



Specialist

Product Design & Engineering

Level: 1

Department: Design & Engineering

Reports To: Sr Product Design Engineer

FLSA Status: Exempt

Rate: \$20-30 per hour depending on experience, 5% bonus based on team performance.

About

Founded in 1986 and based in Fitchburg, Massachusetts, Image Diagnostics, Inc. (IDI) is a leading manufacturer of specialized medical devices and equipment. We specialize in high-performance surgical and diagnostic imaging equipment, including C-arm compatible tables, mobile video display systems, and radiation protection solutions. Our mission is to enhance patient outcomes and improve surgical workflows through innovative engineering, quality craftsmanship, and human-centered design.

Position Summary

The Specialist Product Design Engineer is an entry-level technical associate responsible for providing foundational drafting, CAD modeling, and documentation support to the engineering team. Working under the direct guidance of Senior Engineers, this position assists with detail modeling, generating engineering drawings, preparing ECO packages, building physical prototypes, and learning the regulatory requirements of medical device manufacturing.

Core Competencies

- 3D CAD Modeling & Technical Drafting
- Prototyping & Shop Floor Assistance
- Collaboration & Communication
- Eagerness to Learn & Adapt

Essential Duties and Responsibilities

- Support design projects from initial concept through engineering change release.

- Create manufacturing specifications, detail drawings, and engineering documentation.
- Collaborate with Manufacturing, Quality, Operations, Purchasing, and Regulatory teams.
- Assist in root-cause analysis and recommend basic technical corrective actions.
- Support product testing, validation activities, and process improvements.
- Assist in developing departmental engineering standards and best practices.
- Learn and adhere to quality system requirements, compliance procedures, and medical device standards.
- Conduct research on emerging materials, manufacturing technologies, and design methods.

Required Qualifications

- Bachelor's degree in Industrial Design, Mechanical Engineering, Biomedical Engineering, Electrical Engineering, CAD/Drafting, or relevant Technical School certification..
- 0-2+ years of product design experience, preferably in medical device or regulated manufacturing.
- 1+ years of Solidworks or On-Shape experience in an academic or professional environment.
- Portfolio deck showcasing design projects, 3D CAD modeling skills, physical prototypes, and technical problem-solving.

Knowledge, Skills, and Abilities

- Hands-on mechanical aptitude and comfort working in a shop, lab, or manufacturing environment.
- Strong attention to detail, especially regarding drawing notes, dimensions, and document revision control.
- Positive attitude, strong listening skills, and a desire to learn from senior mentors.
- Good verbal and written communication skills.

Work Environment

- Schedule: 40-hour on-site position with flexible daily scheduling options and occasional remote flexibility as business needs allow.
- Environment: Hybrid environment spanning office space and the manufacturing floor, with occasional exposure to production equipment and moderate noise levels. Minimal local/regional travel may be required.
- Location Perks: Convenient reverse commute along Route 2, just 1/2 mile from the MBTA Wachusett Commuter Rail Station, and 10 minutes from Wachusett Mountain Ski Area and Leominster State Forest.

Physical Requirements

- Ability to work across office and light manufacturing environments.

- Ability to sit, stand, and walk for extended periods, occasionally lift up to 50 lbs, and wear required Personal Protective Equipment (PPE) when on the shop floor.

Disclaimer

- This job description is intended to describe the general nature and level of work performed by employees assigned to this position. It is not intended to be an exhaustive list of all responsibilities, duties, or qualifications. Management reserves the right to modify or assign additional responsibilities as business needs require.