



JOB DESCRIPTION

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

General purpose:

Provide mechanical engineering support for the Aftermarket and/or Lifestyles division of Stillwater Designs.

Essential functions:

- Design mechanical components of consumer electronic products including but not limited to loudspeakers, associated electronic enclosures, control and loudspeaker enclosures:
 - o Produce detailed mechanical designs of parts and assemblies utilizing the current version of SolidWorks.
- Develop and maintain engineering documents such as FMEAs. Maintain 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:
 - o Participate in daily SCRUM meetings and weekly development meetings.
 - o Work closely with tool makers and suppliers from concept to finished goods and after finished goods are in production to improve processes and/or materials and/or design (“running changes”).
 - o Review samples, parts, products, and processes; provide feedback to suppliers in a timely manner.
 - o Assist Quality Control in determining failure modes and corrective action.
 - o Conduct product testing as needed.
 - o Provide in-house production support including coordinating design and use of inspection gauges.
 - o Use and help maintain rapid prototype machines, i.e. 3D printers.
 - o Provide on-site support at customer and manufacturing facilities.
 - Some domestic and international travel will be required. Must be able to obtain a passport.
 - o Participate in peer review for other mechanical engineer’s projects as needed.
- Take Lead Engineer role on projects assigned by the Project Manager:
 - o Lead Mechanical Engineer is responsible for mechanical and cosmetic approval of the product.
 - o Assist in determining and acquiring benchmark products.
 - o Collaborate with other engineers and create mechanical design in CAD (3D models and 2D prints/spec sheets as needed).
 - o Present and defend design choices and answer questions in a group setting such as Design Team Meeting.



- Work closely with Acoustic Engineering to spec and/or build any needed samples.
 - This includes but not limited to using hand tools or power tools, working with local machine shops, ordering hardware, and contracting other resources such as online prototype services.
- Test any samples built.
- Determine required mechanical tests, including packaging testing and create templates.
- Assist Project Manager and Acoustic Engineering and Technicians determine sample needs and order samples from suppliers using ESRS (Engineering Sample Request System).
- Gather information and create packaging information: giftbox die cuts, inner packaging design and details, line art, renders, photo samples, create packaging contents, and/or other information.
- Meet with Product Training, Product Planning, Marketing, and others to review product details: installation, features and benefits, usage, special characteristics, etc.
- Review giftbox, packaging, manual, and samples. Report to Project Manager and/or supplier with feedback.
 - The review should contain but not be limited to acoustic performance, cosmetics, fitment, packaging, packaging contents.
- Gather weights and dimensions and send to 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. Must be able to 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 related field.
- b. 1-3 years of experience in consumer electronics Mechanical Design.
- c. 1-3 years of experience in a related field.
- d. CAD experience in latest version of SolidWorks.
- e. Experience with MS Project, Excel, Word, other standard computer usage skills.
- f. Working knowledge of ASME Y14.5-2009 Geometric Dimensioning & Tolerancing.

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, operate machines.
- Must be able to operate a computer, other office machines, 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 up to 20 pounds.