

# € TRAINING

Corrosion Management Best Practices





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## Introduction:

This training program is designed to provide participants with comprehensive knowledge and skills essential for managing corrosion effectively in industrial plants and installations. It empowers them to implement proactive measures that safeguard infrastructure and enhance reliability.

## Program Objectives

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

- Understand the fundamentals of corrosion technology.
- Gain proficiency in advanced inspection methods for detecting corrosion.
- Learn preventive measures and mitigation strategies.
- Develop skills in implementing corrosion prevention best practices.
- Enhance their ability to manage corrosion risks effectively.

## Target Audience:

- Maintenance engineers and technicians.
- Inspection and quality assurance professionals.
- Plant managers and operations personnel.
- Engineers involved in design and materials selection.
- Professionals seeking to deepen their expertise in corrosion management.

## Program Outline:

### Unit 1:

#### Fundamentals of Corrosion Technology:

- Types and Causes of Corrosion.
- Corrosion Mechanisms and Factors.
- Corrosion Control Methods.

- Material Selection for Corrosion Resistance.
- Environmental and Operational Impacts on Corrosion.

## Unit 2:

### Advanced Inspection Techniques:

- Non-Destructive Testing NDT for Corrosion Assessment.
- Visual Inspection Methods.
- Ultrasonic Testing UT and Radiography.
- Magnetic Particle and Dye Penetrant Testing.
- Corrosion Monitoring Technologies.

## Unit 3:

### Prevention and Mitigation Strategies:

- Cathodic Protection Systems.
- Coatings and Surface Treatments.
- Inhibitors and Corrosion Resistant Alloys.
- Design Considerations for Corrosion Prevention.
- Maintenance Practices to Prevent Corrosion.

## Unit 4:

### Best Practices in Corrosion Prevention:

- Risk Assessment and Management Strategies.
- Corrosion Monitoring and Surveillance.
- Training and Awareness Programs.
- Regulatory Compliance and Standards.
- Case Studies on Successful Corrosion Prevention.

## Unit 5:



## Implementation and Continuous Improvement:

- Implementing Corrosion Prevention Measures.
- Monitoring Effectiveness and Adjustments.
- Continuous Improvement Initiatives.
- Evaluating Long-Term Performance.
- Future Trends in Corrosion Prevention.