
Freemelt receives fusion research order

– Will develop new methods for 3D printing with tungsten for fusion power plants

Nasdaq First North-listed Freemelt – a high-tech commercial company whose groundbreaking solution creates new conditions for rapid growth in 3D printing – has received an order for a materials development project from the United Kingdom Atomic Energy Authority (UKAEA). The order means that Freemelt will develop manufacturing methods to print components with tungsten for use in future fusion energy power plants. The order value exceeds SEK 1 million.

Tungsten has great mechanical strength, high corrosion resistance and a melting point of 3,400°C, which makes it suitable for use in industrial processes involving extreme temperatures, such as fusion energy production.

"We are developing tungsten material processes for eMELT, our coming industrial metal 3D printer. Tungsten is difficult to manufacture with traditional methods and can be costly. Using our electron beam technology and our software, Pixelmelt, we will develop methods to enable production at scale," says Freemelt's CEO Daniel Gidlund and continues:

"We look forward to working with UKAEA in attempt to put fusion electricity on the grid."

Fusion energy has the potential to provide a safe, low carbon and sustainable part of the world's future energy supply. UKAEA is a global leader in fusion energy research and development.

"Fusion energy development is one of the greatest scientific and engineering challenges of our time," says Doctor Miguel Zavala-Arredondo at the United Kingdom Atomic Energy Authority.

In fusion machines, energy is created in the same way as in the sun by merging hydrogen atoms to helium. This reaction occurs at temperatures exceeding one hundred million degrees. The heat from this process is extreme and therefore the most heat-resistant metals in the chamber walls are needed.

"Tungsten is one of the strategic materials that Freemelt is developing and where we have made great progress in recent years. When we also have the opportunity to be part of the development of renewable energy, this is something we as a company are very inspired in and dedicated to", says Daniel Gidlund.

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About Us

Freemelt is a high-tech company whose ground-breaking solution creates new opportunities for rapid growth in 3D printing, also known as additive manufacturing. The company's protected technology enables cost-effective printing to a consistent and high quality. By choosing an open-source solution, the conditions are created for strong growth and expansion towards manufacturing markets.

Freemelt was founded in 2017, is listed on Nasdaq First North Growth Markets, has 34 employees, head office in Gothenburg and a manufacturing unit in Linköping. Read more at www.freemelt.com.

Image Attachments

[CEO Daniel Gidlund](#)

Attachments

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