

SD stillwaterdesigns

JOB DESCRIPTION

Position: Mechanical Engineer I
Department: Research & Development
M.E. Manager: Kyle Ambrose

General purpose

Provide mechanical engineering support for the Aftermarket division of Stillwater Designs.

Essential functions

- Design mechanical components of consumer electronic products including, but not limited to, loudspeakers, associated electronic enclosures, control enclosures, and loudspeaker enclosures.
 - Produce detailed mechanical designs of parts and assemblies using the current version of SolidWorks.
- Develop and maintain engineering documents such as FMEAs. Maintain the engineering standards library and ensure that all applicable standards are met.
- Work closely with Acoustic Engineering, Electronic Engineering, Sales, Purchasing, Quality Control, and other teams to develop new products.
 - Participate in daily SCRUM meetings and weekly development meetings.
 - Work closely with tool makers and suppliers from concept to finished goods and after finished goods are in production to improve processes, materials, and designs through running changes.
 - Review samples, parts, products, and processes and provide feedback to suppliers promptly.
 - Assist Quality Control in determining failure modes and corrective action.
 - Conduct product testing as needed.
 - Provide in-house production support, including coordinating the design and use of inspection gauges.
 - Use and help maintain rapid prototype machines such as 3D printers.
 - Provide on-site support at customer and manufacturing facilities. Some domestic and international travel will be required. Must be able to obtain a passport.
 - Participate in peer review for other mechanical engineers' projects as needed.
- Take the Lead Engineer role on projects assigned by the Project Manager.
 - The Lead Mechanical Engineer is responsible for mechanical and cosmetic approval of the product.
 - Assist in determining and acquiring benchmark products.
 - Collaborate with other engineers and create the mechanical design in CAD, including 3D models and 2D prints or specification sheets as needed.
 - Present and defend design choices and answer questions in a group setting such as a Design Team Meeting.
 - Work closely with Acoustic Engineering to specify and/or build needed samples. This includes, but is not limited to, using hand or power tools, working with local machine shops, ordering hardware, and contracting resources such as online prototype services.
 - Test any samples built.
 - Determine required mechanical tests, including packaging testing, and create templates.
 - Assist the Project Manager, Acoustic Engineering, and Technicians in determining sample needs and ordering samples from suppliers using the Engineering Sample Request System (ESRS).
 - Gather information and create packaging information, including giftbox die cuts, inner packaging design and details, line art, renders, photo samples, packaging contents, and other information.
 - Meet with Product Training, Product Planning, Marketing, and others to review product details such as installation, features and benefits, usage, and special characteristics.
 - Review giftboxes, packaging, manuals, and samples. Report feedback to the Project Manager and/or supplier. The review should include, but not be limited to, acoustic performance, cosmetics, fitment, packaging, and packaging contents.
 - Gather weights and dimensions and send them to the Project Manager and/or Product Planning Specialist.
 - Organize and conduct peer reviews.
- Apply knowledge of engineering principles to the development of new products and adaptation of existing products.

- Work under general supervision. Must be able to set and meet goals to ensure project completion and work well under deadline.
- Exhibit a cooperative, punctual, and capable work ethic.

Educational and experience requirements

- a. Bachelor of Science degree in Mechanical Design Engineering or a related field.
- b. CAD experience in the latest version of SolidWorks.
- c. Experience with Microsoft Project, Excel, Word, and other standard computer usage skills.
- d. Working knowledge of ASME Y14.5-2009 Geometric Dimensioning & Tolerancing.
- e. One to three years of experience in consumer electronics mechanical design is desired but not required.
- f. One to three years of experience in a related field is desired but not required.

Physical requirements

- Must be able to remain in a stationary position 50% of the time.
- Must be able to move about inside the office to retrieve samples and operate machines.
- Must be able to operate a computer, other office machines, and hand and power tools.
- Must be able to handle and inspect samples.
- Must be able to communicate in person.
- Must be able to lift and carry 20 pounds or more.