

ADDITIVE MANUFACTURING FOR CAR BODY ENGINEERING 2018

MARCH 13, 2018, BAD NAUHEIM, GERMANY



Workshop with
experts from
leading OEM e.g.
Audi, Daimler

When conventional production technologies reach their limits, it is time for additive manufacturing to strike. Additive manufacturing promises faster product development and replacement, better parts properties and significant cost savings – but it must be applied correctly and it entails a rethinking of product development. The huge potential of additive manufacturing processes can best be explored by structurally combining complex assemblies into a single component and integrating additional functions. This will ultimately save development time and cut assembly and production costs. According to current forecasts, market volume could increase fivefold in the coming years.

After a successful first conference, the Automotive Circle again addresses this manufacturing process.

Among the questions to be examined will be:

- ▶ What is the role of additive manufacturing processes in car body engineering?
- ▶ How great an opportunity is this for automotive production?
- ▶ Which technologies are available for series production?
- ▶ What do suppliers offer in the field of additive manufacturing?
- ▶ What practical experience has already been gained by OEMs?
- ▶ Which challenges need to be mastered by additive manufacturing processes if they are to make the leap into automotive series production?
- ▶ Which strategy is being pursued by OEMs?
- ▶ To what extent has additive manufacturing already been used in tooling and how has it benefited the users?

Answers will be provided by major OEMs and suppliers who will debate additive manufacturing as a strategic topic with attendees at length and in depth. The one-day event will feature a number of tone-setting and technology lectures, followed by discussion forums aimed at facilitating professional exchanges of opinion of the highest practical relevance.

IN COOPERATION WITH



Prof. Dr.-Ing. Claus Emmelmann
Director Fraunhofer IAPT



(The LZN Laser Zentrum Nord GmbH was incorporated into the Fraunhofer-Gesellschaft on January 1, 2018 as the Fraunhofer Research Institution for Additive Manufacturing Technologies IAPT, Fraunhofer IAPT for short.)

CONFERENCE CHAIR



Andrea Huber
Presidium
Automotive Circle
T +49 151 40260773
automotive.circle@web.de
automotive-circle.com



PROGRAM

08:00 am Registration and handover of conference documents

09:00 am Welcome
Andrea Huber, Automotive Circle, DE

IMPULSE

09:15 am Looking for the Big Haul – 3D printing heading for automotive serial production
Prof. Dr. Claus Emmelmann, Fraunhofer Research Institution for Additive Manufacturing Technologies IAPT, DE

09:45 am Additive product design – Applications and status
Dr. Florian Finsterwalder, Dr. Paul Fickel, Daimler AG, DE

COMPONENT PRESENTATION

10:15 am 3i-PRINT: concept, simulation and hardware realization of a modular, functionally integrated aluminum interior cross car beam
Stefan Herrmann, csi entwicklungstechnik GmbH, DE

10:45 am ☕ Coffee & contacts

11:15 am "LightHinge+": Additive production of lightweight bonnet hinges with integrated pedestrian protection
Sebastian Flügel, Edag Engineering GmbH, DE

11:45 pm LMD (Laser Metal Deposition) for progressive introduction of AM in Automotive
Dr. Antonio Candel-Ruiz, Trumpf Laser- und Systemtechnik GmbH, DE

12:15 pm Development and application of hybrid composite and metallic additive manufacturing for automotive structures
Dr. Ben Farmer, HiETA Technologies Ltd, GB

12:45 pm Mechanical behaviour of an additively manufactured structural part (crash box) in comparison to series production
David Miller, Robert Hofmann GmbH, DE

01:00 pm 🍴 Lunch

WORKSHOP

02:00 pm Additive manufacturing en route to automotive series bodies – Challenges and potentials
Prof. Dr. Claus Emmelmann, Fraunhofer Research Institution for Additive Manufacturing Technologies IAPT, DE

03:45 pm Metallic 3D Printing at Audi – Latest developments
Martin Bock, Audi AG, DE

04:15 pm Applications of 3D Printing Additive Manufacturing for Lightweight Vehicle Bodies
Leon Kaunitz, Nio USA, US

04:45 pm Farewell and end of conference
Andrea Huber, Automotive Circle, DE

Subject to change (status as of March 7, 2018)

THE CONFERENCE ADDRESSES:

Car body engineers, managers and employees of OEMs, suppliers and institutes working in the field of additive manufacturing processes.

CONFERENCE FEES

Standard: 895,- €*

Combi-ticket: 2.395,- €* (plus conference „Strategies in Car Body Engineering“, March 14 – 15, 2018, unit price starting 1.995,- €*)

* all prices plus German VAT

CONFERENCE VENUE

Hotel Dolce Bad Nauheim
Elvis-Presley-Platz 1, DE-61231 Bad Nauheim
T +49 6032 303-0, F +49 6032 303-529
info@dolcebadnauheim.com
www.dolcebadnauheim.com

TERMS AND CONDITIONS

Information and registration at
www.automotive-circle.com



YOUR CONTACT

Kirsten Heni
Event Manager
Automotive Circle
T +49 511 9910-378
kirsten.heni@vincentz.net



Program updates at
www.automotive-circle.com

Picture: ©chesky/ fotolia.com