

**Job Description:** Senior Mechanical Engineer

**Location:** Cradley Heath

**Reports to:** Chief Technical Officer

**Company:** Mechatherm International Limited

### About Us

Mechatherm International Limited is a world leader in the design and supply of bespoke furnaces and casthouse equipment for the aluminium industry. Every one of our designs is unique, built around our clients' needs, and engineered to drive efficiency, performance, and sustainability. With global projects spanning multiple continents, we are at the forefront of delivering pioneering technologies, including hydrogen-fuelled furnaces, to help decarbonise the aluminium industry.

### Role Overview

We are seeking a Senior Mechanical Engineer who is enthusiastic, innovative, and unafraid to challenge the norm. In this role, you will take ownership of designing and developing complex mechanical systems, working on one-of-a-kind projects that will shape the future of the aluminium industry. You will travel worldwide to collaborate with clients, suppliers, and installation teams, and play a key role in pushing our designs forward toward a greener, more sustainable future.

This is not a role for someone who wants to repeat the same designs day after day. No two projects are ever the same at Mechatherm and we are looking for a dynamic engineer who thrives in that environment.

### Key Responsibilities

- Lead the mechanical design of bespoke aluminium furnaces and casthouse equipment, from concept through to completion.
- Develop innovative solutions that incorporate emerging technologies, including hydrogen combustion systems and low-carbon furnace designs.
- Collaborate with multidisciplinary teams (projects, electrical, automation) to deliver integrated project solutions.
- Provide technical leadership, mentoring junior engineers and challenging traditional approaches where improvements can be made.
- Liaise with clients across the globe to understand their requirements and deliver designs that exceed expectations.
- Undertake international travel to customer sites for project meetings, installation support, and design validation.
- Contribute to Mechatherm's continuous improvement and R&D activities, helping shape the next generation of furnace technology.
- Ensure all designs comply with international safety and environmental standards.

### What Makes This Role Exciting

- Global Projects. Work with leading aluminium producers worldwide and travel extensively.
- Innovation at the Core. Be part of ground-breaking projects in hydrogen-fuelled furnaces and sustainable design.

- Unique Challenges. Every project is a one-off, in our 50 years in business no two designs have been the same.
- Real Impact. Help shape the decarbonisation of the aluminium industry and influence the future of global manufacturing.

### **Skills & Qualifications**

- Degree in Mechanical Engineering (or related discipline).
- Significant experience in heavy engineering, industrial equipment, or furnace/thermal process design.
- Proven ability to deliver innovative designs within complex engineering projects, ideally proficient in AutoDesk software.
- Strong problem-solving mindset, able to think differently and challenge convention.
- Excellent communication and collaboration skills with a willingness to travel internationally.
- Experience mentoring or leading small engineering teams.

### **What We Offer**

- Competitive salary and benefits package.
- Opportunities to travel globally and work on unique international projects.
- A dynamic, forward-thinking environment where your ideas will directly influence the future of our designs.
- The chance to work at the cutting edge of green furnace technology, helping the aluminium industry transition to a sustainable future.