

Siemens strengthens footprint in Additive Manufacturing

- **Siemens invests in innovative manufacturing technology**
- **Acquisition of Materials Solutions in UK continues Siemens strategy for digitalization in manufacturing**
- **One of the world leaders in materials and Additive Manufacturing processing and production**

Siemens has acquired a majority stake (85 percent) in Materials Solutions Ltd., one of the world leaders in Additive Manufacturing (AM) processing and production. The remaining 15 percent will be held by the founder of the company Carl Brancher.

Materials Solutions in Worcester is a pioneer in the use of Selective Laser Melting (SLM) technology for the manufacture of high-performance metal parts. A specialty of the company is making turbomachinery parts, particularly high temperature applications for gas turbines where accuracy, surface finish and the highest quality of the materials is critical to ensure operational performance of the parts in service. In August 2015, Siemens Venture Capital acquired a minority stake (14 percent) in the company that currently employs more than 20 highly qualified engineers.

Financial details of the deal were not disclosed.

“With the acquisition of Materials Solutions, we are able to secure world-leading expertise in materials and AM process development with focus on high-temperature super alloys. The company’s strength is to turn models into high quality components in record time. Clearly Materials Solutions fits perfectly within our vision for growth and application of advanced technologies within our Power & Gas portfolio,” said Willi Meixner, CEO of Siemens Power and Gas Division.

Founded in 2006, Materials Solutions has proven applications in high demanding fields such as aerospace, power generation and motor sports. “We are very proud to become a part of Siemens,” said Carl Brancher, CEO of Materials Solutions. “I am sure our know-how and experience will make a significant contribution to Siemens' Additive Manufacturing strategy. Materials Solutions is developing the applications know-how and a supply chain for the world's most advanced engineering companies – delivering processes and precision parts from 3D CAD models, using software, lasers and metal powders,” he added. Materials Solutions will continue to focus on supporting external customers in those highly demanding environments in order to continuously drive and leverage innovations across different industries.

Since the rise of Additive Manufacturing, Siemens has been investing in the technology and is now driving towards industrialization and commercialization. Siemens has been using its internal competence in Additive Manufacturing including the support of Corporate Technology to help meet the customers' needs. Siemens extensively uses AM technology for rapid prototyping and has introduced serial production solutions for rapid manufacturing of small fuel mixers and for rapid repair of burner tips for mid-size gas turbines. Siemens in Finspång, Sweden, already started using Additive Manufacturing technology in 2009 and opened a production facility for metal 3D printed components in February 2016. This investment was the first step in the company's plans for mass manufacture and repair of metal parts with Additive Manufacturing. The first 3D printed burner component for a Siemens heavy-duty gas turbine is in successful commercial operation in a power plant in Brno, Czech Republic.

Additive Manufacturing is a process that builds parts layer-by-layer from sliced CAD models to form solid objects. Also known as '3D Printing' it has for some time been building design verification prototypes. Recent advancements in the technology have enhanced the potential of Additive Manufacturing for fully manufactured production parts. Fiber lasers are now available with enough power to melt high performance metal alloys to manufacture gas turbine or jet engine parts.



3D-printed burner heads

Materials Solutions manufactures Siemens burner heads.

This press release and further material are available at:

www.siemens.com/press/PR2016080358PGEN

For further information on Division Power and Gas, please see:

www.siemens.com/about/power-gas

For further information on Additive Manufacturing, please see:

www.energy.siemens.com/hq/en/services/industrial-applications/additive-manufacturing.htm

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