



# Training Course: Cleaning Network and Line Equipment (400/220)

6 - 17 July 2025 Sharm El-Sheikh (Egypt) Sheraton Sharm Hotel



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Training Course code: EN235690 From: 6 - 17 July 2025 Venue: Sharm El-Sheikh (Egypt) - Sheraton Sharm Hotel Training Course Fees: 7450 

Euro

#### Introduction

This program is designed to provide specialized knowledge and hands-on skills for safely cleaning and maintaining network and line equipment operating at 400/220 kV. Participants will learn essential practices for ensuring system reliability, minimizing outages, and maintaining high standards of occupational safety and electrical security.

## **Objectives**

- Understand the operational principles of 400/220 kV network and line equipment.
- Identify safe cleaning methods and materials for high-voltage systems.
- Implement best practices to maintain equipment efficiency and prevent contamination.
- Learn the importance of coordination and planning in cleaning operations.
- Adhere to safety protocols and regulatory standards.

# **Target Audience**

- Electrical maintenance engineers and technicians.
- · Substation and transmission line operators.
- · Safety officers in electrical utilities.
- Professionals responsible for high-voltage equipment maintenance.

#### **Outlines**

#### Day 1: Overview of High-Voltage Network Equipment

- Introduction to 400/220 kV network and line equipment.
- Function and significance of transformers, insulators, and circuit breakers.
- Effects of contamination and pollution on equipment performance.

#### Day 2: Contamination Types and Effects



- Understanding various contaminants dust, oil, salt, etc..
- Impact of contamination on high-voltage equipment.
- · Methods to assess contamination levels.

#### Day 3: Cleaning Principles and Techniques

- Fundamentals of cleaning high-voltage equipment.
- Wet and dry cleaning methods.
- Selecting appropriate cleaning agents for different materials.

#### Day 4: Safety Measures in Cleaning Operations

- Electrical safety procedures for high-voltage systems.
- Lockout/tagout LOTO processes.
- Use of Personal Protective Equipment PPE in cleaning operations.

#### Day 5: Tools and Equipment for Cleaning

- Overview of cleaning tools e.g., brushes, air blowers, water jet systems.
- Inspection and maintenance of cleaning tools.
- Demonstration of tool usage for cleaning line and network equipment.

#### Day 6: Cleaning Substation Equipment

- Techniques for cleaning insulators, bushings, and transformers.
- Removing oil spills and other contaminants.
- · Best practices for substation cleaning.

#### Day 7: Cleaning Overhead Lines and Towers

- Safe access and cleaning of transmission towers.
- Cleaning methods for conductors and insulators.
- Challenges and solutions in different environments e.g., urban, coastal.



#### Day 8: High-Voltage Cleaning Standards and Regulations

- Industry standards for cleaning operations.
- Regulatory compliance in cleaning 400/220 kV equipment.
- Case studies on non-compliance consequences.

### Day 9: Planning and Coordination of Cleaning Activities

- Scheduling cleaning operations to minimize system downtime.
- Coordination with operations and safety teams.
- Documentation and reporting of cleaning activities.

#### Day 10: Inspection and Quality Assurance

- · Post-cleaning inspection procedures.
- Ensuring cleaning quality and equipment reliability.
- Continuous improvement in cleaning practices.



# Registration form on the Training Course: Cleaning Network and Line Equipment (400/220)

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

Telephone: +201095004484 to provisionally reserve your place. Fax your completed registration form to: +20233379764 E-mail to us : info@gh4t.com or training@gh4t.com Complete & return the booking form with cheque to:Global Horizon 3 Oudai street, Aldouki, Giza, Giza Governorate, Egypt.