

## Senior Mechanical Design Engineer

### About us

At Leilac we're passionate about enabling the transition to a carbon neutral world by providing the most compelling decarbonisation solution for global cement and lime.

Operating across Europe, the Americas and Asia Pacific, Leilac's technology seeks to efficiently separate unavoidable carbon emissions ready for use or storage, without additional chemicals or processes. It aims to be scalable, retrofittable, energy agnostic and electrification ready, providing flexible and economical pathways to carbon neutral cement and lime.

Our purpose-driven team members are unwavering in their commitment to solve this urgent global challenge for industry, global society and our planet.

### The opportunity

We're looking for a **Senior Mechanical Design Engineer** to support the engineering design and development of Leilac's calciner technology.

The role will support the technology development through all phases of project execution, from feasibility to commissioning and operations, requiring a focus on design, R&D and optimization. The Senior Mechanical Engineer will assist in the design and development of pilot plants, prototypes and test apparatus, will develop test and validation plans and will support physical testing. This will require you to take ownership of particular design areas, to drive and deliver the tasks and responsibilities assigned by the lead project engineers and other business leaders.

Dependent on specific project requirements, the role will also require specifying and selecting mechanical equipment, designing the integration of equipment in new and existing plant and liaising with various disciplines to ensure design integrity for lime and cement plant systems.

### This role will be responsible for:

- Detailed mechanical designs, including specification of equipment requirements, equipment designs and fabrication methods.
- Mechanical engineering design and delivery, including use of tools such as standard engineering equations, empirical data, FEA, with a focus on thermomechanical stress, thermal expansion, cyclical thermal loading, heat transfer and thermodynamics.
- Working closely with, and in some cases leading, multi-discipline engineering teams (internal and external) to develop engineered solutions.
- Designing bespoke mechanical equipment, which may require collaboration with internal and external parties.
- Participation in R&D projects and programs. Including ideation and discovery phases.
- Development of documentation for and reporting of mechanical design validation including documentation of new processes.
- Evaluating vendor offerings and assisting with vendor selection and qualification.
- Working with operations and field teams (internal and external) to supervise the construction of test apparatus and prototypes and the execution of detailed test programs.
- Developing maintenance and inspection plans for designed equipment.
- Maintaining positive key Client and stakeholder relationships.

### **The right person will be able to demonstrate:**

- Bachelor of Engineering or equivalent (Mechanical, electrical (power), mechatronics, aerospace, or similar)
- 5+ years proven experience in detailed mechanical design
- Experience in first of a kind, or highly developmental projects requiring bespoke mechanical equipment, preferably equipment operating at elevated temperatures.
- Experience conceiving, scoping and executing new product development and research projects.
- Experience designing fixed plant systems for heavy industry (preferably lime and/or cement).
- Thorough understanding of thermomechanical stress, thermal expansion, cyclical thermal loading.
- Design 2D and 3D CAD software packages including AutoCAD, Inventor and other.
- An understanding of industrial plant design and key interface points, particularly lime and/or cement.
- Advanced problem-solving skills and ability to take the initiative in an ambiguous environment, solving unique challenges in a strategic context.
- A strong team approach and collaborative work style, great interpersonal skills and confident communicator

### **Our diversity statement**

Leilac embraces diversity and inclusion. It's one of our core values. We encourage individuals from diverse backgrounds and experiences to apply, as we believe that diversity strengthens our team and enhances our ability to innovate and achieve success.

We value skills, potential, and a passion for our mission above all else. We promote an inclusive and safe space for all and proudly welcome and support people of any race, ability, gender and identity. We are committed to recruiting, training, and promoting all employees regardless of gender, domestic responsibilities, marital status, religion, race, ethnicity, language, sexual orientation, disability or age. Fostering a diverse and inclusive culture is not just a moral imperative; it is foundational to driving innovation and business success.

### **What's in It for you:**

- Growing global organisation
- Work on innovative products that make a difference in the world
- Participation in company share incentive scheme

### **Get to know us at**

<https://www.leilac.com/>