

Job Title: Sr. Mechanical Engineer / Designer

Reports to: Engineering Manager

Company Overview:

EsOX Engineering is a trusted strategic product research and development firm known for honesty, integrity, and transparency. We prioritize intentional work and knowledge sharing to maintain a team that gives back to and advances the engineering field. Specializing in medical, dental, consumer products, and furniture industries, our portfolio serves everyone from solo entrepreneurs to Fortune 500 companies. Our in-house team, equipped with high-end workstations, ensures top-notch quality without outsourcing.

Job Summary:

EsOX Engineering is in search of an experienced Mechanical Engineer / Designer who will play a pivotal role in executing product development projects and building a relationship with our team and clients. This position is with our internal consulting team completing billable project work for our customers including engineering, product development, analysis, and CAD work. This role will also include direct communication with clients, internal and external networking, and helping to build and mentor younger engineers. The overarching goal is to fully participate in a culture where client needs are being met effectively in an enjoyable, professional, and respectful workplace while building the skills of engineering consulting.

In the initial six months, the focus will be on direct support of existing projects and learning the engineering consulting business. The subsequent six months will concentrate on moving you into a primary contributor on projects with relationships at 1-2 primary clients. Beyond this, responsibilities will be divided between primary engineering, design, and CAD tasks (70%) while helping to mentor and advise other engineers (20%) and other tasks related to participating in an internal team and building project success (10%). The ideal candidate would have a keen interest in career development toward an EsOX position as a Lead Engineer, Project Lead, or Engineering Manager.

Duties/Responsibilities:

- Contribute to the product development process using CAD, FEA, design, engineering, calculations, and analysis.
- Describe and perform or write instructions for bench-top testing and evaluation of benchmarks, prototypes, and products.
- Design, build, modify, test and evaluate prototypes
- Collaborate with other engineering disciplines: Work seamlessly with electrical, mechanical, software, and other relevant engineers.
- Build and maintain strong client relationships: Understand client needs, expectations and priorities while fostering open communication.
- Assist in developing and working within project plans, including timelines and budgets.
- Assist in managing project risks: Help identify potential risks and develop mitigation strategies, proactively address issues.
- Present project updates and reports to the internal team and clients: Communicate complex technical information in a clear and concise manner verbally, in writing and presentations, and through sketching.
- Tracking progress and managing time: Track time and budget against expectations and assist project lead in planning and execution.
- Provide strategic thinking and planning combined with creative problem solving.
- Track and address project and engineering details, requirements, and risks
- Record and submit project time and expenses into tracking software.
- Ensure personal deliverables meet client specifications and quality standards.
- Provide product development guidance to other engineers: Possess engineering / design knowledge relevant to the product industry.

Required Skills/Abilities:

- A passion for product development & mentoring.
- Proactive and organized approach to product development engineering
- Significant practical product development experience & technical knowledge including:

- Ability to design and inform development of parts for various fabrication methods such as additive, CNC machining, injection molding, sheet metal, die casting, extrusion, etc
- Familiarity with basics in electronics, programming, and electromechanical parts
- Comfort performing engineering analyses such as mechanisms, FBDs, dynamics, springs, kinematics, FEA, fluids, and thermodynamics.
- Experience in DOF, intentional design, stack-ups, DFMEA, DFM, GD&T, and stack-ups
- Foundation in practical selection of materials for various manufacturing methods
- Understanding of joining methods such as threaded fasteners, riveting, metal welding, adhesives, plastic welding, and snap fits.
- Understanding of the fundamentals of material finishing such as anodizing, powder coating, heat treating, paint, etc.
- Ability to proactively mitigate and effectively communicate complex risks/issues with internal team & clients.
- Ability to effectively communicate with an internal team and clients.
- Comfort and skill using common fabrication methods such as drilling, cutting, grinding, etc.
- Excellent technical verbal and written communication skills.
- Excellent time management skills with a proven ability to meet deadlines.
- Proficient in PTC Creo (strongly preferred) or SolidWorks.
- Proficient in MS Office Suite (Word, Excel, PowerPoint).
- Creative problem solver and innovative mindset.
- Ability to complete tasks with minimal supervision/direction.

Education and Experience:

- BS in Mechanical Engineering, or similar. Master's Degree in Mechanical is a bonus
- 5+ years of successful employment in product development and mechanical engineering
- 5+ years relevant experience in PTC/Creo (strongly preferred) or SolidWorks.

Physical Requirements:

- Ability to perform light to heavy physical labor (lifting, bending, climbing, reaching, stretching, pushing and pulling).
- Ability to lift 50+ pounds frequently.

Ability to sit or stand for prolonged periods of time.