€TRAINING

Natural Gas Propane Refrigeration System

5 - 9 August 2024
London (UK)
Landmark Office Space

Natural Gas Propane Refrigeration System

REF: E1566 DATE: 5 - 9 August 2024 Venue: London (UK) - Landmark Office Space Fee: 6375 Euro

Introduction:

This training program is a comprehensive initiative aimed at equipping participants with the necessary knowledge and skills to effectively operate and maintain propane-based refrigeration systems. Upon completion of the program, participants will be capable of ensuring the smooth and efficient operation of propane refrigeration systems in various industrial settings.

Program Objectives:

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

- Understand refrigerator propane properties.
- Assess the impact of heat transfer factors.
- Design Propane refrigeration systems.
- Operate Propane refrigeration systems effectively.
- Implement control systems for Propane refrigeration.
- Conduct maintenance on Propane refrigeration systems.
- Enhance the efficiency of Propane refrigeration systems.
- Troubleshoot issues in Propane refrigeration systems.

Target Audience:

- Operation engineers,Operation supervisors.
- Process engineer, Design engineer.
- Maintenance engineer, Maintenance supervisors.
- Mangers and team leaders.
- Operators and SR. Operators.

Program Outlines:

Unit 1:

Fundamentals:

- Introduction to Refrigeration.
- Understanding refrigerator propane properties.
- Overview of heat transfer principles.
- Exploration of basic refrigeration systems.
- Study of the refrigeration cycle components.
- Introduction to secondary cooling systems.

Unit 2:

Design, Operation, and Control of Propane Refrigeration System Components Cycle:

- Analysis of typical single and multi-stage systems.
- Understanding propane surge drum and pump loading.
- Examination of expansion valves and propane chillers.
- Overview of economizers in refrigeration systems.
- Study of propane condensers and their operation.

Unit 3:

Propane Refrigeration Centrifugal Compressor:

- Introduction to centrifugal compressor principles.
- Analysis of typical centrifugal compressor components.
- Understanding multi-stage compressor operation.
- Overview of axial compressors and their components.
- Examination of compressor casings, rotors, and guide vanes.
- Study of compressor lubrication, cooling, and control systems.

Unit 4:

Propane Refrigeration Reciprocating Compressor:

- Introduction to reciprocating compressor principles.

- Understanding gas compression in reciprocating compressors.
- Analysis of typical reciprocating compressor components.
- Overview of compression unit operation and components.
- Examination of compression unit cooling and lubrication systems.
- Study of different types of reciprocating compressor configurations.

Unit 5:

Propane Refrigeration Troubleshooting and Improve Efficiency:

- Identification of indicators and checks for refrigeration systems.
- Performing operating checks and diagnosing operating problems.
- Understanding refrigeration system controls and applications.
- Analysis of factors affecting operation and efficiency.
- Strategies to solve fouling problems and improve efficiency.
- Development of maintenance types and maintenance plans for refrigeration systems.