



Position Title: Mechanical Engineer
Department: Engineering
Reports To: Director of R&D Engineering
FLSA Status: Exempt
Prepared Date: 7/16/2019
Approved Date: 4/16/2019

SUMMARY

This position is functionally responsible for providing product sustainment, development, and mechanical design for VTM's current and future rugged military and airborne products. The incumbent is involved in the different aspects of mechanical engineering, such as the investigation of product failures, setting up and conducting tests of complete units and components under operational conditions to investigate design attributes or other factors, or to obtain data for, production, development, standardization, and quality control. As well as participate as an individual contributor in the design and development of computer and computer peripheral products. Also be able to review product design for compliance and engineering principles, company standards, and customer contracts requirements, and related specifications.

ESSENTIAL FUNCTIONS *(To perform within this position successfully, the incumbent must be able to perform each essential duty satisfactorily. Other duties may be assigned.)*

Create and release product requirements, design specifications and technical descriptions for assigned projects, as required by applicable military, airborne, and commercial design standards and internal procedures

Work closely with electrical and software engineers to ensure a "system approach" to product development

Create robust designs by analyzing vibration, impact, EMI, and thermal resistance for compliance with military, airborne, commercial, and customer requirements

Participate in or support the following specific activities:

- Concept planning and design of new products and enhancements to legacy products
- Providing technical input in the preparation of customer proposals
- Risk Assessment
- Prototyping/testing
- Pilot production support
- Design reviews
- Design Verification, Validation, & Qualification
- Root cause analysis & Corrective Action implementation
- Support and investigate production problems
- Develop new, and improve existing tools used in the manufacturing process.
- Provide Design for Manufacturing (DFM) principles to R&D Engineering on new designs.

Review product documentation for accuracy including documentation intended for customer use
Evaluate product non-conformities and recommend design modifications/solutions

Supervisory Responsibilities: No

BASIC QUALIFICATIONS *(The requirements listed below are representative of the knowledge, skills, and/or ability required and preferred for this position.)*

Required Education & Experience:

- Bachelor's Degree of Mechanical Engineering (or related field)
- Master's Degree in Mechanical Engineer (or related field) preferred

Required Knowledge, Skills, & Abilities:

- Must possess superior engineering and communication skills and be capable of interacting with all engineering disciplines
- Must be proficient in industry standard 2D and 3D mechanical design tools (SolidWorks, Coolit, Creo, AutoCAD, etc.)
- Must have experience in taking designs from conception to production
- Ability to research solutions and apply advanced tools and techniques to resolve engineering challenges.
- Ability to organize, schedule, budget and coordinate work phases; excellent time management skills.
- Strong interpersonal, verbal and written communication skills to interface with internal employees, external customers, vendors, and be able to accurately document, report and present
- Proficient with Microsoft Office (Word, Project, Visio, Excel & PowerPoint); proficient experience using internal ERP systems.
- A drive for results in a teambuilding environment
- No travel restrictions

Preferred Education & Experience:

- 5+ years' experience in mechanical design/packaging to meet temperature, shock, vibration and EMI requirements.
- Knowledge of mechanical engineering design related to rugged products and be familiar with applicable military, commercial airborne, and industry standards
- Working knowledge of Microsoft Dynamics AX 2012
- Ability to write reports, technical correspondence, and test procedures
- Ability to effectively present information and respond to questions from groups of managers, clients, customers, and vendors

Physical Demands and Work Environment:

- While performing the duties of this job, the incumbent is frequently exposed to moving mechanical parts, fumes, airborne particles, or risk of electrical shock and vibration.
- The noise level in the work environment is usually moderate.