

## PRESS RELEASE

# SUSTAINABLE MANUFACTURING IS INTEGRAL TO MIDLAND LEAD'S OPERATIONS

**CRANFIELD UNIVERSITY PHD RESEARCHER, ARUN PRABHAKAR JOINED MIDLAND LEAD AS THE TECHNICAL DEVELOPMENT MANAGER, AND ONE OF HIS MAIN ROLES IS TO CONTINUE TO IMPROVE THE COMPANY'S SUSTAINABLE MANUFACTURING PROCESSES.**



Originally from Kerala India, Arun is an accomplished PhD researcher of Cranfield University and has a sound knowledge of manufacturing and sustainability. Arun started working with Midland Lead as a PhD student in 2015, and it was clear from the beginning that he was able to effectively approach complex and demanding technical challenges then translated into solutions that improve sustainable manufacturing processes.

Midland Lead continued to work with Arun as an associate of the Knowledge Transfer Partnership at Cranfield University and now he has joined their team as the technical development manager.

As part of his association with Cranfield University's Knowledge Transfer Partnership, Arun was invited to present a paper at the TMS Conference in Phoenix, USA last year. The document **'Improving Energy Efficiency in Direct Method for Continuous Casting of Lead Sheets'** tackled the subject of energy consumption with respect to comparable lead processes and outlines evidence that the Midland Lead manufacturing process is more energy efficient in comparison to their direct UK competitors. In addition, this paper demonstrates Arun's deep understanding of being able to effectively analyse production and energy processes with precision, along with the technical knowledge of lead as a useable product for construction and other sectors.

Managing director of Midland Lead, Boudewijn Tuinenburg added; "Our commitment to keeping our operations as environmentally efficient as possible is what initially led us to approaching Cranfield University. We wanted to engage with a PhD student from the Sustainable Manufacturing Systems centre which has an excellent reputation.

"Since Arun joined us, he has been undertaking a number of key research projects on the manufacture of lead and his work will form an important part of how we operate into the future. We are very excited to be working with Arun and looking forward to how we can further implement advanced technologies in our end-to-end manufacturing processes."

### SUSTAINABILITY

Midland Lead recognise the fact that the manufacturing industry has a negative impact on the environment, and they explain that

they are committed to working on new ways of how to minimise the negative environmental impact through continuously improving production operations. This includes conserving energy, looking at every aspect of manufacturing processes and reducing waste. Midland Lead is very proud of the fact that they use every bit of lead that comes onto site.

With this in mind, one of the projects that Arun is involved in, is to help manage energy audits to ensure the company is maintaining strict energy efficient operations. Arun said; "The fabrication process plays a major role in how we use and conserve energy now and into the future. It is imperative that we understand and apply new processes to continue to make efficiencies using advanced technology.

"By the nature of the product our manufacturing process is energy efficient. Lead has a relatively low melting point of 327.5°C, therefore less energy is used in manufacturing compared to some alternative lead products. However, we are exploring how we can further optimise the melting and refining process that will have a positive impact on our energy consumption.

"Midland Lead's ongoing commitment is a great example of how a company should apply their ongoing responsibilities to sustainable manufacturing. This ongoing issue of how we can reduce waste and minimise negative environmental impact whilst conserving energy and natural resources, is something that we are hoping to lead the way now and into the future."

### 100% RECYCLED

Lead is the most recycled common used metal in the world, and Midland Lead is committed to creating a sustainable future. As well as the work that Arun and the team are doing with regards to improving energy efficiencies, they only use 100% recycled lead, reducing the requirement to source raw materials.

Boudewijn Tuinenburg concluded; "Cranfield University is well known for its knowledge of sustainable manufacturing techniques and Arun brings with him a wealth of technical expertise.

"Together they have helped Midland Lead demonstrate that we are committed to making strides forward in our approach to sustainable manufacturing. Every organisation should be aware of the impact they have on the environment. To this end, I would urge every organisation to constantly review their environmental policies. This encourages businesses to then make steps to improve practices that reduce the negative impact they may have on the environment. This it is not something that we should ever leave until tomorrow."