



ELECTRICAL CONTROLS

Condensed Course Outline

DIAGRAMS & CONTROL LOGIC

- ☐ Electrical control panels
- ☐ Power distribution
- ☐ Breakers & fuses
- ☐ Power supplies & transformers
- ☐ Relays & contactors
- ☐ Motor drives
- ☐ Terminal blocks
- ☐ Control circuit wiring
- ☐ Panel labeling
- ☐ Ladder logic
- ☐ Control circuits

CONTROL DEVICES

- ☐ Pushbuttons & operators
- ☐ Selector switches
- ☐ Limit switches
- ☐ Pressure switches
- ☐ Temperature switches
- ☐ Flow & level switches
- ☐ Specialty switches

RELAYS & SAFETY

- ☐ Electromechanical relays
- ☐ Solid-state relays
- ☐ Relay ratings
- ☐ Safety relays
- ☐ Machine interlocks
- ☐ Guarding circuits

DRIVES (VFDs)

- ☐ Wiring connections
- ☐ Sinking & sourcing
- ☐ Parameter programming
- ☐ Digital I/O
- ☐ Drive safety
- ☐ Troubleshooting

SENSORS

- ☐ Photoelectric sensors
- ☐ Proximity sensors
- ☐ Scanning modes
- ☐ NPN / PNP circuits
- ☐ Sensor selection

TIMERS & CONTROL CIRCUITS

- ☐ On-delay & off-delay
- ☐ One-shot timers
- ☐ Start/stop circuits
- ☐ Jog circuits
- ☐ Forward & reverse
- ☐ Pilot lights

TROUBLESHOOTING

- ☐ Diagnosing faults
- ☐ Testing relays & contactors
- ☐ Motor starters
- ☐ Solenoids
- ☐ Sensors & switches
- ☐ Solid-state devices



Multi-Skill Training
SERVICES

THE INDUSTRIAL TRAINING PROFESSIONALS