

# BASICS OF ELECTRICAL EQUIPMENT

## ELC001

### COURSE DESCRIPTION

This course covers electrical equipment technology, schematic drawing and wiring methods. It will provide the participants with a basic understanding of the theory and technology of an electrical nature. The participant will develop a working schematic and wire a functional control panel as part of the training. The course provides training knowledge of theory, technology, and troubleshooting techniques.

### COURSE GOAL

To enhance the participants' knowledge, skills, and ability necessary to understand the fundamentals of electrical equipment.

### COURSE OBJECTIVES

By the end of this course, participant will be able to:

- Identify the hazards associated with electrical circuits.
- Understand AC and DC circuit theory and analysis.
- Properly apply electrical protection devices.
- Understand electrical symbols and schematic design.
- Understand and practically apply wiring methods.
- Practical and efficient troubleshooting methods.

### WHO SHOULD ATTEND

- Machine operators.

### COURSE DURATION

5 Working Days

### COURSE OUTLINES

- Electrical safety.
- Basic DC circuits.
- Basic AC circuits.
- Push button and limit switch technology.
- Photocell and proximity switch technology.
- Relay and contactor technology.

- Fuse technology and other circuit protection devices.
- Single phase transformer technology.
- Conductors and insulators.
- Wiring methods.
- Electrical symbols and drawings.
- Basic motor operation.
- Control circuit wiring.
- Troubleshooting techniques and application.

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