

€ TRAINING

Corrosion Management for Petrochemical
Professionals





Corrosion Management for Petrochemical Professionals

Introduction:

This training program offers an extensive exploration of corrosion management tailored for professionals in the petrochemical industry.

Program Objectives:

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

- Identify the various forms of corrosion and the specific mechanisms that result in each form.
- Define electrochemical processes and concepts.
- Recognize the different types of corrosive environments that affect corrosion.
- Give examples as to how and when to use control corrosion methods of design, materials selection, modification of the environment, protective coatings, and cathodic and anodic protection.
- Give examples of control corrosion by a selection of design and engineering materials, modification of the environment, cathodic and anodic protection, and protective coatings.
- Discuss corrosion monitoring techniques using testing, inspection, specimen exposure, electrochemical methods, water chemistry, and analysis of deposits.

Targeted Audience:

- Design engineers, Process engineers, Procurement agents.
- Maintenance planners.
- Service company representatives who support refineries.
- Corrosion and equipment engineers.
- Metallurgists.
- Inspectors and inspection supervisors.

Program Outlines:

Unit 1:

Introduction to Surface Production Operations Management:

- Overview of surface production operations.
- Importance of effective management in enhancing productivity.
- Introduction to key concepts and terminology.
- Overview of common challenges and their solutions.
- Case studies highlighting successful management strategies.

Unit 2:

Safety Protocols and Regulatory Compliance:

- Understanding safety regulations and standards.
- Implementation of safety protocols in surface production operations.
- Risk assessment and mitigation strategies.
- Emergency response procedures.
- Compliance with environmental regulations.

Unit 3:

Equipment Maintenance and Optimization:

- Importance of equipment maintenance in production operations.
- Preventive maintenance strategies.
- Troubleshooting common equipment issues.
- Techniques for optimizing equipment performance.
- Utilization of technology for predictive maintenance.

Unit 4:

Production Planning and Scheduling:

- Overview of production planning processes.
- Factors influencing production scheduling.
- Techniques for effective production scheduling.
- Balancing production demands with resource availability.

- Strategies for adapting to changing production requirements.

Unit 5:

Quality Control and Continuous Improvement:

- Importance of quality control in surface production operations.
- Implementing quality assurance processes.
- Monitoring and analyzing production data for quality control.
- Root cause analysis for addressing quality issues.

- Continuous improvement methodologies such as Six Sigma and Lean Manufacturing.