



09/04/2020

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## POSITION DESCRIPTION

Job Title: Control Systems Engineer  
Department name: Electrical Engineering  
Manager: Manager- Electrical Engineering  
Work location: Billerica, MA

Exempt  
 Non-exempt

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### **Job summary**

Manages and performs PLC control systems engineering work of major complexity that requires a high degree of technical and project management competence.

### **Essential duties and responsibilities**

- Uses a high level of expertise to specify and implement all details of a complex PLC control system for large industrial equipment.
- Duties include full responsibility for planning, organizing and conducting control system development projects for complex industrial equipment.
- Designs and programs all details of a PLC control system including machine control logic and communications to supervisory systems.
- Plans projects involving new concepts and approaches to the design of new products.
- Acquires and manages outside resources as necessary to complete projects.
- Will interact with other Engineers, Designers, Sales, Marketing, Manufacturing, and Purchasing personnel to complete design projects quickly and cost effectively.
- Will travel globally to solve complex problems with equipment in the field, provide technical expertise to the Sales organization, work with and develop suppliers, interact and direct engineering activities.
- Actively participate in design reviews. Review designs with other Engineering, Manufacturing, Sales, and Marketing personnel as well as equipment users to ensure that designs meet all requirements.
- Prepare and present written, oral visual material to support proposals, presentations, design reviews and written reports.
- Develop cost estimates for proposed projects which include labor and material costs.
- Maintain project folders and report project status to Manager, Engineers and others on a regular basis.
- Plan, perform or direct and document experiments to prove design performance
- Coordinate project tasks and schedules, delegate work to designers / drafters and support staff as required.
- Interact with customers and support groups, affected by design development, to obtain and communicate pertinent project information.
- Duties are performed under light supervision by more senior engineering staff.
- Strictly adhere to all BTU safety policies.

**Other duties and responsibilities**

- Some international travel according to business needs.

**Skills and knowledge**

- Expert at PLC based control system design, both the real time as well as Windows10 - Beckhoff PLC experience preferred.
- Experience with PLC programming such as Structured Text and Ladder Logic. Programming language experience with VB, C#, C++ preferred.
- Experienced with managing resources and details required to efficiently complete large and small development projects
- Knowledgeable in industry design and international safety standards involving electrical systems.
- Able to make decisions independently on engineering problems.
- Able to handle multiple projects and tasks concurrently.
- Strong ability to work with others and be an active part of a cross functional team.
- Excellent problem solving and trouble shooting skills.
- Highly organized and detail oriented with the ability to prioritize, manage multiple projects and work to a schedule.
- Microsoft Office proficiency.

**Education and experience**

- BS, MS preferred in Electrical, Electronics Engineering, Computer Science or similar.
- Requires a minimum of 5 – 10 years of experience in an Engineer 2 or similar role.