



## Job Description

**Job Title:** Senior Product Design Engineer  
**Department:** Product Development  
**Reports To:** Director of Design Engineering  
**FLSA Status:** Exempt

### POSITION SUMMARY

The position of Senior Product Design Engineer works in the Product Development Department to develop new parts and products, and maintain/improve existing ones. This individual will take commercial inputs and create designs to support our spirit of innovation within the industry.

The ideal candidate is an individual who works well with a team and has very strong design engineering skills. Experience designing high volume plastic injection molded parts, knowledge of resins used in plastic injection molding, mold manufacturing techniques, experience in dealing with plastic injection mold vendors and the ability to comment and provide direction and support regarding mold designs and design changes.

### ESSENTIAL DUTIES AND RESPONSIBILITIES:

**Essential Duties and Responsibilities:** Essential duties and responsibilities include the following. Other duties may be assigned.

- Completes engineering change requests, maintaining 3D models and updating all applicable documents to current drawing standards.
- Uses technical knowledge and experience to generate high quality design drawings for parts and assemblies –appropriate for the fabrication techniques selected.
- Develops new part specifications, draft assembly procedures, and checks design layouts and drawings for good documentation practices.
- Uses computer aided design and drafting techniques as appropriate to document designs and design analyses. (SolidWorks is our primary mechanical design tool.)
- Assists fellow engineers in the design and development of complex plans, layouts, detailed drawings, bills of materials, and engineering change orders.
- Collaborates with engineers and technicians to conceptualize and develop new technologies.
- Works with internal customers within the MO to provide product design outputs.
- Takes the posture of providing excellent customer service to both internal and external customers with regards to design as a product.
- Performs dimensioning and tolerance evaluations of assemblies, components and drawings.
- Uses experimental, empirical, or numerical analysis to evaluate a designs form, fit, and function.
- Prototypes designs and conducts formal design reviews with internal and external stakeholders.

- Interacts with vendors such as mold makers, tooling vendors, automation vendors to assist on evaluating an ordering parts for Biotix.
- Has the technical ability to evaluate vendors for their technical competency at providing high quality components/molds to Biotix.

**EDUCATION and/or EXPERIENCE SUMMARY:**

- BS Mechanical, Industrial Engineering or other applicable discipline.
- 5-7 years' work experience that actively involved hands-on product design, design drafting and engineering documentation creation.
- Strong 3D CAD modeling and 2D CAD drafting skills – demonstrated understanding of drafting standards, dimensioning, and CAD links between models and drawings. (Certification from SolidWorks a strong plus.)
- Experience within the life sciences industry; working with laboratory consumables, ISO 13485 and/or FDA regulated business preferred.
- Experience working with engineering change control systems.
- Sufficient knowledge of common fabrication techniques (machining, plastic molding, sheet metal forming, casting, and stamping) to understand part drawing requirements and typical tolerances associated with them.
- Ability to draft technical reports to support design output based on design inputs for ISO and compliance documentation.
- High attention to detail.
- Familiar with designing plastic injection molded and machined parts.
- Familiar with basic six sigma tools associated with product design.
- Eager to work, learn, teach and engage as a team player.
- Proven skills working with cross-functional teams.
- Intermediate skills with MS Word, Excel, and PowerPoint, Visio, MS Project.
- Ability to perform and prioritize multiple tasks in a fast-paced environment.
- A self-starter that is quickly motivated, recognizes opportunities, communicates ideas, and acts with little direction in a fluid and matrix environment to deliver business objectives.

**Physical Demands:** The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee spends a considerable amount of time working at a desk with a computer. The employee is regularly required to stand and walk; use hands to finger, handle, or feel and talk or hear. The employee must be able to visually distinguish detail and other fine characteristics of materials and objects. The employee is occasionally required to sit; climb or balance and stoop, kneel, crouch, or crawl. The employee must regularly lift and /or move up to 10 pounds, Specific vision abilities required by this job include close vision, color vision, depth perception and ability to adjust focus.

**Work Environment:** The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.