

Panel Technician Job Description

- Assemble control panels by installing PLCs, terminals, relays, timers, breakers, wiring, and mounts according to specifications
- Connect functional wiring and circuitry between controls, sensors, equipment, and power sources
- Program PLCs and HMIs using ladder logic and other languages to meet sequence of operation needs
- Configure communication between controllers, I/O modules, networks, and SCADA as required
- Test panel functionality by simulating operation and tuning components as needed
- Troubleshoot faults in sensors, wiring, connections or controllers following diagnostics protocols
- Repair or replace defective components according to safety procedures
- Document configurations, calibration values, faults and corrective actions thoroughly
- Install control panels on-site using hand and power tools, sealing environmental enclosures
- Connect field wiring and devices to panels according to schematics
- Commission panels and automation systems by validating programmed functions
- Perform preventive maintenance and minor repairs on-site to maximize uptime
- Monitor automated operation and fine-tune system performance as needed
- Upgrade legacy systems by retrofitting PLCs, HMIs, networks to integrate new functions
- Comply with all safety regulations including lock out/tag out procedures
- Maintain accurate as-built records, manuals and technical documentation
- Coordinate with engineers regarding control strategy implementation

- Train production personnel to navigate HMIs and emerging interfaces
- Provide automation project support including budget estimates
- Identify obsolete components and recommend new products and solutions
- Ensure work complies with NEC, NFPA, UL, CE and other codes
- Obtain pertinent certifications to handle refrigerants, hazardous locations, etc.
- Foster partnerships with vendors to optimize spare parts inventory
- Continuously expand PLC programming knowledge and analytical skills
- Advise management on emerging automation technologies or process improvements.