

# € TRAINING

Upstream Corrosion Management





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## Introduction:

This training program equips professionals with the expertise needed to effectively prevent, monitor, and manage corrosion in upstream oil and gas production facilities. Through targeted modules, participants gain essential knowledge and skills to safeguard infrastructure integrity, ensure regulatory compliance, and optimize operational performance.

## Program Objectives:

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

- Implement effective corrosion control strategies in upstream production pipelines and facilities.
- Utilize advanced corrosion monitoring and inspection techniques.
- Select appropriate corrosion prevention and control measures.
- Develop comprehensive corrosion management plans and risk assessments.
- Ensure regulatory compliance and adhere to industry best practices in corrosion control.

## Targeted Audience:

- Corrosion engineers and specialists.
- Pipeline integrity managers.
- Facilities and asset managers.
- Inspection and maintenance professionals.
- Operations and production personnel.

## Program Outlines:

### Unit 1:

#### Fundamentals of Corrosion in Upstream Production Pipelines & Facilities:

- Introduction to corrosion mechanisms in upstream production.
- Factors influencing corrosion in pipelines and facilities.

- Corrosion monitoring techniques and best practices.
- Understanding the impact of corrosion on operational integrity.
- Overview of corrosion control strategies and their effectiveness.

## Unit 2:

### Corrosion Monitoring and Inspection Techniques:

- Introduction to various corrosion monitoring methods.
- Principles of corrosion inspection and assessment.
- Utilization of non-destructive testing NDT techniques.
- Interpretation of corrosion monitoring data.
- Integration of inspection results into corrosion management strategies.

## Unit 3:

### Corrosion Prevention and Control Measures:

- Overview of corrosion prevention strategies.
- Application of coatings and inhibitors for corrosion control.
- Cathodic protection principles and implementation.
- Design considerations for corrosion-resistant materials.
- Integration of maintenance practices for effective corrosion control.

## Unit 4:

### Corrosion Management Planning and Risk Assessment:

- Development of corrosion management plans.
- Risk assessment methodologies for corrosion control.
- Identification of critical corrosion risk areas.
- Mitigation strategies for high-risk corrosion scenarios.
- Integration of corrosion management into asset integrity management systems.

## Unit 5:

### Regulatory Compliance and Best Practices:

- Understanding regulatory requirements for corrosion control.
- Compliance with industry standards and guidelines.
- Case studies highlighting successful corrosion management practices.
- Continuous improvement strategies for corrosion control programs.
- Importance of documentation and reporting in corrosion management.