Advanced System Grounding & Preventive Grounding

TE103

Course Overview:

Advanced System grounding has been used since electrical power systems began. However, many utilities and industrial plants have used system grounding methods differently. The problem of whether a system neutral should be earthed and how is should be earthed, has many times been misunderstood completely. Therefore grounding of many systems has been based upon past experience rather than engineering analysis.
This course provides applicable information for grounding, such as definitions, reasons for having a system grounding, equipment grounding, the most desirable grounding method, and so on, and how to measure grounding resistance in order to maintain the grounding system.

Course Objective:

-System, equipment, static, lightning protection and sensitive electronics grounding
-Components, methods, connection and electrode choices, location, applications, and issues for a variety of installations
-Fall of potential ground resistance techniques
-Soil resistivity measurement techniques
-Perform testing
-Interpretation of all test results

Course Outline:

-System Grounding
-Ground Connections
-Location Of System Grounds
-Generator Grounding
-Equipment Grounding
-Objectives Of Equipment Grounding
-Ground Conductor Spacing
-Application Of Equipment Grounding
-Static And Lightning Protection Grounding
-Static Electricity
-Grounding For Lightning Protection
-Connection To Earth
-Resistance Of The Earth Connection
-Grounding Electrodes
-Earth Resistance Measurements
-Corrosion
-Sensitive Electronic Grounding

Who Should Attend:

Designed for technicians, engineers and supervisors that is responsible for the design, installation and maintenance of an electrical grounding system.

Training Language:

EN / AR

Training Methodology:

-Presentation & Slides
-Audio Visual Aids
-Interactive Discussion
-Participatory Exercise
-Action Learning
-Class Activities
-Case Studies
-Workshops
-Simulation