

€ TRAINING

MEG Regeneration System Functions



MEG Regeneration System Functions

Introduction:

This training program provides comprehensive instruction on the operational principles and functions of MEG regeneration systems in the oil and gas industry. Through theoretical learning and practical exercises, attendees 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 of centrifugation and positive displacement including pump design, rules, performance comparisons, characteristic curves, and performance testing.
- Check pump performance and apply maintenance and troubleshooting techniques accordingly.
- Determining types of frequency pumps, maintaining them, and detecting and repairing faults.
- Determine the problems of the centrifugal pump and perform maintenance and troubleshooting.
- Determine the types of compressors, how they work, their common problems, and the implementation of troubleshooting techniques.
- Apply different methods for tailoring pumps such as optical alignment, straight edge / RIM, and Face alignment, reverse cursor alignment, reverse connection, and laser alignment.
- Diagnosis of soft foot conditions and correction techniques.

Targeted Audience:

- Factory employees and officials involved in the installation and maintenance of pumps and centrifugal compressors.
- Agricultural maintenance technicians and mechanical maintenance technicians.
- Personnel responsible for the management and supervision of the operation and maintenance of pumps and compressors.

Unit 1:

Fundamentals:

- Introduction to MEG regeneration systems.
- Properties of MEG.
- MEG pumping systems.

Unit 2:

Operations and Controls:

- MEG recovery process.
- MEG exchanger drum and reboiler.
- Pump seal leakage.
- Foam control and pH control.
- Hydrocarbon carryover.

Unit 3:

Technical Challenges and Solutions:

- Process overview and Operating procedures.
- Neutralization of excess alkalinity/acidity in the lean MEG.
- Source of alkalinity to precipitate divalent cations in rich MEG pre-treatment.
- Lean MEG specifications and Rich MEG specifications.
- Monitoring alkalinity and acid injection.
- Corrosion, Scaling & fouling.
- Hydrocarbon carryover.

Unit 4:

Minimizing Deterioration and Losses:

- Flash separation.
- pH management.

Unit 5:



Troubleshooting and Efficiency Improvement:

- Packing materials.
- MEG regeneration column packing maintenance.