

Position Details

Company: Integrated Circuit Solutions (ICS)

Location: Houston area, Texas

Job Type: Full-time

Work Setting: On-site

Medium-Voltage QA/QC Technician

About the Role

Integrated Circuit Solutions (ICS) is seeking a Medium Voltage QA/QC Technician to inspect and verify medium-voltage electrical equipment and assemblies to help ensure completed builds meet engineering drawings, bills of materials, quality expectations, and applicable requirements. The ideal candidate has a solid understanding of electrical systems from 24 VDC through 38 kV, with hands-on knowledge of medium-voltage switchgear, switches, vacuum circuit breakers, control circuits, protection relays, and electrical and mechanical interlocks.

This role works closely with engineering and manufacturing teams to identify discrepancies, verify workmanship and equipment configuration, document inspection results, and support quality resolution before equipment is released.

Key Responsibilities

- Inspect completed electrical equipment and assemblies against engineering drawings, bills of materials (BOMs), and applicable build requirements.
- Verify equipment configuration, components, wiring, clearances, bus arrangements, and assembly details against approved documentation.
- Apply a fundamental understanding of electrical systems ranging from 24 VDC through 38 kV.
- Review medium-voltage metal-clad and metal-enclosed switchgear, medium-voltage switches, and vacuum circuit breakers (VCBs).
- Inspect and verify 24 VDC and 120 VAC control circuits, including 4–20 mA loops where applicable.
- Check bus calculations and clearances, medium-voltage grounding and bonding requirements, and mechanical and electrical interlocks.
- Verify protection relay installation and associated wiring or connections against drawings and project requirements.
- Identify, document, and communicate nonconformances, drawing discrepancies, missing components, and workmanship concerns.
- Coordinate with engineering, manufacturing, and other team members to resolve inspection findings and verify corrective actions.
- Maintain clear and accurate inspection records and communicate quality concerns before equipment release.

Required Qualifications

- Fundamental understanding of electrical systems ranging from 24 VDC through 38 kV.
- Understanding of electrical theory and medium-voltage electrical equipment.
- In-depth understanding of metal-clad and metal-enclosed switchgear.
- Knowledge of medium-voltage switches and vacuum circuit breakers (VCBs).
- Understanding of 24 VDC and 120 VAC control circuits.
- Knowledge of bus calculations and required electrical clearances.
- Understanding of medium-voltage grounding and bonding requirements.

- Knowledge of protection relays.
- Ability to inspect completed builds against engineering drawings and bills of materials (BOMs).
- Understanding of mechanical and electrical interlocks.
- Strong attention to detail, documentation, communication, and problem-solving skills.

Preferred Testing Abilities

- Megger testing on equipment up to 15 kV.
- Hi-pot testing.
- DLRO (digital low-resistance ohmmeter) testing.
- Primary and secondary injection testing.
- Transformer turns-ratio (TTR) testing.

What Success Looks Like

Success in this role means identifying quality issues before equipment release, confirming builds match approved drawings and bills of materials, supporting resolution of discrepancies, and helping deliver safe, reliable, compliant medium-voltage electrical equipment.