

Training  
Course

**Advanced Fire Fighting Systems  
& Rescue in Process Plants**



## Introduction

Fire incidents in process plants pose significant risks to personnel, assets, and the environment. Advanced firefighting systems and rescue operations are critical components of safety management in such facilities. This course aims to provide participants with in-depth knowledge of modern firefighting technologies, rescue techniques, and best practices tailored specifically for process plants. By focusing on advanced strategies and real-world applications, this training equips professionals with the skills needed to enhance their response to fire emergencies and ensure the safety and protection of plant operations.

## Course Objectives:

- ✓ **Understand Advanced Firefighting Systems:** Gain comprehensive knowledge of advanced firefighting technologies and systems used in process plants.
- ✓ **Risk Assessment and Prevention:** Learn how to conduct fire risk assessments and implement preventive measures to mitigate fire hazards.
- ✓ **Rescue Operations:** Develop skills in executing effective rescue operations during fire emergencies in process environments.
- ✓ **Emergency Response Planning:** Equip participants with the ability to create and manage effective emergency response plans.
- ✓ **Compliance and Standards:** Ensure understanding of relevant fire safety regulations, standards, and compliance requirements in process plants.
- ✓ **Enhance Safety Culture:** Promote a proactive safety culture focused on continuous improvement in fire safety and emergency preparedness.

## Who Should Attend?

- Safety Managers and Supervisors
- Fire Safety Professionals
- Emergency Response Teams
- Process Plant Operators and Engineers
- HSSE (Health, Safety, Security, and Environment) Coordinators
- Maintenance Personnel
- Any personnel involved in fire safety and emergency response in process plants

## Training Methods:

- ✓ Online Video material.
- ✓ Presentation.
- ✓ Live Interactive sessions.
- ✓ Course presenter will make extensive use of all tools that will be needed for the virtual environment.
- ✓ Questions & Answers

## Course Outline:

### Day One

- Introduction to Fire Safety in Process Plants
- Fundamentals of Fire Chemistry and Behavior
- Types of Fire Hazards in Process Plants
- Overview of Advanced Firefighting Systems
- Fixed Fire Protection Systems: Sprinklers, Foam, and Deluge Systems
- Portable Firefighting Equipment and Their Uses

### Day Two

- Fire Detection and Alarm Systems
- Understanding Fire Suppression Agents and Their Applications
- Design and Maintenance of Firewater Systems
- Gas Detection and Suppression Systems in Process Plants
- Hazardous Material (HAZMAT) Firefighting Techniques
- Emergency Shutdown Systems and Their Role in Fire Safety

### Day Three

- Rescue Techniques and Equipment in Process Plants
- Advanced Search and Rescue Operations
- Firefighting Tactics for Process Plant Fires
- Evacuation Procedures and Safe Zones Management
- Personal Protective Equipment (PPE) for Firefighting and Rescue
- Thermal Imaging and Its Applications in Firefighting

### Day Four

- Incident Command System (ICS) in Fire Emergencies
- Training and Drills: Preparing for Fire Emergencies
- Fire Risk Assessment and Management
- Developing Fire Safety and Emergency Response Plans
- Human Factors in Firefighting and Rescue Operations
- Coordination with External Emergency Services

### Day Five

- Regulatory Compliance: NFPA, OSHA, and Local Standards
- Post-Incident Analysis and Continuous Improvement
- Case Studies of Major Fire Incidents in Process Plants
- Advanced Technologies in Fire Detection and Suppression
- Leadership and Decision-Making in Fire Emergencies
- Creating a Fire-Safe Culture in Process Plants

## Training Details

Course Duration	5 Days
Pre-Schedule	6-10 October 2024
Venue	Arts Hotel Istanbul
Training Fees Per Person	KWD 1250 ( One Thousand Two Hundred Fifty )
Course Fees Include	<ul style="list-style-type: none"><li>✓ Tuition documentation</li><li>✓ Curriculum and Training Handout</li><li>✓ Five star Lunch</li><li>✓ Completion Certificates</li></ul>

