

Electrical Panel Builder / Machine Electrician

Department: Manufacturing / Electrical

Reports To: Assembly Manager

Employment Type: Full-Time

Position Summary

We are seeking a skilled **Electrical Panel Builder / Machine Electrician** to build, wire, test, and troubleshoot electrical control systems for food processing machinery manufactured at our facility. This position is responsible for electrical panel assembly, machine wiring, electrical testing, and troubleshooting equipment during machine build, startup, and final testing.

The ideal candidate has experience working from electrical schematics, building industrial control panels, wiring automated machinery, and diagnosing electrical problems. Experience with food processing, packaging, or other OEM machinery is preferred.

Key Responsibilities

- Build and wire industrial electrical control panels according to electrical schematics, drawings, and bills of material.
- Mount and wire components including circuit breakers, power supplies, contactors, relays, terminal blocks, transformers, VFDs, servo drives, PLC hardware, safety devices, and other control components.
- Perform point-to-point wiring of control panels and machine-mounted electrical components.
- Wire motors, sensors, solenoid valves, switches, encoders, photo eyes, safety devices, operator stations, and other machine components.
- Route and terminate machine cables, conduit, wireway, and cord grips in a clean and professional manner.
- Read and interpret electrical schematics, panel layouts, wiring diagrams, and machine drawings.
- Verify wiring against electrical drawings and correct discrepancies as needed.
- Power up machines and perform electrical checks prior to machine testing.
- Troubleshoot electrical problems during machine assembly, startup, testing, and commissioning.

- Diagnose issues involving motors, VFDs, sensors, relays, contactors, safety circuits, PLC I/O, and other industrial control components.
- Use multimeters and other electrical test equipment to diagnose wiring and component problems.
- Work with mechanical assemblers, controls engineers, programmers, and other team members during machine startup and troubleshooting.
- Identify electrical drawing errors or design issues and communicate necessary corrections to engineering.
- Make electrical modifications and repairs to machines as required during testing.
- Maintain high standards for panel workmanship, wire labeling, routing, termination, and overall machine appearance.
- Follow applicable electrical codes, company standards, and safe work practices.
- Support final machine testing and preparation of equipment for shipment.

Qualifications

- High school diploma, GED, or equivalent required; technical or electrical training preferred.
- Previous experience building industrial electrical control panels or wiring automated machinery is strongly preferred.
- Ability to read and understand industrial electrical schematics and wiring diagrams.
- Working knowledge of 24VDC control circuits and industrial AC power circuits.
- Familiarity with PLC-controlled machinery, VFDs, motors, sensors, relays, contactors, and industrial safety circuits.
- Ability to use a multimeter and troubleshoot electrical circuits systematically.
- Strong mechanical aptitude and attention to detail.
- Ability to work independently from drawings as well as collaboratively with engineering and production teams.
- Experience with food processing, packaging, material handling, or other custom OEM machinery is a plus.
- Knowledge of UL 508A, NFPA 79, and industrial electrical standards is a plus.

- PLC programming experience is helpful but not required unless specified for the position.

Physical Requirements

- Ability to stand, bend, kneel, climb, and work around industrial machinery for extended periods.
- Ability to safely use hand tools, power tools, and electrical test equipment.
- Ability to lift and carry components, tools, and materials associated with machine assembly.
- Ability to work inside electrical enclosures and in confined areas of machinery when necessary.

Preferred Experience

- Industrial control panel building
- Automated machine wiring
- Food processing or packaging equipment
- OEM/custom machinery manufacturing
- Machine startup and troubleshooting
- PLC and industrial control systems
- VFD and motor controls
- Industrial safety circuits

What Success Looks Like

A successful Electrical Panel Builder / Machine Electrician produces **clean, accurate, and reliable electrical work**, can take a machine from panel build through final electrical checkout, and can systematically troubleshoot problems during startup. This individual takes ownership of workmanship, identifies issues before equipment leaves the facility, and works effectively with mechanical and controls teams to deliver dependable machinery to customers.