

## Sr. Mechanical Engineer

Are you looking to join a high-tech 3D printing company that helps develop the next generation of spacecraft and electric vehicles? Fortius Metals is leading the effort to bring stronger metal alloys to large format robotic additive manufacturing (AM). We are a venture-funded, early stage, high growth company whose products have received multiple awards for high performance applications. We enable stronger, lighter fabrication for aerospace and defense customers with our patented 3D printing and welding alloys. Our long-term goal is to re-shore manufacturing in the USA.

We have an immediate opening for a Senior Mechanical Engineer to join our organization. This position will improve the capabilities and sales of high technology products by expanding the use of large format additive with global customers. The Sr. Mechanical Engineer will be responsible for guiding customer designs through fabrication, developing workflow, and project management for facility development. This role will work cross-functionally with Engineering, Sales, Marketing, and Operations.

Located just outside of Boulder, CO, this position is a foundational role in an emerging company. Fortius Metals offers a competitive salary commensurate with experience, a fun work environment, excellent health, dental, and vision benefits, and an equity position.

All candidates must be United States citizens. Candidates may be required to perform a background check, reference verification, credit check, and/or preemployment drug screening. Some travel may be required at times. No relocation reimbursement. Candidates submitted by third-party agencies will not be considered.

### **What you'll do:**

- You will work closely with structural aerospace engineers to design additive parts that demonstrate new possibilities for AM. You will also work to expand those possibilities by developing processes, techniques, and technologies. You will interact frequently with customers during development projects.
- Utilize and apply experience in a broad range of fields to understand welding machine development process and interactions between machine design and welding process development/optimization, providing the benefit of this understanding to increase the value proposition of high technology products.
- Identify capital tooling and work center capability needs and lead the efforts of standing up key factory capabilities.
- Drive first-time article builds through design analysis, build, post processing and test.
- Demonstrate the ability to define and implement a process from scratch and effectively communicate to a diverse team.
- Develop manufacturing process capabilities to support introduction of new products.
- Conceptual and detailed engineering of custom industrial automation equipment including robotic work cells, work piece tooling, and positioning equipment using 3-D CAD software (i.e., ProE / Creo and SolidWorks). Complete mechanical engineering items needed to design, build, ship and service products.
- Demonstrate mechanical aptitude for engineering custom / prototype mechanisms.
- Works with limited or no direct supervision. Develops procedures, gathers and correlates basic data and performs routine engineering
- Assignments are broad in nature, requiring originality and ingenuity.
- Serve as a team's mechanical engineer for major development projects or multiple simultaneous projects.

**What you need to know:**

To be successful in this role, you need to be a self-starter that is able to thrive in ambiguity, identify problems and quickly resolve them, and provide definition to the previously undefined. You should have a commitment to quality and the discipline required to achieve it. You will set the tone for how parts will be fabricated and tested. You will be the go-to Mechanical Engineer, capable of laying out the facility, standing up work centers, and establishing production 'norms.' You will be a trail blazer for the company, so you need to be self-motivated and able to influence in order to effectively implement your plans. You will need to balance a scrappy, get-it-done attitude with a vision for the long-term processes required for scaling and efficiency.

- Bachelor of Science degree in aerospace, mechanical, manufacturing, robotics or industrial engineering.
- Minimum of 7 years of experience in engineering or manufacturing environment.
- Proficient in at least one CAD program, design for additive manufacturing, and GD&T.
- Expert in at least 2 of the following: design engineering, robotic engineering, manufacturing, standing up work centers, facility layout development, business practice development, capital equipment development, authoring standard process documents, product flow optimization.
- Computer proficiency including MS Office (i.e., Microsoft Word, Excel, PowerPoint) and project management software is a must.
- Working knowledge of Design for Six Sigma and/or statistical Design of Experiments methodologies.
- Processes and applies a broad knowledge of engineering and scientific principles, practices and procedures, within the field of specialization, to the completion of difficult assignments.
- Excellent written and verbal communication skills.
- Natural curiosity and willingness to learn
- Dependable and hard working
- Takes initiative and has a sense of urgency
- Confident and positive attitude
- Great team worker

**Nice to have but not required:**

- Experience with metal additive manufacturing
- Experience justifying and successfully implementing capital projects, such as establishing new work center stations or qualifying new manufacturing processes
- Possesses and applies both practical and fundamental understanding of various arc welding processes
- Experience with Robotic Programming
- G-Code and machine shop programming experience
- Experience with Autodesk PowerMill, Fusion 360, Magics, N-Topology, Sysweld, Comsol, or similar
- Applied numerical analysis including fluid and structural (CFD, FEA)

If you meet these requirements and want to join a fast-growth company, email your cover letter and resume to [resumes@fortiusmetals.com](mailto:resumes@fortiusmetals.com) Include Job Title "Sr. Mechanical Engineer" in the subject of your email.

Fortius Metals is an Equal Opportunity Employer. We value diversity and are committed to creating an inclusive environment for all employees. All aspects of employment are decided on the basis of qualifications, merit, competence, performance and business need.

[www.fortiusmetals.com](http://www.fortiusmetals.com)