



Training Course: Installation of Natural Gas Distribution Networks and Infrastructures

> 1 - 5 June 2025 Alexandria (Egypt)

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# Training Course: Installation of Natural Gas Distribution Networks and Infrastructures

Training Course code: EN235269 From: 1 - 5 June 2025 Venue: Alexandria (Egypt) - Training Course Fees: 4750 🛛 Euro

# Introduction:

Welcome to the Certification in Installation of Natural Gas Distribution Networks and Infrastructures training program! This comprehensive course is designed to equip participants with the essential knowledge and skills required for the safe and efficient installation of natural gas distribution systems.

# **Overview:**

Natural gas plays a vital role in providing energy for various applications, and its distribution demands a meticulous understanding of infrastructure, safety protocols, and regulatory compliance. This program is tailored to professionals and individuals seeking expertise in designing, installing, and maintaining natural gas distribution networks.

# Why Attend?

- Gain a deep understanding of natural gas distribution systems.
- Learn the latest industry standards and regulatory requirements.
- Acquire hands-on experience with installation techniques.
- Enhance your skills for troubleshooting and maintenance.
- Obtain a recognized certification in gas distribution infrastructure.

# **Target Audience:**

This training program is suitable for a diverse range of professionals and individuals involved in or aspiring to work in the natural gas industry. The target audience includes:

- Engineers and Technicians in Gas Utilities
- · Construction and Infrastructure Professionals
- Environmental and Safety Specialists
- Regulatory Compliance Officers
- Project Managers and Planners
- Government Officials and Inspectors



· Students and Graduates in Engineering or Related Fields

Whether you are already working in the industry or seeking to enter it, this program will provide you with the knowledge and expertise needed for successful and safe natural gas distribution.

# **Objectives:**

Upon completion of the Certification in Installation of Natural Gas Distribution Networks and Infrastructures training program, participants will be able to:

- Understand the Basics: Grasp the fundamentals of natural gas, distribution networks, and the importance of safety in gas installations.
- Comply with Regulations: Navigate and comply with regulatory requirements, safety standards, and permitting processes governing gas distribution.
- Design and Plan Networks: Develop the skills to design, plan, and assess natural gas distribution systems, considering safety, efficiency, and environmental impact.
- Master Installation Techniques: Acquire hands-on experience with installation techniques, including pipe joining methods, welding, and quality assurance.
- Handle Maintenance and Troubleshooting: Demonstrate proficiency in preventive maintenance, identify common issues, and implement effective troubleshooting strategies.
- Manage Gas Metering: Understand various gas metering methods, install and calibrate gas meters, and handle billing and customer metering.
- Ensure Safety and Emergency Response: Develop and implement safety protocols, detect and respond to gas leaks, and effectively manage emergency situations.
- Address Environmental Considerations: Recognize the environmental impact of gas distribution and apply mitigation strategies to comply with environmental standards.

# Outlines:

Day 1:

#### Introduction to Natural Gas Distribution

- Welcome and Registration
- · Overview of Natural Gas and its Importance
- Introduction to Natural Gas Distribution Networks
- Safety Briefing and Guidelines
- Icebreaker Activities



# Day 2:

## Basics of Gas Infrastructure

- Components of a Natural Gas Distribution System
- Types of Gas Pipes and Materials
- Pressure Regulation in Gas Networks
- Safety Measures in Gas Installations
- Case Studies and Discussions

## Day 3: Regulatory Compliance and Standards

- Understanding Regulatory Requirements
- Compliance with Safety Standards
- Permitting and Inspection Processes
- Q&A Session with Regulatory Experts
- Group Activities on Compliance Scenarios

## Day 4:

## Design and Planning of Gas Networks

- Principles of Gas Network Design
- Site Assessment and Planning
- Sizing and Layout of Gas Pipelines
- Environmental Considerations
- Practical Design Exercises

# Day 5:

## Installation Techniques and Practices

- Introduction to Installation Techniques
- Pipe Joining Methods
- Welding and Non-Destructive Testing NDT



- Hands-On Installation Exercises
- Quality Assurance in Installations

## Day 6:

## Maintenance and Troubleshooting

- Preventive Maintenance of Gas Infrastructure
- Identification and Handling of Common Issues
- Emergency Response and Shutdown Procedures
- Practical Simulation of Troubleshooting Scenarios
- Maintenance Best Practices

#### Day 7:

#### Gas Metering and Measurement

- Types of Gas Meters
- Installation and Calibration of Gas Meters
- Measurement Accuracy and Verification
- Billing and Customer Metering
- Metering Practical Exercises

## Day 8:

# Safety Protocols and Emergency Response

- Emergency Response Planning
- Gas Leak Detection and Response
- Evacuation Procedures
- Mock Emergency Drills
- Guest Speaker on Safety Protocols



# **Environmental Considerations**

- Environmental Impact of Gas Distribution
- Mitigation Strategies
- Compliance with Environmental Standards
- Case Studies on Environmental Challenges
- Group Discussions on Environmental Practices

# Day 10:

# Final Assessments and Certification

- Review of Key Concepts
- Written and Practical Assessments
- Certification Ceremony
- Feedback and Q&A Session
- Closing Remarks and Networking



# Registration form on the Training Course: Installation of Natural Gas Distribution Networks and Infrastructures

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

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Full Name (Mr / Ms / Dr / Eng): Position: Felephone / Mobile: Personal E-Mail: Official E-Mail:			
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