

Organiser

Gesamtverband der Aluminiumindustrie e.V. (GDA) is the German association of aluminium companies that produce raw aluminium or aluminium products, also in combination with other materials. As a trade association it represents the interests of an efficient aluminium industry in Germany.

WWW.ALUMINIUM-CONGRESS.DE

D-A-CH

D-A-CH is the network of German, Austrian and Swiss associations representing the interests of aluminium companies in their countries.

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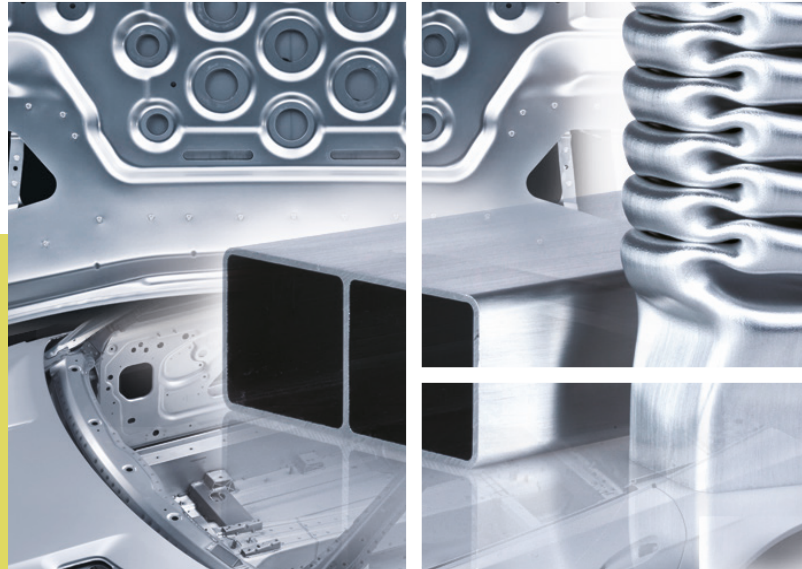
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PROGRAMME

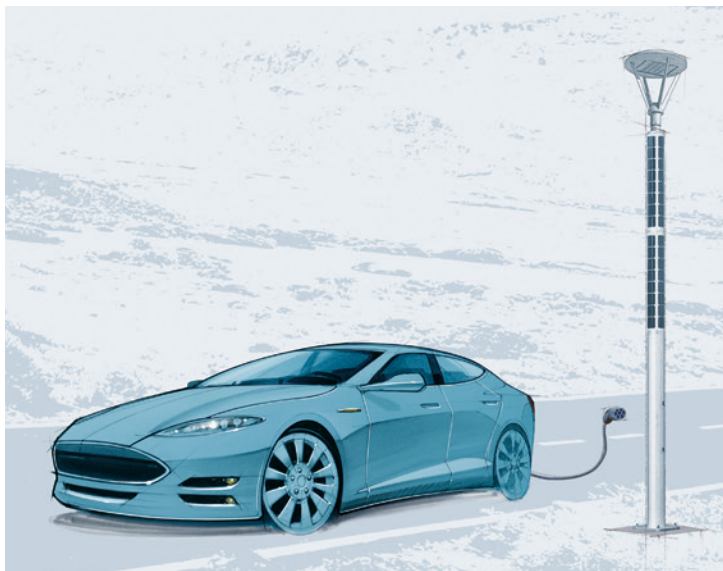
Aluminium in Automotive
Engineering – Challenges
and Solutions

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Driving lightweight solutions

We add value to your automotive applications

- Reduced weight through optimized design
- Improved safety
- Enhanced visual appearance
- Pioneering products for e-mobility
- Easier assembly through functional integration and innovative fabrication methods
- Global design and application support for customized solutions

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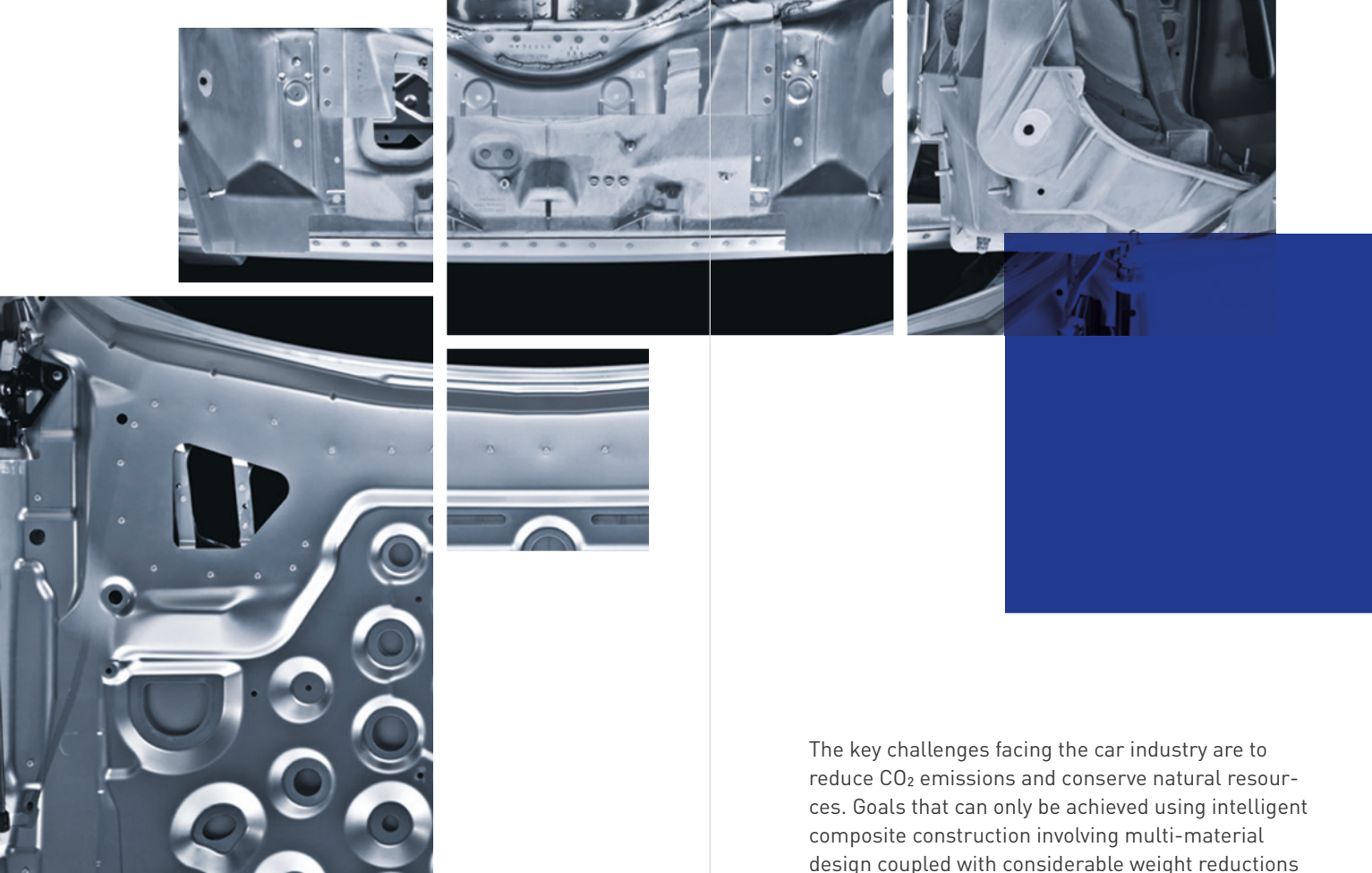
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Introduction

