

# Job Description

<b>Job Title:</b>	Senior Mechanical Engineer	<b>Revision Date:</b>	06/27/2022
<b>Work Location:</b>	Norwood, MA		
<b>Department:</b>	R&D Engineering		
<b>Reports to:</b>	Manager, Mechanical Engineering & Systems	<b>FLSA Status:</b>	Exempt

**Summary:**

Senior level technical position.

Works in a project team environment as an individual contributor or team leader on new product development and/or sustaining engineering tasks.

Completes large-scale and/or complex assignments by working independently with minimal technical supervision.

Assignments are of a non-routine and non-repetitive nature. Results of work are used to provide new products for sale or to enhance the capabilities of currently released products.

**Essential Functions:**

1. Completes detailed specifications, designs, calculations, analyses and simulations for major hardware components of a project. Capable of developing high level and detailed architectures for product subsystems.
2. Develops and utilizes advanced, alternate or non-standard tools and techniques to provide problem solutions when traditionally accepted methods are inadequate or do not apply.
3. Oversees the fabrication and assembly of models and prototypes, providing technical direction to other assigned team members. Develops and implements product specific diagnostic and troubleshooting procedures to identify root causes for problems associated with prototype functionality and performance.
4. Sets up and conducts non-standard or product-specific evaluation tests of prototypes. Records observations and data, analyzes and interprets results and prepares summary reports.
5. Keeps abreast of new and emerging technologies, processes and components in one or more areas of engineering expertise. Participates in evaluating the technical feasibility and benefits of incorporating recent developments into new and enhanced products.
6. Prepares Engineering documentation inputs (i.e. drawings, schematics, Bills of Material, specifications, etc.) for Documentation Control. Reviews preliminary documentation packages for technical completeness and accuracy and provides technical direction to Documentation Control personnel during documentation preparation and release.
7. Participates in Design and Drawing Reviews, serving as an independent reviewer of work being accomplished by other individuals and project teams.
8. Coordinates regularly with team members from other organizations. Monitors progress of tasks on established project schedules and reports status to Project Manager or senior management.
9. Interfaces regularly with external suppliers and customers to identify and evaluate new technologies, components and processes, or to troubleshoot problems with products.
10. May serve as Team Leader or Project Manager responsible for the overall completion of a project.
11. Develops and maintain project schedules, leads project team meetings, coordinates day-to-day project activities, develops contingency and recovery plans and provides project status reports for senior management.
12. Completes other projects and tasks as assigned.

**Experience Requirements:**

1. Minimum of 7-10 years' experience conducting specification, design, prototyping and test activities on new or existing electromechanical laboratory instrumentation and consumables.
2. Specific design experience in electronics packaging, sheet metal and non-metallic enclosures.
3. Knowledgeable in materials selection and mechanical fabrication and assembly processes.
4. Ability to prepare accurate and complete drawings, part specifications, bills of material, work instructions, engineering change orders, etc. using industry accepted drafting and documentation standards.
5. Able to expeditiously complete projects from initial concept through production startup and to provide on-going support after release.
6. Able to work effectively and productively in a project team environment or as an individual assigned to a project.
7. Good oral and written skills.
8. Detailed knowledge of personal computers for word processing, spreadsheets, modeling, simulations and analyses.
9. 5+ years recent experience designing and documenting electromechanical products using Solidworks.

10. Experience with Solidworks PDM preferable.
11. Ability to accurately record, analyze, interpret and summarize test data and observations.
12. Demonstrated ability to effectively manage multiple priorities in a fast-paced deadline-driven environment.
13. Strong organizational, written and verbal communication skills.

**Education Requirements:All**

1. Bachelor's Degree in Mechanical Engineering. Advanced Degree preferred.

**Physical Requirements and Working Conditions:**

1. Must be able to stand for long periods of time.
2. Typical office environment.
3. Must be able to use basic office equipment: computer, printer, copier, telephone, etc.
4. Must be able to remain stationary for long periods of time.
5. Must be capable of communicating with stakeholders through various means.

**Application Process:**

Interested candidates should send their resume to:

Human Resources  
2 Technology Way  
Norwood, MA 02062  
Jobs@aicompanies.com

Nothing in this job description restricts management's right to assign or reassign duties and responsibilities to this job at any time