

Title: Senior Engineer

Company: Burn Design Lab, BDL

Location: Vashon, WA

Modality: On-site / in person

Position type: Full-time / permanent

Overview: Do you have a passion for people, the environment, and international development? Are you both creative and results oriented? Are you ready to apply your skills and experience towards a compelling mission?

For over 2 billion people, cooking is a daily hazard. Women prepare meals using biomass fuels over open fires, exposing themselves and their families to dangerous levels of toxic smoke. The daily search for fuel degrades the local environment and allows little time for outside work, education, or rest, leaving women and girls trapped in a cycle of economic hardship and poor health.

Burn Design Lab (BDL) is dedicated to helping women and their families in the developing world live better, healthier lives through access to cleaner-burning cookstoves. Headquartered on Vashon Island, WA, BDL improves lives and protects the environment by researching, designing, and developing cleaner burning cookstoves with partners currently in the West African Region and Sub-Saharan Africa.

Position Summary: BDL is seeking a highly motivated and experienced Senior Engineer to help grow our engineering team. Reporting to the Executive Director and collaborating with the team of junior engineers/intern(s) and senior engineer volunteers, the Senior Engineer is responsible for helping manage projects, lead best practices, and develop cleaner burning stoves and manufacturing systems with our partners. This position requires a professional with a deep understanding of product design and manufacturing systems, a proven track record of successful program implementation, and a passion for improving women's lives and protecting the environment on an international scale.

Key Responsibilities:

- Working collaboratively with the engineering team of staff and volunteers, while guiding junior engineers and interns, to develop designs and prototypes of both cookstoves and cookstove manufacturing equipment, tooling, & systems.
- Using CAD to design and iterate cookstoves, tooling, jigs, fixtures related to cookstove manufacturing (and sheet metal forming) and ensuring design best practices are used across the engineering team
- Building cookstove prototypes from sheet metal (forming, spot welding, and general metal fabrication), ceramic, refractory, & other materials, while training junior staff on machine and equipment use and maintenance.
- Designing and developing 3D printed patterns, molds, or dies for casting, sheet metal fabrication, or forming ceramics/clay
- Conducting cookstove performance tests in the laboratory to analyze performance as part of our iterative design process and evaluating/selecting cookstove materials for durability
- Optimizing manufacturing layouts, workflows, and designs to scale production capacity of cookstove manufacturing partners in low- and middle-income countries
- Support in building out BDL's Product Lifecycle Management, Project Directory, Part Database, etc. with the intention of taking on the responsibility of managing it
- Lead effective project management with Executive Director to grow project and program impact as outlined in our BDL Strategic Plan
- Working with Business Development team to identify, build, and implement new projects and secure new partnerships aligned with BDL Strategic Plan

Qualifications:

- Minimum of 5+ years of demonstrated success in product and tooling design, manufacturing system optimization, and/or engineering team management experience
- Proven understanding of mechanical and industrial engineering best practices, including product lifecycle management, BOM management, parts management, revision control, manufacturing workflow optimization (5S, etc),
- Proficiency in 3D CAD software (currently using Fusion 360, Inventor, and Solidworks) and creating, checking, and approving 2D drawings
- Proficiency in CNC plasma/laser cutters, nesting, and other sheet metal manufacturing equipment and techniques (ie CNC press brake, etc)
- Proficiency in project management software (currently using Asana) and excellent project management skills, with the ability to prioritize tasks, meet deadlines, and manage multiple projects simultaneously.
- Proficiency in Microsoft Office Suite
- Demonstrated experience working collaboratively with internal and external stakeholders, including executive leadership, program staff, international partners, and volunteers.
- Strong analytical and problem-solving skills.
- Exceptional written and verbal communication skills.
- Strong passion and commitment for international development, women's health, and the environment.
- Ability and willingness to travel for up to a total of 1-2 months of the year to project locations.
- In-office/shop 4+ days per week when not traveling to project locations.

Preferred:

- Proven track record of building and maintaining a strong, highly capable, motivated teams – managing small sized teams of 3-10+
- Experience with manufacturing on the African continent, or other regions with more limited resources / capacity / infrastructure
- Experience with non-profit strategic planning and program/impact growth

Benefits:

- Range of \$75,000 – \$85,000 per year salary, commensurate with experience
- Opportunities to grow with the organization's success
- Compensation package includes access to company QSEHRA (health reimbursement arrangement), 403(b) with company match, 15 vacation days, 14 holidays, and sick days per year.

How to Apply: Interested candidates should submit a resume and cover letter outlining your qualifications and interest in the position to hr@burndesignlab.org. Please include "Sr. Engineer Application – <Your Name>" in the subject line. Applications will be accepted until the right candidate has been hired.

Burn Design Lab is an equal opportunity employer committed to diversity and inclusion. We strongly encourage diverse applicants to apply. BDL will ensure that persons with disabilities are provided reasonable accommodations for the hiring process in accordance with applicable law. If reasonable accommodation is needed, please contact us at hr@burndesignlab.org.