

€ TRAINING

Industrial Inspection and Corrosion
Management





Industrial Inspection and Corrosion Management

Introduction:

This training program is designed to provide professionals with the knowledge and skills necessary to effectively inspect industrial equipment and manage corrosion issues. It empowers them to enhance safety, reliability, and longevity of industrial assets.

Program Objectives:

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

- Understand the principles and practices of industrial inspection.
- Develop skills in identifying and assessing corrosion.
- Learn techniques for corrosion prevention and control.
- Gain insights into the latest technologies and methods for corrosion management.
- Enhance capabilities in planning and executing corrosion management programs.

Targeted Audience:

- Inspection Engineers.
- Maintenance Technicians.
- Corrosion Engineers.
- Plant Managers.
- Quality Control Professionals.
- Industrial Safety Officers.

Program Outline:

Unit 1:

Fundamentals of Industrial Inspection:

- Overview of industrial inspection principles and practices.
- Regulatory requirements and industry standards for inspection.

- Types of inspection techniques: visual, non-destructive testing NDT, and advanced methods.
- Planning and scheduling inspections.
- Case studies on effective industrial inspection practices.

Unit 2:

Understanding Corrosion and Its Effects:

- Basics of corrosion: types, causes, and mechanisms.
- The impact of corrosion on industrial equipment and infrastructure.
- Methods for detecting and evaluating corrosion.
- Corrosion rate measurement and analysis.
- Practical exercises on identifying and assessing corrosion.

Unit 3:

Corrosion Prevention and Control Techniques:

- Techniques for preventing corrosion in industrial environments.
- Use of coatings, inhibitors, and cathodic protection.
- Material selection and design considerations for corrosion resistance.
- Implementing maintenance practices to control corrosion.
- Real-world examples of successful corrosion prevention.

Unit 4:

Advanced Corrosion Management Strategies:

- Developing and implementing corrosion management programs.
- Integrating corrosion management into asset integrity management.
- Using data and technology for proactive corrosion management.
- Risk-based inspection and maintenance planning.

Unit 5:

Case Studies and Best Practices in Corrosion Management:

- Analysis of real-world case studies in industrial corrosion management.
- Lessons learned from significant corrosion incidents.
- Best practices for continuous improvement in corrosion management.
- Innovations and emerging trends in corrosion management.
- Roundtable discussion on industry challenges and solutions.