

Electrical Engineer

Responsible for the electrical design, wire, test, debug and installation of technologically complex electro-mechanical industrial x-ray inspection systems.

Job Description:

- Work closely with the Mechanical, X-Ray and System Engineering teams responsible for the design of electro-mechanical and/or material handling systems.
- Wire electrical panels according to drawings and schematics
- Install, wire and configure electrical, imaging and x-ray components into new and existing inspection systems.
- Create, modify and finalize detailed electrical designs, schematics and drawings using AutoCad electrical
- Review engineering drawings and designs to ensure adherence to established specifications, internal guidelines, quality standards and national codes and standards.
- Generate, revise, and finalize BOMs
- Interact with a cross-disciplinary engineering team (mechanical, electrical, software, imaging) to generate and edit system electrical design documents
- Work with Production, Design & Installation teams to revise drawings and generate final as built package
- Provide support to Technical Writing and Project management Teams in the creation of technical documentation, system manuals, and customer facing documentation
- Test, troubleshoot and debug electrical, components and systems in-house and at customer locations
- Interact with a cross-disciplinary engineering team (mechanical, electrical, software, imaging) on system designs and to help resolve customer problems and provide world class customer service
- Ensure all work is completed in compliance with all applicable local, state, federal Electrical standards.
- Potential travel to customer sites or other company locations worldwide (approximately 30%)

Essential Skills:

- Bachelor's Degree in Electrical Engineering
- Three (3) to five (5) years of relevant electrical electro-mechanical system design experience.
- Basic to proficient level of expertise in AutoCAD Electric
- Experience working with and generating BOMs within an MRP or ERP system.
- In depth knowledge of electrical circuitry with established electrical safety work protocols and practices and ability to read electrical diagrams.
- Prior experience working with test equipment such as multimeters and oscilloscopes.
- Knowledge in control programming environments such as RSLogix, VB or other scripting languages
- Experience with the Integration of DC Drives, VFD's, Servo Drives, PLC's and PC based control systems
- Knowledge of CANbus, Controller Area Network (CAN) for real-time control system applications.

- Familiarity with motor drives (Copley), PLC (Allen Bradley, Siemens) and PC based control system.
- Knowledge of Pneumatic Actuator Control and Relay Logic.
- Knowledge of Machine Guarding Systems and Power Distribution
- Knowledge of CE, UL, or other applicable regulatory guidelines or standards
- Experience with Microsoft Office Suite of Tools.
- Must be a US Citizen or US Permanent resident who is legally authorized to work in the US and able to successfully pass a background check and pre-employment drug test.
- Proficiency in the English language with established written and verbal communication skills
- Ability to work in a fast-paced dynamic environment, capable of prioritization, multi-tasking, and effective organization.
- Excellent interpersonal skills
- Will need to successfully pass a drug test and present a clean and valid driver's license

Non-Essential Skills:

- Previous experience wiring and installing electrical panels and wiring and integrating electro-mechanical components into a system.
- Robotics programming is a big plus (will send to training course if required).
- Previous experience troubleshooting electrical circuits down to the component level.
- Established understanding and experience working with high voltage power levels (>1KW)
- Familiarity working with x-ray components.
- Prior soldering experience
- Basic understanding of an MRP or ERP system

Physical & Mental Demands:

- Regularly required to sit, walk, bend and stand.
- Domestic and International travel via air, rail and car.
- Will be required to lift, move, erect, install and assemble components of varying weight, height, length and width dimensions.
- Expected to effectively communicate in person, on phone, and via email and other electronic devices on a continual and repetitive basis.
- Will need to repeatedly use hands to finger, handle, feel and operate hand tools, power tools and standard office equipment.
- Will need manual dexterity to be able to complete required system and component cabling and wiring
- Day to day responsibilities will require lifting, moving, staging and placing of materials up to 50 pounds alone and heavier with assistance.
- Specific vision abilities required include close vision, distance vision and the Must be able to fulfill essential job function in a consistent state of alertness and safe manner

This job description is not all inclusive and is subject to change at any time.