



Job Description

Job Title: Chief Engineer

FLSA: Exempt

Department: Engineering (reports to President)

Date: 1/2016

Position Overview:

Provides all levels of engineering and design support for new product development and technology projects. Engages directly with the product development teams to solve technical problems that arise during development and test activities. Occasionally serves as the lead engineer on development projects with overall responsibility for the product design. Researches new products, product enhancements, and product redesign that align the product development function with the goals of the organization. Helps evaluate the potential and practicality of products in development. Relies on extensive experience and judgment to plan and accomplish goals. Mentors and coaches the department engineers. A wide degree of creativity and latitude is expected. Must perform in a self-directed manner and positively accept direction when given. Must be an exceptional technical leader and capable of providing objective evaluation of product development results. Must be situationally aware and be capable of resolving conflicts resulting from differing technical approaches and opinions. Must be an excellent written and verbal communicator. Must have excellent customer relations skills.

Educational Requirements:

Bachelor's degree in mechanical engineering required with an advanced engineering degree preferred; a Master's in Business Administration (MBA) a plus. Familiar with the application of best practices of mechanical engineering. Familiar with the application of geometric dimensioning and tolerancing (GD&T).

Essential Job Functions:

- Lead and manage the engineering and design functions for the company.
- Write proposals (management, technical, and pricing) to win new development work.
- Develop and mature new and derivative products in various lifecycle stages. This involves conceptual, preliminary, and detail design of complex components and systems, drawing creation, and associated tolerance analyses.
- Prepare and conduct preliminary, critical, and interim technical design reviews.
- Perform stress analyses/evaluations using constitutive equations, numerical and finite element methods, and empirical methods.
- Evaluate the results of detailed stress analyses and incorporate them into the design of components and systems.
- Setup and perform a variety of static and dynamic component and system tests.



- Supervise a variety of product development, validation, and qualification testing, typically in accordance with MIL-STD-810 and similar industry specifications.
- Manage and support new product development efforts through research, rapid conceptual product development, and proposal writing.
- Provide technical support to Quality and Procurement.
- Provide assembly support, as required, to fabricate prototypes and test articles in house.
- Write statements of work for subcontractors and support/supervise their work.
- Write test plans, test procedures, and test reports to support development, validation, and qualification testing.
- Write progress, compliance, technical and other similar reports.
- Evaluate and scope work to meet the objectives of the task.
- Manage effort to satisfy requirements within schedules and budgets.
- Assist with hiring engineering and other technical staff.
- Keep management apprised of technical and personnel developments.
- Provide feedback to staff on a regular basis.
- Other duties as assigned by management.

Job Requirements:

- Minimum of 15 years of experience in product design, development and related activities.
- Manage and lead the engineering team.
- Keen ability to continuously and objectively critique design evolution for optimal product development results – results that are commercially marketable.
- Knowledge of, and experience with, solid modeling using SolidWorks® or a related package.
- Functional with MS Office application software including Word, Excel and Project
- Detailed knowledge of engineering design practice.
- Knowledge of finite element analysis (FEA) modeling and results assessment.
- Capable of estimating labor and materials costs for product and technology development projects.
- Demonstrated outstanding verbal and written communication skills with internal team members and external customers.
- Excellent situational awareness skills and abilities.
- Demonstrated ability to facilitate design reviews.
- Able to resolve team conflict and motivate to achieve goals.
- Appreciation for cross-functional support requirements.

Physical Requirements:

The employee is required to talk, see and hear. The employee is required to sit for extended periods of time and use their hands and fingers, and computer keyboard. The employee is occasionally required to stand, walk, and reach with arms and hands. Vision abilities required by this job include close vision. Some light lifting, up to 25 lb, is required.