

Job Title: Product Engineer

Reports to: Engineering Manager

COMPANY PROFILE

Hydra-Flex, Inc., a privately-held company headquartered in Eagan, MN, is a recognized leader in fluid dynamics with a mission to develop innovative products that solve problems, save precious resources, reduce operating costs, and provide exceptional and measurable results for our customers.

COMPANY BACKGROUND

The company was founded in 2002 with the intent to “find a better way” to manufacture innovative and reliable fluid handling products - including chemical injectors, complete chemical dispensing systems, and high pressure nozzles.

Listed on the [INC. 5000](#) Fastest Growing Private Companies, the [MSPBJ Fast 50](#), and Best in Class winner at the [2016 MN Manufacturing Awards](#), Hydra-Flex is a small, dynamic organization with an 8-year track record of double-digit sales growth and aggressive plans for the future. Our continued growth will be fueled by expanding our chemical dispensing and nozzle technologies to new vertical markets including hydro-excavation, industrial cleaning, sanitation, vehicle wash, wastewater treatment, agriculture/horticulture, and laundry/warewashing, etc.

CORE VALUES



INNOVATION



RELIABILITY



ACCURACY

OUR CULTURE

Hydra-Flex’s success is a direct result of our most important asset — our people. Working collaboratively, our team members enjoy a casual, fast-paced, flexible, and rewarding work environment that is:

- *Customer Focused* – we understand that our customers are the reason why we’re in business.
- *Built on Teamwork* – we believe teamwork divides the task and multiplies the success.
- *Results Driven* – we believe that what gets measured improves.

JOB SUMMARY

Hydra-Flex is looking for a motivated design engineer who can bring new products to market in a growing, fast-paced environment. If you love new product development as much as we do, this might be the perfect job for you.

Do you enjoy...

- Using your design knowledge to push the limits of process feasibility?
- Taking responsibility and being empowered to get the job done?
- Finding creative solutions when problems arise?
- One upping competitors with amazing new products?

Are you the type of person that...

- Is willing to accept risk in a new design but always leaves an out?



- Thinks it's worth changing the design to amaze a customer?
- Knows that CAD is only one of many tools that make you great?
- Takes pride in exploring a new design?

If so, we want to talk to you about joining the Hydra-Flex engineering team. Come explore new product designs with us. We want to hear about the ways you will design to minimize risk and maximize performance. Impress us with your mechanical systems knowledge and show off your design skills. Amaze us with new concepts and ideas we haven't even thought of yet.

PRIMARY RESPONSIBILITIES

1. Provide significant creative and technical influence accompanying the responsibilities of new product design and testing using a self-starter mentality.
2. Use independent engineering judgment, concept, theories and principles to create new product.
3. Evaluate the feasibility of conceptual projects and prepare detailed analysis, including time and cost for completion.
4. Develop conceptual and detailed designs for complex mechanical components, subsystems, and systems utilizing hand calculations, customized spreadsheets, and software based engineering analysis programs.
5. Perform recurring engineering activities on existing products as needed.
6. Complete FMEA, DOE's, mistake proofing and tolerance analysis reports on designs as required.
7. Participate in both design and hands-on prototyping work to see products created and manufactured onsite in our adjoining factory and engineering lab.
8. Communicate and report project status to departmental managers.
9. Provide technical direction to mechanical technicians involved with fabrication, machining, testing, validation, installation, calibration, troubleshooting, and operations of complex mechanical systems.
10. Support development of work plans including work breakdown structures, cost estimates, and schedules. Provide input to project management for tracking costs and schedule.
11. Aid in high level customer technical support duties as required.
12. Help integrate new product into manufacturing.
13. Plan and participate in prototype and pilot runs.
14. Other duties as directed.

KNOWLEDGE AND SKILL REQUIREMENTS

1. BS or MS Degree in Mechanical Engineering.
2. 7 years of progressive experience relating to mechanical and fluid products design.
3. Wide breadth of experience with mechanical systems.
4. Expertise with the design of machined and injection molded components.
5. Possess a general understanding of Finite Element Analysis techniques.
6. Experience with Solidworks CAD software.
7. Highly competent in technical writing and verbal presentations.
8. Hands on experience with engineering validation.
9. Work in a fast-paced, small team environment under minimal supervision.
10. Assist with technical support of current and new products.
11. Demonstrated ability to interface with suppliers.
12. Demonstrated ability to meet schedule and cost commitments.
13. Proficient in the use of MS Office products.
14. Ability to lift 25 lbs.
15. Ability to stand 10-25% of the time.

COMPETENCIES:

1. **Drives for Results:** focuses and guides self in accomplishing work objectives



2. **Influence:** interacts with others in a way that gives them confidence in one's intentions and those of the organization.
3. **Stress Tolerance:** maintains stable performance under pressure or opposition; handles stress in a manner that is acceptable to others and to the organization.
4. **Technical/Professional Knowledge:** possess, acquires, and maintains the technical expertise required to do the job effectively and to create effective solutions.
5. **Execution:** sets high standards of performance for self, assuming responsibility and accountability for successfully completing assignments or tasks; self-imposing standards of excellence rather than having standards imposed.
6. **Fosters Trust:** understands the complexities of intellectual property and maintains the confidential nature or information.