LP Management Services, Inc.
Specializing in Safety, Health and Risk Management Consultation

Motor and Motor Control Operation & Troubleshooting

Automated motor control systems play a big role in the production and efficiency of industrial operation. Their correct installation, operation and maintenance can save thousands of dollars. However, a motor control system adjusted or functioning incorrectly can cost just as much. Faulty motor control equipment can even cause damage to systems and equipment not directly connected to the motor circuit. The purpose of this course is to provide a comprehensive overview of motor control systems including in-depth troubleshooting techniques utilizing controller simulator software. The instructor will utilize lectures, visual aids, case history examinations, and student hands-on performance to provide the greatest possible exposure to medium voltage motor control. Anyone who works on or near power generation, transmission, or distribution systems should attend this course. Additionally, supervisors, managers, safety personnel, and those responsible for ensuring a safe work environment should attend this course.

Duration: 8 Hour Program

INTRODUCTION
Purpose
Presentation Methods
Course Goals

BACKGROUND
History of Electrical Blueprints
Computer Aided Drawing and Design
Maps
Purpose of Electrical Diagrams
Blueprint Page Layout

SYMBOLS AND TERMS
Switches
Symbols
Abbreviations
Device Numbers

TYPES OF DIAGRAMS
Views
Physical Diagram
Schematics
Construction Wiring Diagram
Site Plans (Plan View)
Block Diagrams
One-Line Diagrams
Three-Line Diagrams
Interconnect Wiring Diagrams
PLC Diagrams (Ladder Logic)
Diagram Scales

CONTROL CIRCUITS
Basic Controls
Simple Start / Stop Circuit
Dual Control Circuit
Time Delayed Operation
Complete Control Circuits