



BARN LIGHT

ELECTRIC COMPANY®

Job Title: Sr. Engineer
Department: Engineering
Reports to: Director of Engineering

Supervisory Responsibility: Yes
FLSA Status: Exempt
Physical Demands: Level I

Job Summary: Lead position within the Engineering Department with a primary focus on New Product Development, Custom Quotes, Custom Designs, Product Documentation, and Engineering Change Orders of existing products. Simultaneously performs Engineering tasks related to the above, while also overseeing specific personnel within the Engineering Department assigned to similar tasks. Works closely with other personnel within the Engineering Department, as well as other departments throughout the company.

Essential Duties and Responsibilities:

- Perform engineering tasks related to New Product Development, Custom Quotes, Custom Designs, Product Documentation, and Engineering Change Orders of existing products - and works to complete projects within budget and timelines
- Develop new products and product families – concepts, renders, specifications, product safety, prototyping, analysis, documentation, ECR/ECO, assembly instructions, installation instructions, BOM creation, NAV data, from concept to manufacturing
- Perform custom fixture costing, drawings for custom specs and custom renders
- Responsible for design changes and improvements to existing products and implements design changes with supporting documentation
- Perform thermal analysis of products using SolidWorks Flow Simulation software and physical testing apparatus
- Create conceptual models, renderings and 2D Drawings as needed for New Product Development, Marketing and Commercial Sales
- Evaluate and implements action items to ensure all BLE product is properly listed for product safety (CSA, UL)
- Create/Output documentation packages for ECO's
- Creation and maintenance of product item cards in NAV
- Facilitate BOM Configurations to NAV Team and assists in BOM creations for manufacturing
- Develop product assembly instructions for manufacturing/plant
- Develop installation instructions for end users
- Coordinate samples for design validation in support of product launch/updates
- Provide product training to Marketing/Sales Team and Manufacturing Team as needed
- Report on tasks and projects utilizing Microsoft Office 365 Planner, as well as other means necessary
- Work closely with Purchasing Department as it relates to costing, prototypes, and vendor/product selection
- Work closely with Operations and Purchasing to facilitate prototypes
- Perform other assigned tasks as directed by the Director of Engineering
- Adhere to all company policies, procedures, and Standard Code of Conduct

Required Skills

- 10+ years (Recent) experience designing in SolidWorks (3D Modeling and 2D Drawing Creation)
- SolidWorks PDM Vault Experience
- High level of understanding, with ability to design, manufacturing techniques and operations (Die casting, injection molding, CNC machining, sheet metal fabrication, etc.)
- Experience with UL/CSA Safety Standards as it relates to Electrical Products (preferably Lighting Products)
- Experience with integrated LED drivers and LEDs
- Understanding of statistics as it relates to the generation of CpK for dimensional analysis
- Understanding of tolerances as it relates to assemblies and manufacturing techniques
- Ability to take direction and comprehend design feedback and intent
- High Level of organizational and analytical skills
- Ability to direct other engineers as needed to complete projects and tasks
- Experienced with Engineering processes and procedures, including BOM Management, Revision Control, Design Validation, Work Instructions, and the ECR/ECO process
- Computer skills - MS Office

Preferred Skills

- Ability to run light simulations utilizing Photopia or equivalent software
- Ability to read/analyze IES files utilizing Photometric Toolbox or equivalent software
- Experience in the creation and management of BIM files
- Experience with Thermal Analysis Simulation utilizing SolidWorks Flow Simulation or equivalent software

Educational/Certification/License Requirements

- Bachelor of Science Degree in Mechanical Engineering

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities and activities may change at any time with or without notice.

Barn Light Electric is an equal employment opportunity employer.