Job Description

**Job Title:** Director of Engineering  
**Level:** Director  
**Location:** Research Triangle Park, NC

bioMASON is a unique biotechnology start-up manufacturing company with a natural process that will significantly revolutionize the building and construction industry. bioMASON employs microorganisms and chemical processes to manufacture biological cement-based building materials in ambient temperatures.

Concrete is the second most consumed substance on earth following water. The production of cement accounts for over 8% of global CO2 emissions. bioMASON is driven by scaled proof that there is a better way to reduce these emissions.

bioMASON's products include proprietary manufacturing processes and materials. bioMASON’s products make it possible to manufacture in ambient temperatures using locally available materials, without using fuel or heat sources. bioMASON enables savings in energy costs and zero carbon emissions.

bioMASON offers the opportunity to manufacture biological cement materials with a revolutionary process that does not use fossil fuels. Instead, products are grown in less than 72 hours using natural biocement® as a binder for aggregates. Aggregate materials are waste and locally sourced. Biocement Products enable manufacturing to take place in ambient temperatures, using existing concrete equipment. bioMASON made products with biocements are tested in ASTM standard labs for strength and durability and exhibit higher performance.

bioMASON is distinguished by its unique technology, manufacturing costs, the use of local materials, greater environmental responsibility, customizable manufacturing process, and relatively low capital requirements.

The first commercially available product is bioLITH® Tile. The company competes in the marketplace through direct manufacturing and contracts.

bioMASON is privately held and headquartered in Research Triangle Park, North Carolina. For additional information, please go to the company’s website at [www.biomason.com](http://www.biomason.com).

**Position Summary**

The Director of Engineering will oversee manufacturing to develop, design, prototype, build and procure, install manufacturing equipment and automation solutions.

**Key Responsibilities**

*Supervisory Responsibilities:*
- Plans and coordinates the work of engineering staff.
- Oversees engineering staff and ensures that they meet goals and objectives.
- Services as hiring manager for all staffing needs; coordinates with human resources for all staffing and employee relations issues.
• Conducts performance evaluations that are timely and constructive.
• Provides training and mentoring as needed.

**Duties/Responsibilities:**

• Consults with Chief Production Officer, Chief Technology Officer and VP Manufacturing to create long-range operating and manufacturing roadmaps specific to the needs of the organization.
• Develops new solutions that are cost effective from concept to testing to production.
• Oversees progress and timeliness of projects, and under budgets.
• Reviews project reports to ensure projects are on schedule and within budget.
• Performs other related duties as required.
• Troubleshoot new or existing product problems involving designs, materials, or processes.
• Investigate or resolve operational problems, such as material use variances or bottlenecks.
• Identify opportunities or implement changes to improve manufacturing processes or products or to reduce costs, using knowledge of fabrication processes, tooling and production equipment, assembly methods, quality control standards, or product design, materials and parts.
• Apply continuous improvement methods such as lean manufacturing to enhance manufacturing quality, reliability, or cost-effectiveness.
• Incorporate new manufacturing methods or processes to improve existing operations.
• Determine root causes of failures or recommend changes in designs, tolerances, or processing methods, using statistical procedures.
• Design layout of equipment or workspaces to achieve maximum efficiency.
• Estimate costs, production times, or staffing requirements for new designs.
• Develop sustainable manufacturing technologies to reduce greenhouse gas emissions, minimize raw material use, replace toxic materials with non-toxic materials, replace non-renewable materials with renewable materials, or reduce waste.
• Purchase equipment, materials, or parts.

**Qualifications and Requirements**

• Master’s degree in Engineering required.
• At least ten years of related experience required including engineering leadership.
• Professional Engineer (PE) license preferred.
• Project Management Professional (PMP) is preferred, not required.
• Proven Operations Executive with a track record in the management, scale and optimization of the production process within a growing organization.
• Have broad functional experience (manufacturing/production, regulatory, safety, compliance, etc.) and experience at the intersection of Operations and Research & Development.
• Extensive management experience, as it relates to the building, expansion and development of manufacturing equipment and automation solutions.
• Possess strong decision-making, problem-solving and time management skills.

**Additional Preferred Attributes**
Leadership over multiple facilities.
Ability to move rapidly, while effectively ensuring quality standards are met.
Working knowledge of data analysis and performance/operation metrics.
Highly organized with excellent attention to detail.
Driven, self-motivated, creative, flexible, proactive, punctual, persistent.
Comfortable with a demanding, fast-paced work environment.
An excellent communicator.
Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Considering the relative costs and benefits of potential actions to choose the most appropriate one.

All bioMASON Employees must:

- Consistently demonstrate honesty and integrity through personal example.
- Follow all safety policies and proactively engage in safety initiatives.
- Produce high quality work with a focus on first time right.
- Exhibit a passion and aptitude for learning with an analytical mindset.

We invite all qualified, interested candidates to send your resume to jobs@biomason.com with the heading “CPO”. We offer competitive salary, a comprehensive benefits package and opportunity for advancement.

bioMASON Inc. takes affirmative actions as an equal opportunity employer to attract, promote, and retain the most fully qualified candidates without regard to race, creed, religion, color, citizenship status, national origin, sex, age, sexual orientation, predisposing genetic characteristics, genetic information, marital status, status as a domestic violence victim, arrest record, disability, military status, disabled veteran, recently separated veteran, Armed Forces Service Medal veteran, other protected veteran or other characteristic as protected by law.
EOE M/F/D/V