

DESIGN ENGINEER

JOB DESCRIPTION SUMMARY:

The Design Engineer provides engineering and drafting on a day to day basis and provides engineering support to sales, production and purchasing as needed. Such responsibilities include, but are not limited to, using Solidworks to create production drawings; creating and reviewing operation instructions; reviewing production drawings for accuracy and completeness; designing and performing tests to evaluate materials, parts, and completed designs; providing engineering opinions and status reports on projects; discussing design requirements and product performance with customers and sales staff; using computers to facilitate duties and to document work; using of spreadsheets, word processors, Solidworks and other computer software; research technical information and product availability as required; maintaining awareness of in-house production capabilities for making design decisions; developing mechanical and electrical designs sufficient to meet product design and requirements within manufacturing capabilities of the company and its suppliers; maintaining current knowledge on applicable industry and regulatory standards and technology; responding to customer complaints and suggestions regarding product design, reliability or defects; and traveling as may be required to a customer's place of business.

REQUIREMENTS: ABET accredited B.S. Engineering Degree. This is a technical position. Judgment and technical prowess are the prime considerations for this position. The principle requirements of the position are mathematical, mechanical, and spatial skills. The Design Engineer must be able to evaluate mechanical interactions and solve problems related to machinery. The Design Engineer must be able to imagine three dimensional objects and visualize the effect of rotating them; must be able to evaluate product specifications and tolerances; must be comfortable evaluating physics, metallurgical, chemical, and similar problems; must be familiar with mechanical drafting standards; must be proficient in solid modeling; and must be acquainted with manufacturing machinery and tools and their usage. The Design Engineer must have verbal communication skills for explaining technical concepts to non-technically oriented people; must have technical, report and instruction writing ability; must have an understanding of Structural Mechanics theory and analysis; must have an understanding of basic electrical principles; and must have the ability to understand and interpret technical and non-technical written and verbal information and instructions. The Design Engineer must be able to budget his/her time effectively; must be able to coordinate with the time constraints of other departments; and, must be able to estimate time requirements. The Design Engineer is expected to demonstrate sufficient initiative to complete all tasks assigned and sustain a working relationship with other departments within the company. The Design Engineer must be able to work at computer stations for periods of four hours comfortably; must be able to carry fifty pounds, and must have vision adequate for the position.