

## **Aeromet secure NATEP backing for A20X™ powder development project**

A group of innovative companies led by Aeromet International are pleased to have been awarded funding from the National Aerospace Technology Exploitation Programme (NATEP) to further develop the innovative A20X™ advanced aluminium powder for additive manufacturing (AM).

As part of the High Strength Aluminium Powder for Additive Manufacture (HighSAP) project Aeromet, along with partners Renishaw, Rolls-Royce and PSI, are set to further optimise the A20X™ alloy for use in additive manufacturing and produce a set of demonstrator parts.

NATEP, an Aerospace Growth Partnership initiative, is an industry led programme supporting UK-wide companies in the aerospace supply chain to develop innovative technologies.

Mike Bond, Director of Advanced Material Technology at Aeromet, said: “We are very pleased to have been awarded NATEP funding for this exciting project. By working with our partners, we hope to further develop our powder technology and create a new option for high strength additive manufactured parts. NATEP is a great way for innovative companies to come together to develop cutting edge technologies”.

A20X™ is a family of next generation high-strength aluminium alloy technologies, developed and patented by Aeromet. The A20X™ family includes the Metallic Materials Properties Development and Standardisation (MMPDS) approved A205 casting alloy and A20X™ powder for additive manufacturing. A20X™ is an aluminium-copper alloy with a highly-refined microstructure and a unique solidification mechanism, giving it greater strength, fatigue and thermal characteristics compared to other alloys. A20X™ castings are already in production for high strength, high temperature aerospace applications and the HighSAP project aims to exploit the potential of A20X™ for additive manufacturing.

Dr Martin McMahon, Business Development Manager of Global Solutions Centres at Renishaw added, “Renishaw is very pleased to be a part of this project and for the innovative new A20X™ aluminium powder to be further developed using Renishaw’s additive manufacturing systems and network of Solutions Centres”. He continued, “Renishaw’s state of the art metal AM systems feature high power multiple lasers, class leading inert processing environment, and a unique open parameter development platform, making them ideal for investigating innovative new materials like A20X™”.

Paul Murray, Principal Materials Engineer at Rolls-Royce, commented: “Rolls-Royce are excited to participate in this project and contribute to the development of this very promising new aluminium alloy. NATEP is a proven programme with a strong track record of supporting innovation in the UK aerospace supply chain”.

Dr Gordon Kerr, PSI Ltd, said: “PSI are very pleased to be a partner in this project which aligns very well with our strategy of optimising powders for additive manufacturing. PSI technology combines VIM with inert gas atomisation and this project will utilise our knowledge of processing and handling aluminium alloy powders”.

## **Notes to editors:**

### **About Aeromet International**

Founded in 1982, Aeromet International is a leading supplier of cast metal parts to the global Aerospace and Defence industries. It provides major OEMs including Airbus, Boeing, BAE Systems and Rolls-Royce with parts ranging from engine and fuel system components to winglets and doors.

Aeromet is a technology-led business which specialises in the development of unique and innovative solutions for complex parts. The company has developed and patented A20X™, the world's strongest commercially available aluminium casting alloy.

Aeromet employs 260 people based at three sites in Sittingbourne, Rochester and its headquarters in Worcester. In February 2018 Aeromet announced the acquisition of the business and assets of Stone Foundries, adding employees and operations in Charlton.

Further information at [www.aeromet.co.uk](http://www.aeromet.co.uk)

### **About Renishaw plc**

UK-based Renishaw is a world leading engineering technologies company, supplying products used for applications as diverse as jet engine and wind turbine manufacture, through to dentistry and brain surgery. It has over 4,000 employees located in the 35 countries where it has wholly owned subsidiary operations.

For the year ended June 2017 Renishaw recorded sales of £536.8 million of which 95% was due to exports. The company's largest markets are China, the USA, Japan and Germany.

Throughout its history Renishaw has made a significant commitment to research and development, with historically between 14 and 18% of annual sales invested in R&D and engineering. The majority of this R&D and manufacturing of the company's products is carried out in the UK.

The Company's success has been recognised with numerous international awards, including eighteen Queen's Awards recognising achievements in technology, export and innovation.

Further information at [www.renishaw.com](http://www.renishaw.com)

### **About National Aerospace Technology Exploitation Programme (NATEP)**

The Aerospace Growth Partnership developed the National Aerospace Technology Exploitation Programme (NATEP) aimed at small and medium sized suppliers to help them develop their own innovative technologies to enhance their capabilities and increase their ability to win new business with higher tier companies anywhere in the world. The current programme builds upon the successful NATEP programme which ran between 2013-2017 and is now supported by funding from the Aerospace Technology Institute and Innovate UK.

By continuing to develop an aerospace supply chain with a high rate of innovation, rich in new technologies the UK will be better able to offer the right products and services, at the right time and ahead of competition. This will ensure that market opportunities are exploited with high value manufacturing work retained in the UK.

Further information at [www.natep.org.uk](http://www.natep.org.uk)