

JOB DESCRIPTION

POSITION: Electrical Engineer Drive TS Group (5+)

AUTHORIZED BY: M. Patel

DATE: 4/21/17

PRIMARY FUNCTION:

Avtron Aerospace is looking for a controls/systems engineer to architect and design PLC/PC based equipment for the worldwide Aerospace industry. The candidate must possess a system level design perspective, with the ability to integrate a variety of sub-systems such as data acquisition, motor control, fluid temperature control, safety, and other related systems. Candidates must have experience architecting and designing PLC and PC based systems, with a strong background in PLC programming. Candidates should have a strong understanding of drive controllers, especially configuration and tuning, for AC and DC motors in a range from 50HP to 1500HP.

Responsibilities:

- Use creative skills to architect world class solutions based on sound engineering practices and industry standards, and interpret or influence customer specifications.
- Lead technical efforts to design and develop the best cost/performance product that meets or exceeds customer requirements.
- Analyze and devise alternative solutions to a problem and propose the best resolution.
- Support significant design decisions by calculations, simulation, and prototyping. Critical specifications must have documented analysis demonstrating design compliance.
- Lead effective technical design reviews and contribute to improving design knowledge by thoughtful contributions at other's design reviews.
- Work with Drafting to create detail design package consisting of schematics, bills of materials, and assembly drawings.
- Work within the guidelines of the Avtron Aerospace design guidelines and Product Development Process.

- Investigate and implement new techniques to improve capabilities in regard to design for assembly (DFA), manufacturability (DFM), and test (DFT). Share successful advances within Avtron.
- Ensure equipment Acceptance Test Procedures (ATP) are prepared, and participate in the testing and troubleshooting phase as necessary.
- Create, or assist in the creation of, technical documentation (User Manuals) that effectively convey the required information to the end user.
- The job holder will debug electrical systems and support startup.
- Designing electrical system for testing aerospace/industrial components .
- Supporting test systems, including troubleshooting via phone/email.
- Integrating software, electrical hardware, and mechanical interface.

Education/Experience:

- College degree in electrical or related engineering field or equivalent practical experience.
- Five or more years of experience including design and development of industrial equipment.
- Electrical hardware Controls design experience (safety, power distribution, 24vdc control circuits, cable design, etc.).
- Experience in field buses including DeviceNet, Ethernet IP, and others.
- Experience in the operation of electrical and electromechanical components.
- PLC experience is a requirement.
- Experience in writing software code a plus, but not required.
- Experience in drive controllers.
- Hardware experience should include Data Acquisition Systems design and integration, as well as, familiarity with Drive Systems, AC Motors, DC Motors, PLCs, Servo Controls, and Instrumentation.
- Proficient in Microsoft Office, Outlook, Word, Excel and PowerPoint.

Other:

- In depth Knowledge of NEC, NFPA, ANSI/RIA, UL, CSA and similar standards.
- Ability to quickly analyze and troubleshoot complex hardware/software systems.
- Ability to integrate hardware and software into a functional and reliable test system.
- Ability to document and support a test system once it is fielded.

- Ability to interpret OEM design and test documentation to determine test requirements and strategy.
- Knowledge of AutoCAD.
- Ability to create new drawings from a customer specification.
- Ability to design power distribution circuits and panel layouts.
- Ability to create, review and approve engineering documents, drawings, procedures, bill of materials and specifications.
- Strong organization and time management skills.
- Practiced in diligently documenting all project activities accurately.
- Team player and independent self-starter and be able to work on multiple projects simultaneously.
- Excellent communication (verbal and written) and interpersonal skills with all organizational levels. Well-developed interpersonal skills.
- Must be able to multi-task and prioritize assignments quickly.
- Must be flexible and work well with others in a fast-paced team environment.
- Must be detail-oriented.
- Must be willing to travel.

The above details describe the principle duties of an employee in this position, but are not to be construed as setting forth all the specific duties inherent in this job. Any employee is expected to perform other related duties when requested by their supervisor.

An employee is expected to observe and follow at all times the stated policies and operating procedures of the Company and to observe and follow all rules and practices of safety.

EOE – Equal Opportunity Employer. People of color, women, veterans and individuals with disabilities are encouraged to apply. (Compliant with the new VEVRAA and Section 503 rules)