

Job Description

Title: Sr. Mechanical Engineer

Cost Ctr: 705-000

Work Location: Addison, TX

Position Status: Full-time Part-time

Division & Department: Hardware Engineering

Position Reports to: Director, Hardware

Position Overview and Definition:

The Sr. Mechanical Engineer is responsible for research, development, and the 3D design for new mechanical products. This will be done using SolidWorks to capture new mechanical designs. This position is responsible for product implementation, electro optical, PCB board outlines, and existing design adaptations for industrial machine vision type products and parts. This position will also include ongoing product improvements utilizing new processes or material changes.

Functional Description:

- Responsible for all aspects of mechanical engineering activities within the company: product concept, scheduling, budgeting, design & development, design verification & prototyping, tooling, qualification/validation & regulatory related activities, product launch & sustaining engineering
- Application of comprehensive design approach and analysis to ensure highest quality, least cost/risk and least time to market solutions
- Design parts and components utilizing multiple manufacturing processes/materials for the product design that would yield the most quality and cost-effective solutions; injection molding, casting, sheet metal, elastomeric injection and compression molding, die-cutting, plating and paint finishing, assembly joint solutions
- Perform cost, stress and thermal, finite element, and tolerance analyses
- Collaborate with electrical engineering and operations groups to define PCA keepouts, mounting, and connector locations
- Lead the documentation process and create detailed BOMs and 2D drawing using GD&T (ANSI Y14.5M)

Candidate Competencies:

- Expertise in Computer Aided Design and drafting. Solidworks at professional level and expertise with Solidworks Simulation finite element analysis [FEA]
- Expertise in part/assembly design considerations for Design for Manufacturing & Assembly (DFM and DFA)
- Experience with Product Lifecycle Management (PLM) and Configuration Management (CM)
- Strong project/task management, prioritizing and multi-tasking skills

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- Ability to effectively and clearly communicate concepts, ideas and knowledge to other individuals and teams
- Strong knowledge of electro-mechanical packaging
- Familiarity with PCB fabrication and PCA processes
- Demonstrate proficiency with Microsoft Office (Excel, Outlook, PowerPoint, Word).
- Ability to manage engineering projects, tasks and be an active member of a project team.

Education and Experience:

- Bachelor of Science in Mechanical Engineering required
- Minimum of 10 years of experience in product design and development