

**Learning Topic: Certified HAZOP Leader.**

**Course Name: 1. Certified HAZOP Leader.**

**Reference Code :SAF 311**

### **Description:**

HAZOP is one of the most employed Process Hazard analysis (PHA) technique that originated in the petrochemical industry. It can help identify hazard scenarios that could adversely affect people, property, or the environment. A HAZOP is a structured and systematic analysis of a system to identify potential hazards and operability issues, and to find solutions.

This course provides participants with an in-depth understanding of the HAZOP technique, together with practical development of HAZOP leader skills.

### **Course Objective:**

After completion of this training, delegates will:

- Understand the role of the HAZOP Team Leader.
- Be able to plan, organize, manage and successfully undertake a Hazard and Operability study
- Describe the Hazard and Operability (HAZOP) process, including the requirements, process safety guidelines, information collection, team selection, and documentation involved in a PHA/HAZOP study.
- Be able to provide feedback to team members on their performance in HAZOP application.
- Use hazard checklists and what-if techniques to supplement brainstorming analyses.
- Write and lead PHA/HAZOP studies for a variety of work-related situations and circumstances.
- Be able to conduct What-if analysis, FMEA, FTA, ETA

### **Program Methodology:**

The workshop is based with large capacity of training aid materials and practical sessions; and customized for SHE team in performing HAZOP study. Sessions include formal presentation, interspersed with directed discussion, workshops and case study. In addition, related videos will be shared and commented on by all participants.

#### **United Arab Emirates**

Emirates Towers, Level 41 Sheikh Zayed Road  
Dubai-UAE. P.O Box 3103

Tel.:0097143132317

#### **Kingdom of Saudi Arabia**

Khobar Gate Tower  
King Fahad Street , Khobar 31952

Tel.: 00966133308334

#### **Kingdom of Saudi Arabia**

101 Business Tower, 8th Floor  
Al Jubail 35513, Bldg# 9278 ,KSA

Tel.: +966 13 361 5552

## Who Should attend?

- Engineers, Operating Personnel, PSM Coordinator, HSE Managers and Engineers
- Those with only a few years of experience who want to review or broaden their understanding of process safety.
- Other professionals who desire a better understanding of the subject matter.

## Course Outline:

### 1. Introduction

- **Process Safety Management overview**
- PHA requirements in process safety
- Why is a HAZOP carried out?
- When is a HAZOP carried out?
- Essential features of HAZOP study
- Strengths and weaknesses
- Case study

### 2. Preparation for the PHA

- Developing a PHA Scope
- HAZOP analysis preparation
- HAZOP analysis meeting
- Team size and membership
- Team members, qualifications, and responsibilities
- Required documents preparation
- Case study and elaboration
- Workshop: Example HAZOP (instructor-led)

### 3. The Detailed HAZOP Study Procedure

- Preparation for carrying out a study and planning the meetings
- A detailed breakdown and explanation of a HAZOP study in practice
- Selection of study nodes / design intent of node
- Introduction of guide words
- Guidelines for managing the team
- Recording study results / maintaining quality control
- Management of results and recommendations
- Communication of results to management.

#### United Arab Emirates

Emirates Towers, Level 41 Sheikh Zayed Road  
Dubai-UAE. P.O Box 3103

Tel.:0097143132317

#### Kingdom of Saudi Arabia

Khobar Gate Tower  
King Fahad Street , Khobar 31952

Tel.: 00966133308334

#### Kingdom of Saudi Arabia

101 Business Tower, 8th Floor  
Al Jubail 35513, Bldg# 9278 ,KSA

Tel.: +966 13 361 5552

#### 4. Implementation

- Continuous vs. Batch processes and sequential operations
- Process element selection - node identification
- Process parameters, guidewords, causes & consequences
- Human factors concepts
- Ranking (prioritizing) HAZOP actions
- Preparation of study report
- Management of Change Analyses (MOC)
- Development of mitigation action plan
- Group workshops and elaboration

#### 5. Relevant to PHA

- Analyzing Operating Procedures for Critical Accident Scenarios
- How and When to Apply HAZOP, FMEA, and/or What-if/-Checklist Analyses, FTA
- Training on the Software PHA-Pro
- HAZOP Revalidation

Course Duration	Date	Venue	Course Fee
5 Days			

**Time:** 08:00 AM -03:00 PM

**Numbers of hours:** 30 Hours

#### United Arab Emirates

Emirates Towers, Level 41 Sheikh Zayed Road  
Dubai-UAE. P.O Box 3103

Tel.:0097143132317

#### Kingdom of Saudi Arabia

Khobar Gate Tower  
King Fahad Street , Khobar 31952

Tel.: 00966133308334

#### Kingdom of Saudi Arabia

101 Business Tower, 8th Floor  
Al Jubail 35513, Bldg# 9278 ,KSA

Tel.: +966 13 361 5552