

Job Title	Controls Engineer I	Effective Date:	01/01/2019
Department:	Engineering	Revised Date:	

JOB DESCRIPTION

Job Location:	Corporate Headquarters	Company Industry:	Engineering consulting
Job Role:	Entry Level Engineering	Travel Required:	50%
Employment Status:	Full Time	Employment Type:	Exempt, at will
Reports to:	Engineering Manager	Manages Others:	No

Position Summary:

The Controls Engineer I shall demonstrate basic skills in requirements gathering, configuration, integration and implementation of process control solutions including batch software, PLC / DCS systems, HMI packages, SCADA systems, and PC networking technology.

The ideal candidate will have basic knowledge of process automation, field instrumentation, in all the following project phases: implementation, system integration, testing and on-site startup. May be responsible for the installation and technical support of PLC or DCS based hardware and software. He/She will participate in engineering on-call rotation within the first year of employment.

The Controls Engineer I is self-motivated and dedicated with a strong sense of initiative and the ability to easily adapt to changing situations. He/she must also have strong technical and programming acumen and solid organizational, time-management and prioritization skills. It is also important for controls engineer to have excellent verbal and written communication, interpersonal and customer service skills with the ability to collaborate effectively with a wide range of people at all levels of expertise.

Responsibilities

- Daily responsibilities include solutions implementation and support of the project team objectives.
- Works with direct supervisor or Senior Controls Engineer to assist identify electrical and controls system designs solutions based on engineering principles and involvement in presentation of the solution to customer.
- Works with project management, understands project scope, schedule and budget allocated to the project. Identifies barriers and communicates to project management in a timely and effective manner.
- Assists with project documentation including, but not limited to I/O lists, and acceptance documentation.
- Actively participates with other engineering team members in field wiring on large projects.

- Understands PLC, DCS, and HMI programs.
- Understands control system networks.
- Understands and assists with control systems including device configuration, I/O checkout.
- Troubleshoot control systems (software, hardware, electrical, field device problems, and pneumatic problems); Provides technical support to external customers.
- Ensure that the projects assigned are completed on time.
- Actively participates on internal project meetings; may be required to meet with customer.
- Able to multitask on multiple projects and project elements.
- Actively participates in research and development projects as directed by supervisor.
- Will be part of engineering call rotation approximately 9 months from the beginning of employment.
- Accurately and timely completes all time recording in the organization's time management system.
- Complies with all safety training requirements of the organization and/or the customer.
- Works with project management to assure project in scope, on schedule: identifies barriers and communicates timely and effectively to project management.

Essential Skills:

- Professional demeanor, self-motivated, energetic and enthusiastic with excellent communication and intrapersonal skills.
- Knowledge of PLCs, HMI and industrial controls. Will be expected to be proficient in at least one technology platforms within first year of employment.
- Knowledge of PC operating systems, hardware, and networking.
- Basic understanding of P&ID fundamentals and functionality.
- Ability to interpret/understand and interpret electrical drawings.
- Basic knowledge of process safety
- Basic troubleshooting skills with expectation that troubleshooting skills improve over time.
- Attention to detail and superior time management skills.
- Analytical skills, ability to work under pressure, decision making & problem-solving skills.
- Strong knowledge of MS Office Applications.
- Strong written and verbal communication ability.
- Able to establish priorities and manage workload effectively.
- Self-starter who can work either independently or as part of a team.
- Ability to travel to customer sites.

Education and Qualifications

- Minimum of an associate degree in relevant engineering technology field or study with acceptable knowledge of computer programming and computer systems operation. Prior experience in electrical and controls field a definite plus. Knowledge of automation (PLC/DCS) and electrical system design, diagnosis, and operation. Must have an acceptable driving record.

- Must be able to pass background and drug testing.
- Must be a US citizen or be able to work legally in the United States without sponsorship.

Physical Requirements

Please check all that apply to this position. When appropriate, enter the percent of time the position requires that activity and/or the amount (percentages do not have to total 100%).

Activity	% of time	Activity	% of time
Standing	20%	Sitting	80%
Laying Down	0%	Crouching	10%
Crawling	0%	Twisting	0%
Kneeling	10%	Reaching	5%
Pushing Average Wgt: 25# Max Wgt: 50#	5%	Computer Use	95%
Lifting Average Wgt: 25# Max Wgt: 40#	25%		

Vision Required: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hearing Required: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Speaking Required: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Ability to detect color required: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Proficient in English: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	PPE required: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no See Hazard Assessment Form link below.
Manual dexterity Required: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	