



## Mechanical Design Engineer

Taylor Devices, Inc. (TDI), located in North Tonawanda, NY, is a leading designer and manufacturer of Fluid Viscous Dampers and offers a wide variety of specialized products for energy management systems to a diverse customer base. Our system solutions span a variety of applications in Aerospace & Defense, Structural and Industrial sectors. We are currently looking to add Mechanical Design Engineers to our Engineering Team. The successful candidate will be an employee of TDI, North Tonawanda. Certified to AS9100, ISO9001, and ISO14001.

### **Position Summary**

The successful candidate will provide technical support, to a cross-functional team, in areas of dynamic energy management. The candidate will apply knowledge of mechanical and structural design elements with kinematic motion analysis to evaluate system solutions for isolated systems. Typical engineering activities include interpreting application requirements, analyzing system inputs and responses, choosing appropriate design elements and technologies, and designing custom solutions. Custom solutions consist of various unique components such as springs (mechanical and fluid), dampers and isolators that require bottom-up detailed design for physical performance and strength of materials.

The ideal candidate will be proficient in mechanical analysis and design of dynamic systems, specifically in the area of damped harmonic motion. This requires a sound knowledge of statics, kinematics, dynamics, strength of materials and fluid dynamics. Proficiency with design software such as Solidworks is expected; experience with FEM such as MSCOne is a plus. A primary element of the position will be to interpret the application needs and to recommend solutions when an incomplete information set is often not available.

Engineering work may also include specification preparation and review, support to bids and proposals, customer/supplier interface, documentation of designs/analyses/tests, hands-on.

The successful candidate will report to the Chief Engineer, headquartered in North Tonawanda, NY.

### **Essential Functions**

- Key contributor to development of complex and dynamic energy management systems.
- Interpersonal and effective communicator, able to work alone and as part of a team.
- Creative and analytical thinker.
- Design and documentation of safe, reliable, and cost-effective engineering solutions.
- Support to Aerospace & Defense, Structural and Industrial industries.
- Meeting with customers, suppliers, and cross-functional team to assist with design, detailing, analysis, budgeting, project development and execution.
- CAD using Solidworks 3D.
- CAE using MSCOne suite of simulation software.
- ERP using Infor Syteline.
- Travel to support programs.
- This position requires access to information and hardware subject to U.S. export-control.

### **Requirements**

- Must have excellent communication and organizational skills.
- Minimum education: BS in engineering.
- Minimum software experience: 3D modeling; Preferred: Solidworks CAD
- Preferred experience: Broad background in mechanical design and analysis, strength of materials, kinematics, dynamics, and fluid mechanics.
- Preferred analysis capability: Experience in FEA, FEM, numerical modeling
- Minimum experience: College Graduate
- Preferred experience: 5+ years in mechanical engineering related field.

### **Salary and Incentive Plan**

- Commensurate with experience & qualifications

### **Benefits upon Permanent Hire**

Medical, Dental, Vision, 401k and Company Match, Health Savings Account with Company Contribution for High Deductible Health Plans, Company Paid Life Insurance, Voluntary Life Insurance, Voluntary Short-Term Disability, Voluntary Long-Term Disability, Company Bonus Plan, Stock Purchase Plan, Tuition Reimbursement, Paid Holidays, Paid Time off, On-the-job Training, Employee Assistance Program, PPE Reimbursement, Company Referral Program.

### **How to Apply:**

Submit a resume to: [employment@taylordevices.com](mailto:employment@taylordevices.com)

*Taylor Devices is an Equal Employment Opportunity Employer. All qualified applicants will receive consideration for employment without regard to veteran status, uniform service member status, race, color, religion, sex, national origin, age, physical or mental disability, genetic information, or any other protected class under federal, state, or local law.*