Title of Position
Electrical Designer

Team/Department
Engineering Department

Reports To
Drafting and Design Team Leader

FLSA Status
Hourly

Position Summary:

The Electrical Designer possesses a functional knowledge of electrical power and automation systems. Designers perform assignments to develop professional engineering work by applying their knowledge of electrical applications and requirements. They apply standard techniques, procedures, and specified criteria in carrying out a sequence of related engineering tasks. Demonstration of judgement is required on details of work and in making decisions and adaptations of engineering alternatives. Electrical Designers are responsible for performing electrical design duties on projects including power distribution, electrical design, process control design, and instrument and control design.

Essential Responsibilities:

Technical

- Provide complete design services to meet customer specifications, drawings, and control & power system requirements
- Design electrical layouts, drawings and wiring diagrams, working from instructions, vendor or client drawings, proposals, specifications and other information provided by Engineers and/or clients.
- Have an ability to read power and motor control circuits and working knowledge of power and/or instrumentation design (Conduit sizing, simple loop diagrams, etc.), perform calculations for lighting, voltage drop, grounding, service/feeder size
- Comply with standards and procedures of H2E, its clients and customers
- Have a working knowledge of NFPA 70, NEMA ratings and area classifications
- Use computer aided design equipment and/or conventional design stations, technical handbooks, calculators, and ability to obtain technical information from various sources to implement designs
- Perform fieldwork and technical research - visit construction/plant sites and fabrication shops during design phase on as required basis

Leadership / H2E & Project Management

- Has a working knowledge of project execution concepts and practices
- Assigns tasks to Drafters and coordinates with Designers and supports Power and Controls/Automation Engineers
- Completes projects within scope, schedule, and budget while maintaining safety and quality requirements
- Proactively monitors project schedules and balances priorities to execute project deliverables
- Effectively collaborates with H2E and Client Engineering throughout the electrical design process

Communications

- Provide technical guidance, training, and development of staff through review of project work involving electrical design with quality and accuracy
- Represents H2E in communication and documentation pertaining to engineering deliverables
- Interact with contractors, clients, and facility operators
- Possess effective oral and written communication skills

Ownership / Growth / Direction

- Assumes ownership of technical designs to impact the successful outcomes of large industrial projects
- Continual strives for self-improvement in the latest technology and equipment of the industry
- Provides mentorship and oversight to the development of Drafting Staff personnel
- Ability to resolve project related technical issues to move the team and the company forward

Minimum Qualifications:

- AS degree in Electrical or CAD/Drafting Technology required, BS degree is preferred
- Minimum of 5 years electrical design experience with a background in Consulting Engineering or Industrial/Utility facility design/operation
- Proficient in AutoCAD for preparation of electrical drawings
- Experienced with national electrical codes and electrical industry standards
- Experienced in process controls, and medium/low voltage electrical distribution
- Have general knowledge of other related disciplines (mechanical & structural)
- Ability to work efficiently and effectively when managing multiple tasks
- Effective oral and written communications and excellent interpersonal skills with the ability to work through the resolution of project related issues
- Self-motivated, results oriented, and flexible to work well under tight schedules in a fast-paced team environment
- Efficient in the use of MS Office software suite: Outlook, Excel, Word, OneNote, Project and Access