

PRESS RELEASE

PRESS RELEASEMay 25, 2016 || Page 1 | 4

Aachen Center for 3D Printing at RapidTech 2016: Additive Manufacturing Processes for Medium-Size Companies

Over the last several years, RapidTech in Erfurt has become a major venue for German users of 3D printing and additive manufacturing. The Aachen Center for 3D Printing is represented at Booth 925 in Hall 22, along with a double-decker bus from Aachen University of Applied Sciences, to offer exciting ideas for industrial users.

Nearly 4000 attendees from 15 countries were on hand for last year's RapidTech exhibition in Erfurt. This year, the organizers have significantly expanded the exhibition space while also extending the event by an additional day. Through the FabCon 3.D and RapidTech exhibitions as well as the RapidTech specialist conference with 700 participants (2015), they are targeting not only industrial users of additive manufacturing but also startups and creatives in the 3D printing community.

Experts from the Aachen Center for 3D Printing, a joint project of the Fraunhofer Institute for Laser Technology ILT and Aachen University of Applied Sciences, will again be on hand for the event. The project partners aim to provide small and medium-sized enterprises with easy access to the entire additive manufacturing (AM) process chain. To this end, they are offering training and further education initiatives in addition to consultation, hands-on training and joint projects.

Trying Out Additive Manufacturing in the FabBus

Aachen University's FabBus is a converted double-decker bus with eight training stations and twelve 3D printers on board. Located on the edge of Hall 2 next to the FabCon 3.D Forum, the FabBus is set to be quite an eye-catcher. The Aachen experts take the bus to customers, where employees from a wide range of manufacturing sectors can try out this technology. In addition to the training stations, the bus also features fully equipped design workstations and a variety of 3D printers for polymers.

This allows customers to observe and discuss all stages of additive manufacturing. From additive-friendly design to additive manufacturing, rework and quality analysis, the Aachen Center for 3D Printing offers its full range of expertise along the additive process chain. The center also offers programs for people to train as "Additive Manufacturing Designer" or "Additive Manufacturing Specialist."

Editorial Notes

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A Low-Cost SLM System for Medium-Size Companies

Aside from the training and further education of employees, capital investments in production systems represent the greatest barrier to entry in additive manufacturing. The FabBus has already succeeded in lowering these hurdles, yet the acquisition costs for production systems, particularly those for processing metallic materials, remain high.

And this is exactly the point of focus for a new project initiated by the Aachen Center for 3D Printing – the specialists are developing a 3D printer for metallic materials for under 10,000 euros!

At the conference

Cost structures also play an important role at the RapidTech specialist conference. On Tuesday, June 14, two experts from Aachen will be discussing “Machine-Specific Cost Drivers in Additive Manufacturing Using Laser Melting” (Johannes Schrage, Chair for Laser Technology LLT at RWTH Aachen University) as well as “Increasing Build-up Rates Using High-Power Selective Laser Melting for Ti6Al4V Material” (Maximilian Schniedenharn, Fraunhofer ILT).

With around 700 participants last year, the conference is one of the largest specialist events for additive processes in Europe. Split into a user convention and ten different expert forums, it provides participants with an overview of the current state of scientific research and offers user forums with topics ranging from “additive contract manufacturing” to “aviation”.

PRESS RELEASE

May 25, 2016 || Page 2 | 4

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Image 1:
The Aachen University of Applied Sciences' FabBus features eight workstations for training and further education as well as twelve 3D printers.

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PRESS RELEASE

May 25, 2016 || Page 3 | 4

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Image 2:
Tool for foaming of polymers. Due to its complex structure, it is produced using Selective Laser Melting.
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PRESS RELEASE

May 25, 2016 || Page 4 | 4

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