



Senior Mechanical Engineer - New Product Development

Location: Minneapolis-St. Paul

Optomec is the world-leading provider of additive manufacturing systems for high-performance applications in the Photovoltaic, Electronics, Biomedical, and Aerospace & Defense markets. The company has a global customer base of industry-leading manufacturers.

We are building a Twin Cities-based product development team with the mission to take our breakthrough Aerosol Jet technology to production scale, and deliver a rapidly expanding portfolio of rock-solid industrial solutions.

This is an awesome opportunity to become part of an elite team in a skunk-works-type atmosphere, and get in on the ground floor of a cutting-edge technology with incredible growth potential.

Responsibilities

- Develop Aerosol Jet additive manufacturing systems, including nanoparticle-ink handling, aerosol generation and transport, thermal control and mechatronics sub-systems.
- Identify, characterize and qualify component technologies, materials and manufacturing methods
- Develop product specifications and test protocols
- Perform engineering analysis and modeling to demonstrate system performance virtually
- Design parts and assemblies in SolidWorks
- Source components and manage suppliers
- Perform hands-on prototype assembly and system testing, in-house and in the field, supervise lab technicians
- Produce product documentation and test reports
- Interface professionally with suppliers and customers

Qualifications

- US citizen or permanent resident
- MS in Mechanical Engineering plus at least 5 years' experience in product design and development of industrial equipment or commercial devices; other degrees may be considered if complemented with additional relevant experience and achievements
- Significant accomplishments in high-performance fluid-dynamical systems or small-scale (gram/micron/millisecond) mechatronics
- Familiar with statistical process analysis and design of experiments
- Outstanding teamwork and communication skills, and high leadership potential
- Exceptional energy, technical insight, creativity and perseverance
- Strong work ethic, multi-functionality and willingness to pick up a wrench, soldering iron or shovel as needed



Additive Manufacturing Systems — from Nano to MACRO™

Additional preferred skills

- Aerosol mechanics
- Multi-phase computational fluid dynamics (CFD) modeling
- Electronics manufacturing, other high-volume manufacturing
- Solvents and nanoparticles
- Process development
- Systems engineering, reliability engineering, robust design
- Micro manufacturing
- Clean room technology