

€ TRAINING

MEG Regeneration System Functions



19 - 23 January 2025
Cairo (Egypt)



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REF: E1583 DATE: 19 - 23 January 2025 Venue: Cairo (Egypt) - Fee: 4465 Euro

Introduction:

MEG regeneration systems play a crucial role in gas processing by efficiently purifying and recycling Monoethylene Glycol, ensuring optimal performance and reducing operational costs. This training program provides comprehensive instruction on the operational principles and functions of MEG regeneration systems in the oil and gas industry. Through it, participants will develop the skills needed to operate and troubleshoot MEG regeneration systems effectively.

Program Objectives:

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

- Describe the design, rules, and performance testing of centrifugation and positive displacement pumps.
- Check pump performance and apply appropriate maintenance and troubleshooting techniques.
- Identify types of frequency pumps, maintain them, and detect and repair faults.
- Diagnose centrifugal pump problems and perform effective troubleshooting and maintenance.
- Determine the types of compressors, their operation, common issues, and troubleshooting techniques.

Targeted Audience:

- Process Engineers working in oil and gas operations.
- Maintenance Technicians responsible for pump and compressor systems.
- Operations Supervisors managing MEG regeneration processes.
- Mechanical Engineers specializing in fluid handling systems.
- Field Operators involved in the operation and troubleshooting of MEG systems.

Program Outline:

Unit 1:

Fundamentals of MEG regeneration systems:

- Introduction to MEG regeneration systems.
- Properties and characteristics of MEG.

- Overview of MEG pumping systems.
- Basic components and functions of MEG regeneration units.
- Importance of MEG in oil and gas operations.

Unit 2:

Operations and Controls:

- Overview of the MEG recovery process.
- Functions of MEG exchanger drums and reboilers.
- Identifying and managing pump seal leakage.
- Foam control methods and pH management.
- Addressing hydrocarbon carryover in MEG systems.

Unit 3:

Technical Challenges and Solutions:

- Operating procedures for MEG regeneration systems.
- Neutralizing excess alkalinity/acidity in lean MEG.
- Addressing divalent cations precipitation in rich MEG pre-treatment.
- Specifications for lean and rich MEG.
- Monitoring alkalinity and managing acid injection.

Unit 4:

Minimizing Deterioration and Losses:

- Flash separation techniques for MEG systems.
- Effective pH management to reduce deterioration.
- Strategies to minimize MEG losses during operations.
- Controlling scaling and fouling in regeneration systems.
- Maintaining system integrity to enhance longevity.

Unit 5:

Troubleshooting and Efficiency Improvement:

- Identifying and addressing common MEG regeneration issues.
- Maintenance of MEG regeneration column packing materials.
- Troubleshooting hydrocarbon carryover and foam control issues.
- Techniques for improving the efficiency of MEG regeneration systems.