

American Boronite Corporation ("Boronite") is an early-stage advanced materials company focused on the development and manufacture of ultra-lite superfibers, superfabrics, and supercomposites made of continuous yarns and tapes of BNNTs (Boron Nitride Nanotubes) and CNTs (Carbon Nanotubes), often combined with other materials. Our materials have extraordinary structural and electrical properties that are ideal for electricity storage and distribution, actuation and monitoring, and advanced functional textiles and structural panels. Due to their high strength, light weight, and unique electrical, thermal and shielding characteristics, we expect our materials to become the backbone of a new class of structures that are multi-functional and offer tremendous cost and energy savings over existing materials.

We are seeking a hands-on, talented, and high-reaching multidisciplinary Mechanical Engineer to join our team. The Mechanical Engineer will be in-charge of the detailed design, optimization, and operation of our state-of-the-art nanomaterial production equipment. This is a full-time position.

In this position you will:

- Lead the design and prototyping of our nanotube textile production, fiber handling, and postprocessing systems.
- Prototype and build subsystems and modules.
- Work with Boronite's engineers and materials scientists to develop, characterize, and analyze properties of the material we make.
- Manage engineering interns throughout the year.

About You:

You are passionate about nanomaterials. You have a bachelor's or master's degree in Mechanical Engineering or a related discipline (Physics, Materials Science, etc.). You are a self-starter, skilled at working on teams, know how to ask for help when you are stuck, and are driven to learn. You have 5+ years of experience designing and building complex mechanical hardware systems.

Required Skills:

- You are an expert at designing in CAD software such as Autodesk Inventor or SolidWorks.
- You have superb project management skills and ability to execute on-time with minimal oversight.
- You feel at home in the machine shop. You are able to prototype parts you design on a variety of machines (mill, lathe, belt sander, bandsaw, drill press).
- You understand design for manufacture principles for a multitude of manufacturing methods including additive manufacturing and water jet.
- You are able to create detailed manufacturing and assembly drawings.
- You have experience working with servo and other digitally-controlled motors and with designing drivetrain systems.

Bonus skills:

- You are savvy at implementing motor control systems such as the Galil system.
- You are familiar with ANSYS, and/or other CFD modeling systems such as Autodesk CFD and OpenFOAM.
- You are knowledgeable about textile manufacturing processes and supporting equipment.
- You know how to interface with and/or develop programs in LabVIEW.
- You have experience designing for high temperature, oxygen-free, corrosive environments and hydrogen containing environments.
- You have spent time in a chemistry lab and feel comfortable with chemical process development.

If this sounds like you, submit a cover letter, a CV and names and contact information for two references to [Pavel.Bystricky@Boronite.com](mailto:Pavel.Bystricky@Boronite.com).

We are an equal opportunity employer and do not discriminate on the basis of race, gender, sexual orientation, color, religion, national origin, political affiliation, marital status, disability, genetic information, age, membership in an employee organization, parental status, military service, or other non-merit factor. Boronite offers a competitive salary and generous equity incentives and benefits for its employees. This position is open only to US Citizens.