

RobotWorx

a SCOTT company

Electrical Controls Engineer

Job Description

Exempt: No

Department: Production

Reports To: Production Project Manager

Location: Marion, Ohio

GENERAL DESCRIPTION OF POSITION

This position is responsible for increasing the support of customers by providing the electrical components of robotic system integration, programming, run off, installation and start up both at RobotWorx and at the customer's site. Also expected to build/maintain the customer relationship and RobotWorx reputation as a quality and trusted automation solutions provider.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Integration, Repairs, and Product Improvement
 - a. Coordinate with sales, project, and engineering teams to build and integrate robotic systems by manufacturers including that of Fanuc, Motoman, ABB, Universal Robots, and KUKA.
 - b. Hands-on integration, modifying and repair of robot and equipment to meet required customer specifications.
 - c. Assist the project team in developing necessary project processing parameters
 - d. Perform engineering and manufacturing functions for retrofit projects including, but not limited to, customer contact, hardware design, software design, scheduling, materials coordination, build, and implementation
 - e. Develop PLC programs both in-house and in the field.
 - f. Design, diagnose, modify, and repair electrical control systems
 - g. Panel building and development of wiring and schematics based on Scope of Work
 - h. Troubleshoot and editing of existing PLC Programming and Ladder Logic
 - i. Utilize skills with Allen-Bradley PLC's as well as fluency in RSLinx and RSLogic
 - j. Maintain electrical and safety standards to current industry best practices and all applicable safety codes.
 - k. Takes primary responsibility for safety audit and compliance.
 - l. Safely and professionally operate common power and hand tools and general workshop equipment
 - m. Plan, schedule and deliver completed work to meet agreed deadlines, working as a team or as an individual
 - n. Hands-on assistance with R&D and product improvement activities.
2. Onsite Equipment Installation, Client Training and Customer Support
 - a. Assisting the customer's needs by installing the robot and equipment into place, training their staff to operate the equipment and provide support to the customer, either on-site or remotely by phone, video conference, and/ or remote access communications from off site.
 - b. Being professional, helpful, commercially aware and safety conscious as a representative of the company at all times
 - c. Being available outside normal hours of work to assist with customer support when necessary.
3. Local 6S practices, Inventory upkeep, and site sustainability
 - a. When the Tech is Local and not working on a Deliverable, they will be expected to ensure our worksite meets 5S standards and assisting in the management of Inventory, Spare Parts, and Test Equipment.
4. Reporting and Documentation
 - a. Keeping accurate and up to date records on all aspect of work done, using existing documents and processes
 - b. Performing Quality Control inspections to ensure project is complete
 - c. Perform system run-offs to the satisfaction of the customer while meeting contractual agreements
 - d. Preparing service reports as necessary.
 - e. Prepare expense reports as necessary.
5. General
 - a. To keep up to date on Scott Technology Ltd practices and policies with the company publishing notice of applicable changes and amendments as required.
 - b. To comply with local health and safety compliance procedures to meet both legislative and standards as communicated by the company and consistent with the companies Health & Safety Management system.
 - c. Where appropriate, to manage company compliance as required by legislation or best practice.

- d. To ensure their own personal career development and that of the team is encouraged with attendance at appropriate educational courses and training organizations. In particular, will achieve and maintain appropriate expertise in people relationships, employee motivation and effective management.
- e. Will be involved and support the Group's Continuous Improvement Program to ensure we deliver high quality products and services in less time. Involvement will typically be within improvement project teams or kaizen events as a team participant or team leader.

Perform any other related duties as required or assigned.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty mentioned satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

1. Must be fully trained on use of the robot and controller, including all software options and hardware.
2. Minimum (4) years programming experience with two or more of the following: Fanuc, ABB, Motoman, KUKA, or Universal Robots
3. Minimum (3-5) years' experience developing, troubleshooting and editing of new or existing PLC Programming and Ladder Logic
4. Must have the ability to implement advanced robotic functions (line, vision, safety, welding, etc.) independently
5. The ability to design, diagnose, modify, and repair electrical control systems
6. Skills with Allen-Bradley PLC's required as well as fluency in RSLinx and RSLogic
7. CAD experience (SolidWorks, AutoCAD, etc.); the ability to proficiently create and read schematics or drawings; ability to specify appropriate equipment for a project and verify compatibility of all components
8. Electrically qualified to understand, troubleshoot, and service 480V 3 phase electrical equipment
9. The ability to complete integration and programming of a highly complex robotic system
10. Excellent problem solving skills
11. Self-motivated, confident, able to conduct training in small groups. Proficient and professional verbal and written communication, including group training
12. Commercially aware of costs and sales opportunities
13. Must be at least 18 years of age.
14. Ability to pass physical, drug screen and reference check.
15. Good mechanical and technical comprehension, interpersonal and organizational skills.
16. Ability to work well under pressure.
17. Must be able to pay attention to detail, follow detailed processes and reporting requirements.
18. Must have the ability to multi-task.

EDUCATION AND EXPERIENCE

Bachelor's Degree in engineering or related schooling/on-the-job education in a specific skill area; technical degree or higher may be acceptable with demonstrated extensive hands-on equivalent experience, plus 4 years related experience and/or training. Or equivalent combination of education and experience.

RESPONSIBILITY FOR FUNDS, PROPERTY and EQUIPMENT

None.

