
JOB DESCRIPTION: Senior Controls Engineer

Summary

Participate and oversee electrical control design and commissioning to ensure compliance with project requirements and Alliant's standards. Manage assigned engineering personnel and tasks to ensure project success in meeting respective objectives (i.e. quality, schedule, budget, spec compliance, and technology).

Essential Duties and Responsibilities

- In conjunction with project engineer and/or project manager, develop project objectives by reviewing project proposals and plans.
- Determine project specifications by studying product design, customer requirements, and performance standards.
- In conjunction with project engineer and/or project manager, determine project schedule by studying project plan and specifications.
- Maintain project schedule by monitoring project progress, coordinating activities and resolving problems.
- Prepare project status reports by collecting, analyzing, and summarizing information and trends; recommending actions.
- Lead development and design of PLC based controls.
- Contribute to team effort by participating in engineering activities.
- Provide technical leadership to controls team. Ensure compliance with customer requirements specified in project documents. Ensure compliance with Alliant's Controls Department's standards in electrical control design, PLC programming and commissioning.
- Confirm product performance by designing and conducting tests.
- Ensure quality on all engineering deliverables – review and approve.
- Keep standardization high and constantly improve processes.
- Keep current with technology.
- Any other task as directed by management.

Responsibility and Authority

- Responsibility: Noted above – Be aware of project leadership, project budget and schedule, customer satisfaction, engineering process, and engineering quality.
- Authority: Engineering technical decisions within spec compliance and Alliant’s standards. Engage technical experts/services.

Qualifications

- B.S. Engineering or equivalent combination of education and experience.
- Strong analytical, verbal, and written communications skills.

Language Ability

Adequate conversational English is required in order that the individual be able to take direction from management, understand how to complete job tasks, communicate adequately with co-workers and customers, understand and follow safety guidelines, and understand the Alliant Technologies Employee Handbook and all company policies. Must be able to interpret written warnings as posted in all work areas in both the Alliant Technologies office or at any work site where Alliant Technologies performs work.

Experience

- 10 years of controls experience
- 5 or more years of experience designing controls systems, commissioning and troubleshooting PLC industrial control systems (e.g. Rockwell, Square D, and Siemens) and their industrial networks (e.g. ControlNet, DeviceNet, Modbus, Profibus, and Ethernet).
- Competency with field installation supervision, monitoring Electrical installation subcontractor and closing of jobs.



**Alliant Technologies
 Job Demands**

Position: Senior Controls Engineer

Physical & Mental Demands	Extent			
	Continuous Over 70%	Frequent	Occasional	Rarely
<i>Physical Demands</i>				
Standing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climbing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bending	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Crouching	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pushing/Pulling	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Carrying	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lifting/Lowering 1-15 lbs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15-30 lbs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
30-50 lbs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Over 50 lbs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fine Hand/Eye Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Color Discrimination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hearing Acuity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Mental Demands</i>	Continuous Over 70%	Frequent	Occasional	Rarely
Concentration on detail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attention span 1+ hours on a task	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to remember multiple tasks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oral communication	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Written communication	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Working Conditions</i>	Continuous Over 70%	Frequent	Occasional	Rarely
Exposure to toxins, cyotoxins, poisons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Exposure to extreme heat, cold, temp fluctuations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposure to hazardous chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Exposure to radiation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (Specify:)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sensory Requirements	Is Crucial	Is useful		
See	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Distinguish colors	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Hear/Listen	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Taste	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Smell	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Touch	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Speech	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Mental Effort	Work Environment
Check all functions performed on a daily basis... <input checked="" type="checkbox"/> Reading <input checked="" type="checkbox"/> Basic arithmetic <input type="checkbox"/> Advanced mathematics <input type="checkbox"/> Weighing/measuring <input checked="" type="checkbox"/> Visualizing conclusions <input type="checkbox"/> Analyzing data <input checked="" type="checkbox"/> Searching for solutions <input checked="" type="checkbox"/> Creating methodologies <input checked="" type="checkbox"/> Conducting research <input type="checkbox"/> Managing resources <input type="checkbox"/> Evaluating performance of others	% of time spent: 90 Indoors <hr/> 10 Outdoors <hr/> The air is: <input checked="" type="checkbox"/> Clean/Normal/Average <input checked="" type="checkbox"/> Dusty/Dirty <input checked="" type="checkbox"/> Wet/Humid <input type="checkbox"/> Affected by smoke, fumes, etc. You work on a surface that is: <input checked="" type="checkbox"/> Level <input type="checkbox"/> Uneven <input type="checkbox"/> Sloping <input type="checkbox"/> Slippery Noise level is: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Loud