

### TUESDAY | FEBRUARY 6

8.00 am Welcome and conference introduction
Dr. Dirk Meine, Automotive Circle, DE
Dr. Jan-Philipp Weberpals, Audi AG, DE

#### **OEM STATUS REPORTS**

8.15 am

Holistic approach for laser beam welding for cell contacting of battery modules with highest quality

Dr. Jan-Philipp Weberpals, Audi AG, DE; Konstantin Ribalko, Precitec GmbH & Co. KG, DE

8.45 am

Border conditions for laser applications in BIW at the Volkswagen brand

Meinulf Hinz, Volkswagen AG, DE

9.15 am Copper and aluminium welding in e-automotive:
Renault's state of the art

Christian Brémont, Groupe Renault, FR

9.45 am Meet the Speakers / Coffee and contacts

#### **BODY STRUCTURE**

10.30 am Optical Coherence Tomography (OCT) in combination with actual welding tasks
Richard Steinbrecht, Lessmüller Lasertechnik GmbH,
DE

11.00 am Al-based quality control for laser brazing and aluminum welding applications
Dr. Michael Ungers, Scansonic MI GmbH, DE

11.30 am Improving the weldability of 22MnB5 in laser beam welding by process superposition with ultrasonic waves

Christian Wolf, University of Kassel, Department for

Cutting and Joining Manufacturing Processes, DE Welding aluminum for automotive applications with dynamic beam laser

Dr. Robert Bernhard, Civan Lasers Europe GmbH, DE

12.30 pm Meet the Speakers / Lunch break

#### **BATTERY CELLS**

12.00 pm

1.45 pm Innovative process and machine for Laser-Tab-Welding
Dr. Dmitrij Walter, Manz AG, DE

2.15 pm Highly productive e-mobility applications with a focus on welding contacts for cylindrical batteries
Dr. Axel Luft, Scansonic MI GmbH, DE; Uwe Bergmann, Bergmann & Steffen GmbH, DE

2.45 pm Laser welding lattice to cell with in-process monitoring
Dr. Mohamed Al-Badani, Jaguar Land Rover Ltd., UK
Dr. Paul Webster, IPG Photonics Corporation, CA;

3.15 pm Meet the Speakers / Coffee and contacts

#### **BATTERY SYSTEM**

4.00 pm Laser scanner welding of aluminum busbars
Dr. Dirk Steffens, Mercedes-Benz AG, DE; Lutz König,
Precitec GmbH & Co. KG, DE

4.30 pm — online presentation —

Porosity reduction in laser

Porosity reduction in laser welding of Al sheets from BIW to e-mobility

Masoud M. Pour, General Motors Company, US

5.00 pm Precision Power Laser: A step change in automotive joining

David Kilburn, The Lincoln Electric Company, US

5.30 pm Laser welded leak-tight aluminum cooling solutions
– series application and progress in large cooling
plates industrialzation

Oliver Quirin, Trumpf Laser- und Systemtechnik GmbH, DE

6.00 pm Meet the Speakers / Get together

7.00 pm Networking Night

\* All times in CET (UTC+1)
Conference program is subject to change
Status as of: February 2, 2024



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EALA -

**EUROPEAN AUTOMOTIVE LASER APPLICATIONS 2024** 



## WEDNESDAY | FEBRUARY 7

NEW THINKING		
8.00 am	Electrification of the sky and the unique laser welding requirements of the eVTOL industry Sebastian Moser, Precitec, Inc., US	
8.30 am	Addressing the challenges of laser welding for the electric mobility of the future with a beam-shaping solution integrated within the laser head Thibaut Atché, Cailabs, FR	
9.00 am	Evaluation of dual core fiber for automotive seat laser welding applications Luc Leportier, Forvia SE, FR	
9.30 am	Diode Lasers with high wall-plug efficiency for battery cell drying and brake disk cladding Dr. Johannes Schäfer, Laserline GmbH, DE	
10.00 am	Meet the Speakers / Coffee and contacts	
WELDING COPPER		

	Luc Leportier, Forvia SE, FR
9.30 am	Diode Lasers with high wall-plug efficiency for battery cell drying and brake disk cladding Dr. Johannes Schäfer, Laserline GmbH, DE
10.00 am	Meet the Speakers / Coffee and contacts
WELDING (	COPPER
10.45 am	Mechanisms and fascinating insights into the formation of pores during welding of copper using different kind of laser sources  Dr. Andreas Heider, Robert Bosch GmbH, DE
11.15 am	Melt pool behavior during hairpin welding – a computa- tional fluid dynamics approach Dr. Marcin Serdeczny, Flow3D, Inc., US
11.45 am	Application of Laser processing in the visible range for e-mobility parts Dr. Hideaki Shirai, Denso Corporation, JP
12.15 pm	Examples of tailored solutions in laser welding: High power blue laser application in copper welding; benefit of single mode laser in aluminum remote welding; IR beam shaping applied to martensitic stainless steels Stefano Zarini, Optoprim srl, IT

12.45 pm Meet the Speakers / Lunch break

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2.00 pm	Laser welding quality inspection through the process monitoring to minimize the defect rate of the EV battery welds  Dr. Yongjoon Cho, Monitech Co., Ltd., KR
2.30 pm	High-throughput printing of laser seams at micro- meter-accuracy for the e-mobility vehicles of tomorrow Thibault Bautze-Scherff, Blackbird Robotersysteme GmbH, DE
3.00 pm	High-productivity, high-quality laser welding of bipolar plates for fuel cells Dr. Dahv Kliner, nLIGHT, Inc., US
3.30 pm	OEM CONCLUSIONS  Members of the OEM Advisory Board on current trends and challenges in laser-based automotive manufactu-

# 3.45 pm Farewell address and end of the conference Dr. Dirk Meine, Automotive Circle, DE

ring processes

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