Global Horizon
TRAINING CENTER

Training Course:
Electric Power Distribution System For Industrial Plants

13 - 24 April 2025
Dubai (UAE)

Training Course:
Electric Power Distribution System For Industrial Plants

Training Course code: EN2 From: 13 - 24 April 2025 Venue: Dubai (UAE) - Training Course Fees: 7970 Euro

Introduction

Electric power distribution system plays an important role in the efficient operation of a modern industrial plant. Such a system includes high voltage circuit breakers, switchgear, transformers, motor control centers, electric motors, variable speed drives, etc. A trouble-free electrical system is essential for an interruption-free plant operation. This course will cover all aspects of power distribution, including system planning, equipment selection and application, system grounding, protection and conformity with electrical code requirements, etc. Participants will work under instructor guidance to develop a power distribution system single line diagram for a typical industrial plant.

Objectives

Upon Completion of the Course, Participants will be able to:

- Plan your system and select equipment for it.
- Benefit from a clear understanding of all aspects of power distribution system
- Apply the Electrical Code to your projects
- Deal with the important issues such as load estimating, voltage selection, shortage circuit studies and power protection
- make your distribution system more efficient by applying your new knowledge of the power distribution system and equipment

Target Audience

Electrical power distribution engineers, electrical power system engineers, plant managers, plant engineers from all types of industries particularly chemical and petroleum, large institutional power distribution engineers, consulting engineers and other engineers as well as technical personnel involved in the design, engineering, operation and maintenance of power distribution system in industrial plants.

Course Outlines of Electric Power Distribution System For Industrial Plants
System Planning As Applicable To Industrial Plants

- Load estimates
- Voltage considerations and flicker
- Distribution types
- Substation bus arrangements

- Review of a conceptual single line diagram

Short Circuit Studies For Equipment Rating And Relaying

- Applicable standards
- Method of calculations
- System and equipment data
- An example using hand calculations

Load Flow Calculations

- Importance of load flow
- Voltage drop considerations
- Voltage instability
- Loss of a source
- Effect of current limiting reactors
- Optimization of load flow

System Neutral Grounding

- Ungrounded
- High resistance
- Low resistance
- Solidly grounded systems
- Cable insulation and system grounding
- Generator neutral grounding

Review Of Major Equipment

- Motor control centers, switchgear, power transformers
- Application of power cables
- Application of electric motors

- Surge arresters
- Harmonics in power systems and impact of non-linear loads
- Capacitor applications
- Instrument transformers

Workshop - Development Of Single Line Diagrams
Protective Devices And Relay Setting

- Protection and co-ordination principles
- Feeder and bus protection
- Protection of medium voltage motors
- Transformer protection
- Generator protection
- Relay settings and co-ordination curves

Registration form on the Training Course:
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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
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Personal E-Mail: .....
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Company Information

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Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....
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Payment Method

☐ Please find enclosed a cheque made payable to Global Horizon

☐ Please invoice me

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Easy Ways To Register

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.