SUPERVISORY RESPONSIBILITIES

None.

COMMUNICATION SKILLS

Ability to read, analyze, and understand general business/company related articles and professional journals; Ability to speak effectively before groups of customers or employees.

MATHEMATICAL SKILLS

Ability to calculate figures and amounts such as discounts, interest, commissions, proportions, percentages, area, circumference, and volume. Ability to apply concepts such as fractions, ratios, and proportions to practical situations.

CRITICAL THINKING SKILLS

Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables. Ability to apply principles of logical or scientific thinking to a wide range of intellectual and practical problems.

SUPERVISION RECEIVED

Under direction where a definite objective is set up and the employee plans and arranges own work, referring only unusual cases to supervisor.

PLANNING

Considerable responsibility with regard to general assignments in planning time, method, manner, and/or sequence of performance of own work, in addition, the work operations of a group of employees, all performing basically the same type of work.

DECISION MAKING

Performs work operations which permit frequent opportunity for decision-making of major importance which would have considerable effect on the final attainment of multiple major activities and the organization's projects of a large organization component and organization's clientele.

MENTAL DEMAND

Very close mental demand. Operations requiring very close and continuous attention for control of operations which require a high degree of coordination or immediate response. Operations requiring intermittent direct thinking to determine or select the most applicable way of handling situations regarding the organization's administration and operations; also to determine or select material and equipment where highly variable sequences are involved.

ANALYTICAL ABILITY / PROBLEM SOLVING

Moderately repetitive. Activities with slight variation using a definite set of processes or directions with some degree of supervision. Choice of learned things in situations which conform to clearly established patterns and modes.

USE OF MACHINES, EQUIPMENT AND/OR COMPUTERS

Regular use of highly complex machines and equipment; specialized or advanced software programs (desktop/laptop computer and software, production machines and equipment, etc.)

ACCURACY

Probable errors would not likely be detected until they reached another department, office or patron, and would then require considerable time and effort to correct the situation. Frequently, possibility of error that would affect the organization's prestige and relationship with the public to a limited extent, but where succeeding operations or supervision would normally preclude the possibility of a serious situation arising as a result of the error or decision. May also cause inaccuracies or incomplete information that would be used in other segments of the organization as a basis for making subsequent decision, plans, or actions.

PUBLIC CONTACT

Regular contacts with patrons, either within the office or in the field. May also involve occasional self-initiated contacts to patrons. Lack of tact and judgment may result in a limited type of problem for the organization.

EMPLOYEE CONTACT

Contacts with other departments or offices and also frequently with individuals in middle level positions; consulting on problems which necessitate judgment and tact in presentation to obtain cooperation or approval of action to be taken. Also, important contacts with associates as required in advanced supervisory jobs.

REQUIRED CERTIFICATES, LICENSES, REGISTRATIONS

Valid Driver's License Required

PREFERRED CERTIFICATES, LICENSES, REGISTRATIONS

Not indicated.

SOFTWARE SKILLS REQUIRED

Advanced: PLC (fluency in RSLinx and RSLogic)

Basic: Alphanumeric Data Entry, Database, Presentation/PowerPoint, Programming Languages, Spreadsheet, Word Processing/Typing

ADDITIONAL SOFTWARE SKILLS

Proficient with Microsoft Office products, Sales Force, Remote and other software applications.
CAD experience (SolidWorks, AutoCAD, etc.)

PHYSICAL ACTIVITIES

The following physical activities 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 and expectations.

While performing the functions of this job, the employee is *regularly* required to stand, sit, use hands to finger, handle, or feel, reach with hands and arms, stoop, kneel, crouch, or crawl, talk or hear; and *frequently* required to walk; *occasionally* required to climb or balance, taste or smell.

The employee must occasionally lift and/or move up to 50 pounds, occasionally lift and/or move up to 100 pounds with assistance, occasionally lift and/or move more than 100 pounds with assistance, frequently lift and/or move up to 25 pounds, regularly lift and/or move up to 10 pounds. Specific vision abilities required by this job include ability to adjust focus.

ENVIRONMENTAL CONDITIONS

The following work environment characteristics described here are representative of those an employee encounters while performing essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the functions of this job, the employee is *regularly* exposed to work near moving mechanical parts, risk of electrical shock; *occasionally* exposed to work in high, precarious places, fumes or airborne particles, outdoor weather conditions.

The noise level in the work environment is usually loud.

ADDITIONAL INFORMATION

Percentage of time required for travel in this position: <15-20%

COMPANY VALUES/EXPECTED BEHAVIOURS

- **Customer Focus**
 - ✓ Building trust and confidence with our internal and external customers in the way we listen, engage and respond to their needs.
 - ✓ Add value and understand our customers' perspectives and expectations.
 - ✓ Innovate, be creative and think lean and efficient.
- **Teams who Trust**
 - ✓ Do what you say you will, respect, support others and always give your best
 - ✓ All actions and communications support one Team, one Company
 - ✓ Empower, share information and be accountable
- **Attitude and Integrity**
 - ✓ Be accountable for your actions, be positive, flexible and open minded
 - ✓ Take care of the company and our customers like they were one's own
 - ✓ Act with honour in everything you do
- **Results Matter**
 - ✓ Persist, have strength and act with urgency
 - ✓ Continually evaluate and measure progress and take action
 - ✓ Take part and share the celebration of change and success