

## **Master thesis student: Material science**

*AMEXCI AB is a young and diverse joint venture R&D company founded by eleven of the leading industrial companies in Sweden. Our goal is to accelerate the industrial use of Additive Manufacturing (AM / Industrial 3D printing) and support our customers in adopting AM and staying competitive.*

*We support our customers throughout the entire process chain in the development of their products, using AM as an enabler for higher performance, increased efficiency, shorter lead times, and more. At our labs in Karlskoga, Sweden, we offer pilot production and development of parameters and procedures using state-of-the-art industrial AM equipment.*

*AMEXCI's Development department is currently looking for a strong Master Thesis candidate to head the development of new process parameters for a steel alloy for metal laser powder bed fusion (ML-PBF), aiming to increase productivity and optimize for mechanical properties.*

*Starting date is February 1:st and the project is planned for the following 20 weeks.*

### **What we offer:**

- A dynamic and fast paced environment with possibilities of growing within the company
- Becoming a part of our team of diverse and talented people from around the world
- The possibility of working with one of the fastest growing and impactful technologies of our time
- The possibility of working with some of the world leading companies in this area and to contribute to the global advancement of the technology

### **The Job:**

- You will be part of the Development team, learning about the process from talented industrial professionals
- You will learn about the ML-PBF process and apply this knowledge in the project
- You will create the DOE for higher productivity through increased layer thickness of a conventionally available steel
- You will prepare the samples for analysis in our new materials lab
- You will examine the samples using our analysis equipment
- You will assess the mechanical strength of your experiments using our mechanical test rigs.
- If time allows for it, you will also get a chance to expand on the work and develop surface parameters for the same material.
- You will work closely with our metallurgists and participate related activities

### **Qualifications**

- You hold a Master of science degree in engineering, material science or similar, focusing on metals
- You have a structured way of working, can work independently when required and are not afraid to take initiatives for improving the work.
- You are motivated and eager to learn continuously.
- It is necessary that you as a person have analytical skills, comfortable to work in a fast-paced environment and always strives to deliver according to time plan.
- Since our official company language is English, it is paramount that you have excellent English communication skills and you are comfortable with technical writing in English.
- Previous experience in additive manufacturing, mechanical testing, quality assurance or lab-work is a plus
- How you are as a person is important to fit within our team so part of the recruitment process will include meeting with your future colleagues.

### **How to apply**

To apply, please send your CV and cover letter to [kimfarnlund@amexci.com](mailto:kimfarnlund@amexci.com). Selection of candidates might occur during the recruitment time. We look forward to receiving your application as soon as possible but no later than 15th of December.

For more information about AMEXCI, please visit [www.amexci.com](http://www.amexci.com)