

Mechanical Engineer Job Description

Adaptive Innovations Corp. provides complete turn-key automated solutions specializing in custom automation, robotics, tooling and testing equipment. Adaptive is located in Lakewood, CO and is a rapidly growing firm offering an exciting work environment with constantly changing and growing challenges. Adaptive is seeking a creative and driven mechanical engineer to join our team.

Responsibilities:

- Design & develop mechanical system solutions based on engineering principles. Support design decisions with analysis and calculations, as required.
- Participate in peer to peer design reviews and provide critical feedback to colleagues.
- Identify and manage vendors during fabrication and build process.
- GD&T and drafting of mechanical components and sub-assemblies.
- Develop PFMEA's for machines and solutions to minimize project risks.
- Provide technical support and guidance to technician team to insure proper machine assembly and functionality.
- Resolve operational problems related to projects and minimize delays or unexpected cost increases.
- Ensure all relevant safety objectives and legal requirements are observed for all work completed.
- Interpret client requirements, identify and address design parameters and engineering problems and ensure solutions are implemented accurately and in budget.
- Develop project requirements/specifications from sales concepts and customer requests.
- Present and review mechanical system design to customer representatives.

Engineering:

- Analyze project requirements, develop solutions, and perform technical calculations supporting design. Solutions shall consider machine performance, project timing, and project budget before implementation.
- Provide 3D modeling in SolidWorks of all solutions developed. Insure designs can be manufactured using readily available manufacturing processes.
- GD&T and drafting of custom parts and assemblies per ASME Y14.5M
- Create accurate Bills of Material documentation.
- Selection of appropriate materials and processes for custom parts.
- Identification and selection of technology and off the shelf solutions that can be implemented to achieve the project goals.
- Mechanical design of customized solutions including; motor sizing, cylinder sizing, pneumatic/electro-pneumatic and electrical routing.
- Tracking of project spend as compared to provided project budgets.
- Assist in the bring-up of machines using statistical analysis to effectively identify issues, determine root cause, and quickly develop resolutions.
- Provide hands on assembly assistance and precise measurement techniques in order to collect data and identify root causes of machine bring-up issues.

Project Execution:

- Oversee project workflow and support internal and external resources to ensure timely delivery of projects, expected quality, and allotted budget.
- Support manufacture, build and validation of systems.
- Utilize statistical methods for validation of systems.
- Create customer documentation.

- Maintain accurate records and files according to quality standard.
- Commission customized products and systems onsite and at customer facilities.

Job requirements:

- Applicants must be a Citizen of the United States.
- A Bachelor's Degree in Mechanical Engineering (or similar related degree) is required.
- 4-10 years related job experience.
- Proficient in SolidWorks software and MS Office suite.
- Strong fundamental knowledge of mechanical design and its application in automated industrial designs including:
 - Specification of motors and gear trains
 - Mechanism design
 - Pneumatics and vacuum system design
 - Engineering kinematics
 - Tooling and fixturing design
 - Materials selection and process specification
- Drawing generation and design documentation per standards.
- Critical thinking with exceptional problem solving skills.
- Ability to work independently or in a team environment.
- Efficiently organize and plan work tasks to meet company goals.
- Proactive, resourceful & highly motivated with good communication skills and ability to work in high output environment.
- Travel as required to support projects.

To Apply:

- Please submit cover letter, resume, and salary requirements to HR@a-i-corp.com