GLOBAL EXPERTS INSTITUTE FOR TRAINING.
ISO 9001-2008 TRAINING PROVISION CERTIFIED

Amine Treating and Sulphur Recovery Technology

Schedule Dates:

Start Date	End Date	Place
29 Sept	3 Oct 2024	Dubai – The H hotel

Program Introduction:

Natural Gas is considered to contribute less greenhouse gas emissions than other fossil fuels. It has therefore been touted to be the fuel of choice by nations and is considered to serve as a transition until renewable sources mature to the point that they can replace fossil fuels. The abundance of this fossil fuel and the diversity of its composition, requires that in many cases it has to be treated to meet a variety of specifications.

This Amine Gas Sweetening & Sulphur Recovery training course aims to equip the attending delegates with the knowledge of all the current processes used for the removal of acidic and other contaminants (primarily H2S and CO2 but also water vapor, mercury Nitrogen, Argon) from hydrocarbon streams.

Program Objective:

- ✓ Gain a thorough Understanding of Amine Sweetening and Sulphur Recovery Technologies
- ✓ Grasp an Explanation of the Key Features of Gas Treating
- ✓ Understand the Limitations Imposed by Gas Processing Thermodynamics
- ✓ Distinguish the Main Criteria in Process Design
- ✓ Evaluate, Monitor, and Troubleshoot Gas Treating and Sulphur Recovery Operations

Who should attend?

- Technologists
- Mechanical engineers
- Inspection engineers
- Maintenance or project engineers
- Operations personnel

Program Outlines

Day One

Introduction to Natural Gas

- Hydrocarbon Properties
- Associated/ Non-Associated/ Unconventional Gas
- LNG / NGL Production and Processing
- Liquefied Petroleum Gas (LPG)
- Environmental and Safety Considerations
- Gas Specifications

Day Two

Objectives of Gas Treatment

- Gas Contaminants & Objectives of Gas Treating
- Gas Dehydration
- Glycols vs. Solid Desiccants
- Mercury Removal, Nitrogen Rejection Unit
- Chemistry of Amine Gas Sweetening
- Guide to Selection of Gas Sweetening Processes
- Amine Filtration Systems

Day Three

Alkanolamine Processes

- Process Flow and Process Description
- Design Criteria Guidelines for Amine Systems:
- General Considerations for Amine Processes
- Materials Selection and Construction
- General Operating Problems and Troubleshooting
- Solution Degradation & Amine Losses
- Foaming
- Heat Stable Salts
- Corrosion

Day Four

Sulphur Recovery I

- "Claus" Sulphur Recovery Chemistry and Thermodynamics – A question of Equilibrium
- Claus Process - Considerations and Modifications
- The EUROCLAUS Concept
- Process/ Mechanical Considerations
- Thiopaq Process
- Troubleshooting: What Can Go Wrong
- Claus Process Calculations and Exercises

Day Five

Sulphur Recovery II

- Tail Gas Handling
- SCOT Tail Gas Treating
- Particulate Removal
- Mercury/Toxics Emissions
- Incineration
- Sulfur Product Specifications, Storage and Handling
- Safety and Environmental Considerations

Training Methodology:

- Slide presentations
- Interactive discussion
- Simulations and Gamification
- Online Video material

Cost Quotation in Kuwaiti Dinars

The total cost includes:

- Instructor(s) expenses
- Training materials
- Certification
- Lunch Included

Total Cost: 1250 KD per Participant

(One Thousand Two Hundred Fifty Kuwaiti Dinar)