



Industrial Controls Engineer

Department:	Electrical
Reports To:	Director of Electrical Engineering
Supervises:	Project Contractors
FLSA Classification:	Non-exempt
Revision Date:	

JOB PURPOSE or JOB SUMMARY:

Design, build, and maintain product electrical controls equipment, troubleshoot control systems, design and integrate control panels, electrical wiring for projects, aid in Q/C and acceptance testing electrical considerations.

ESSENTIAL DUTIES and RESPONSIBILITIES:

- Read, interpret, generate, and maintain electrical schematic drawings, diagrams, blueprints, specifications, work orders, Bills of Materials, P&ID's and various reports in order to determine materials requirements and assembly instructions.
- Oversee assembly, integration, and skid wiring of electrical or electronic systems and control systems.
- Programming, integration, and troubleshooting of PLC's, HMI's, motor drives, and other attached system equipment.
- Measure and adjust electrical control signals to specified values and determine operational accuracy of instruments.
- Specify, order and maintain parts, wiring, and tooling as needed to maintain workflow.
- Assist other disciplines during all phases of the project (mechanical, fabrication, engineering, etc.)
- Adjust, repair, or replace electrical or electronic component parts to correct defects and to ensure conformance to specifications.
- Help manage electrical contractors for projects.
- Administrate and maintain labeling requirements for projects.
- Mark and tag components for quality tracking processes.
- Perform quality testing and inspection, using magnifying devices, measuring instruments, and electronic test equipment, to ensure parts and assemblies meet production specifications and standards.
- Knowledge of high voltage wiring and 3 phase practices.

- Help to design and maintain various guiding procedures for electrical efficiency and accuracy.

An individual in this position must be able to successfully perform the essential duties and responsibilities listed above. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position.

The above list reflects the general details necessary to describe the principle and essential functions of the position and shall not be construed as the only duties that may be assigned for the position.

COMPETENCIES:

- Safety educated and oriented.
- Strong electrical power and industrial controls system knowledge.
- Knowledge and experience designing and building to UL, NEC, CE and CSA requirements.
- Strong mechanical knowledge, skills, and experience.
- High mechanical and electrical aptitude.
- Good written and verbal communication skills with ability to communicate at all levels and with varied communication styles.
- Ability to approach team and projects with a sense of humor.
- Works well with others.
- Resourceful.
- Inventive.
- Able to stay abreast of multiple projects simultaneously.
- Experience working with electrical schematics and P&ID drawings.
- Ability to design and troubleshoot control systems.
- Knowledge of use of repair tools, testing machinery, and equipment.
- Self-motivated.
- Familiarity with OSHA safety requirements.
- AutoCAD Electrical experience.
- PLC programming experience.
- Attention to detail.
- Ability to follow through project from initial specification to completion.
- Strong knowledge of NEC, UL, CSA, and CE standards and requirements.
- Command of Microsoft Word, Excel, and cloud familiarity.
- Ability to plan and document various project activities.

PREFERRED QUALIFICATIONS:

Education: Electrical Engineering Degree and Journeyman level electrician experience. Alternate combinations of education and experience will be considered. Willing to consider new graduates with past controls experience.

Technology/Equipment: Electrical test equipment, Microsoft Office, Epicor ERP, basic hand and power tools.

PHYSICAL AND MENTAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Wear required safety equipment when on shop floor. While performing the duties of this job, the employee is regularly required to talk or hear. The employee frequently is required to stand. The employee is occasionally required to walk; sit; and use hands to finger, handle, or touch objects, tools, or controls. Specific vision abilities required by this job include close vision. Must have the ability to lift 50lbs and work on ladder as required. Must have the ability to handle frequent deadline rushes.

WORKING ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is occasionally exposed to fumes or airborne particles. The noise level in the work environment is usually moderate to loud. *Many of the functions are performed in the warehouse assembly area.*

The work environment characteristics described here are representative of those an individual encounters while performing the essential functions of this position.

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or status as a protected veteran.

I have read and understand the duties, responsibilities and requirements for this position.*

Employee Acknowledgement

Date

*This document does not create an employment contract, implied or otherwise, other than an "at-will" employment relationship. [Organization's Name] retains the discretion to add duties or change the duties of this position at any time.