

# ASME Plant Inspector Level 1

11 - 15 November 2024 London (UK)



## **ASME Plant Inspector Level 1**

REF: KJ1704 DATE: 11 - 15 November 2024 Venue: London (UK) - Fee: 6375 Euro

### Introduction:

This training program provides participants with the essential skills and knowledge needed to perform thorough inspections and assessments of pressure equipment in industrial plants. It empowers participants to understand and apply ASME standards for the inspection of piping, pressure vessels, and storage tanks, ensuring operational integrity and safety.

## **Program Objectives:**

#### By the end of this program, participants will be able to:

- Understand the fundamental principles of plant inspection.
- Perform in-service inspections of key pressure equipment such as piping and storage tanks.
- Identify and assess equipment conditions and damage mechanisms.
- Develop effective inspection plans and maintain compliance with ASME standards.
- Implement best practices for managing plant maintenance and inspection data.

## **Target Audience:**

- NDT Technicians.
- Integrity Engineers.
- Project and Inspection Coordinators.
- Plant Supervisors.
- Maintenance Professionals responsible for equipment inspection.

## **Program Outline:**

#### Unit 1:

#### Introduction to ASME Standards and Plant Inspection Principles:

- Overview of ASME standards relevant to plant inspection.
- Key principles of plant inspection: safety, compliance, and integrity.



- Understanding pressure equipment failure mechanisms.
- The role of inspections in reducing plant risks and ensuring equipment longevity.
- Planning and executing plant inspections in line with ASME guidelines.

#### Unit 2:

#### In-Service Piping Inspection and Monitoring:

- Inspection methods for in-service piping systems.
- Monitoring piping for corrosion, erosion, and other damage mechanisms.
- Techniques for assessing piping condition and lifespan.
- Developing maintenance and inspection schedules for piping.
- Documentation and reporting of inspection findings.

#### Unit 3:

#### Pressure Vessel Inspection Techniques:

- Design principles of pressure vessels and their impact on inspection methods.
- Assessing common damage mechanisms in pressure vessels.
- Performing non-destructive testing NDT on pressure vessels.
- Calculating remaining life of pressure vessels and setting inspection intervals.
- Best practices for documenting and reporting inspection results.

#### Unit 4:

#### Storage Tank Inspection and Maintenance:

- Storage tank design and in-service inspection requirements.
- Techniques for evaluating the condition of storage tank components floors, roofs, walls.
- Identifying and addressing common damage mechanisms in storage tanks.
- Conducting pressure and leak testing of storage tanks.
- Implementing maintenance strategies to prolong storage tank life.



#### Unit 5:

#### Inspection Planning and Data Management:

- Developing comprehensive inspection plans for plant equipment.
- Using inspection data to make informed maintenance decisions.
- Managing and storing inspection data for regulatory compliance.
- Continuous improvement in plant inspection processes.
- Case study: Implementing a plant-wide inspection program for a petrochemical facility.