **Outline of Process HAZOP**



#### DAY 1

#### Introduction to Risk Assessment

- Training Seminar Introduction: Delegate and Instructor Introductions; Training Seminar Objectives
- The Concepts of Hazards, Risk and Risk Assessment
- Methods for Risk Evaluation
- · Integrating Risk Assessment within Risk Management
- Qualitative, Semi-Quantitative and Quantitative Risk Assessment Methodologies
- Feedback and Review of Day 1

#### DAY 2

#### Risk Assessment Techniques: HAZOP

- Introduction to Hazards Identification and Analysis Techniques
- Techniques for Hazard Identification and Analysis HAZOP
- Where and When to Use HAZOP and the Requirements for a Successful HAZOP Study
- Team Composition for HAZOP Studies
- Guide Words and Process variables used for HAZOP Studies
- Syndicate Exercise Application of HAZOP to Relevant Processes
- Report Back and Review of Day 2

#### DAY 3

#### HAZOP Leadership Techniques

- HAZOP Team Leader / Facilitator Requirements
- HAZOP Scribe Requirements
- · Facilitating HAZOP Studies dols and donlts
- Information required to allow Successful HAZOP Studies
- Case Study where each delegate has the opportunity to facilitate a HAZOP Meeting
- Review of Commercial Software used for HAZOP and Management of Change IMOCI
- Report Back and Review of Day 3

#### DAY 4

#### **Consequence Analysis**

- Theory Behind Fire, Explosion, and Toxic Dispersion Modelling Utilised in Quantitative Risk Assessments
- Types of Fires and their Effects on People and Equipment
- Types of Explosions and their Effects on People and Equipment
- Review of Software available for Consequence Calculations
- Report Back and Review of Day 4

#### DAY 5

#### The Role of QRA

- Introduction to Quantified Risk Assessment IQRAI
- The Role of Event Tree Analysis in Scenario Development
- The Role of Fault Tree Analysis for Multi-causation Analysis



- Applications for ETA and FTA
- Failure Data for Use in QRAIs
- Societal Risk and Individual Risk
- Review of Software available for Quantitative Risk Assessments
- Report Back on Day 5 and Discussion
- Programme Review and the Way Ahead



## Registration form on the Training Course: Advanced Process HAZOP

Training Course code: LS32456 From: 12 - 16 May 2025 Venue: London (UK) - Landmark Office Space - Oxford Street Training Course Fees: 5250 I Euro

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

| Delegate Information  |   |   |   |
|---|---|---|---|
| Full Name (Mr / Ms / Dr / Eng):<br>Position:<br>Telephone / Mobile:<br>Personal E-Mail:<br>Official E-Mail: |   |   |   |
| Company Information   |   |   |   |
| Company Name:<br>Address:<br>City / Country:  |   |   |   |
| Person Responsible for Training and Development   |   |   |   |
| Full Name (Mr / Ms / Dr / Eng):<br>Position:<br>Telephone / Mobile:<br>Personal E-Mail:<br>Official E-Mail: |   |   |   |
| Payment Method  |   |   |   |
| <ul> <li>Please find enclosed a ch</li> <li>Please invoice me</li> <li>Please invoice my company</li> </ul> | neque made payable to Globa<br>any                          | al Horizon  |   |
| Easy Ways To Register   |   |   |   |
| Telephone:<br>+201095004484 to<br>provisionally reserve your<br>place.                                      | Fax your completed<br>registration<br>form to: +20233379764 | E-mail to us :<br>info@gh4t.com<br>or training@gh4t.com | Complete & return the<br>booking form with cheque<br>to:Global Horizon<br>3 Oudai street, Aldouki,<br>Giza, Giza Governorate,<br>Egypt. |