

Industrial Switchgear Maintenance (US-EMISGM1A)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

5 Days
3.3 CEUs

Target Group

- Operator
- Maintenance

Short Description

Personnel responsible for the daily operation and maintenance of Medium and Low Voltage Switchgear and Motor Control.

The Industrial Switchgear and Motor Control course provides the basic skills required to safely operate and maintain Medium Voltage switchgear, Low Voltage Switchgear, Medium Voltage Control and Low Voltage Motor Control Centers. Classroom instruction, video tapes, and demonstrations on typical equipment are employed. Sample circuit breakers are used for trouble shooting and replacement of typical parts.

Objectives

- Perform proper safety procedures
- Identify MV & LV switchgear and its ratings
- Identify MV & LV motor control and its ratings
- Identify Insulated case circuit breaker ratings
- Identify Molded case circuit breaker ratings
- Proper and safe racking procedure
- Perform Rack out - Lock out - Tag out procedure
- Verify operation of protective interlocks
- Perform Mechanical and Electrical operation
- Locate and replace close and trip coils and motor
- Interpret Siemens schematics and wiring diagrams
- Proper lubrication of truck and cubicle
- Test insulation and vacuum integrity
- Measure contact resistance

Content

- Safety procedures around Electrical Equipment
- Introduction to Switchgear Ratings
- Handling, storage and assembly
- Circuit breaker and Motor control ratings
- Cable and control wiring connections
- PT and CPT units

- Current Transformer safety
- Circuit breaker racking procedures
- Rack out, Lock out, tag out procedures
- Explanation of Vacuum Interruption
- Disassembly for maintenance
- Replacing Trip coil, closing coil, and charging motor
- Lubrication
- Insulation testing (Megger)
- Dielectric testing (High Potential)
- Vacuum integrity testing
- Contact resistance test (Ductor)
- Setting the Static Trip
- Testing the Static Trip with PTS-4 test set
- Trip unit interchangeability
- Setting the digital meter
- Interpreting electrical drawings
- Modern protective devices

Language

English

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