Aluminium has become firmly established as the material of choice in numerous markets. And the future holds even more uses in store, especially in the car industry, where aluminium is already the most important material for lightweight design — whether it be for engines, in the body area, for structural components or in the chassis. The aluminium content of cars will increase still further in years to come and will present the aluminium industry and the car industry with massive challenges.

The key challenges facing the car industry are to reduce CO₂ emissions and conserve natural resources. Goals that can only be achieved using intelligent composite construction involving multi-material design coupled with considerable weight reductions in vehicle manufacturing. Given the megatrends such as future mobility, electromobility, innovative hybrid technologies and additive manufacturing, new solutions and applications using aluminium alloys will be increasingly in demand.

At the EAC 2017, with its theme “Aluminium in Automotive Engineering – Challenges and Solutions”, the various possible applications of aluminium in vehicle manufacturing will be presented together with possible developments that will make vehicles of the future lighter and more energy efficient. Participants

The EAC – European Aluminium Congress 2017 is aimed at representatives from aluminium industry, customer industry and research facilities.

Programme overview

Speakers and participants from the aluminium industry automotive component suppliers, OEMs, plant manufacturing and mechanical engineering will discuss innovative developments and new technologies for the automotive engineering of the future.

Simultaneous
translation into
German ↔ English
during the
sessions

DAY 1 | 27.11.2017

12:00 – 13:00	Registration & Get-together
13:00 – 13:10	Opening
13:10 – 13:30	Keynote 1 Sapa, John Tuestad
13:30 – 13:50	Keynote 2 AIRBUS, Peter Sander
13:50 – 14:10	Keynote 3 EOS - Fabian Krauß
14:10 – 14:30	Coffee Break
14:30 – 16:00	SESSIONS 1 & 2 – Presentations Part 1
16:00 – 16:30	Coffee Break
17:00 – 18:00	SESSIONS 1 & 2 – Presentations Part 2
19:00	Dinner & Get-together in Düsseldorf

DAY 2 | 28.11.2017

09:00 – 10:30	SESSIONS 3 & 4 – Presentations Part 1
10:30 – 11:00	Coffee Break
11:00 – 12:30	SESSIONS 3 & 4 – Presentations Part 2
12:30 – 13:30	Lunch
13:30 – 15:00	SESSIONS 5 & 6 – Presentations Part 1
15:00 – 15:30	Coffee Break
15:30 – 17:00	SESSIONS 5 & 6 – Presentations Part 2
17:00	End of Event

DAY 1* - 27.11.2017

KEYNOTE

ROOM DÜSSELDORF

Chairman: Christian Wellner | GDA e.V.



■ **13:00 – Opening and Welcome**
Hinrich Mählmann | GDA President,
personally liable partner of OTTO
FUCHS KG



■ **13:10 – Keynote 1**
Driving a lightweight future with smart
& sustainable aluminium solutions
John Thuestad | Executive Vice President
& Business Area President - Extrusion
Europe | Sapa Group



■ **13:30 – Keynote 2**
On the way to Additive Manufacturing-
Industrial Production enabled by
Al & Ti - Metal-Powders
Peter Sander | Vice President Emerging
Technologies & Concepts | Airbus



■ **13:30 – Keynote 3**
Additive Manufacturing in Automotive
Fabian Krauß | Business Development
Manager | EOS GmbH

MARKETS

SESSION 1 | ROOM DÜSSELDORF

Chairman: Marius Baader | Verband
der Automobilindustrie e.V.

■ 14:30

The Global Aluminium Market Outlook

Anil Patel | CRU Analysis | UK

■ 15:00

Aluminium market & market outlook

Julian Brockhaus | TRIMET Aluminium SE | Germany

■ 15:30

**The impact of electrification on lightweighting
and aluminum demand**

Hélène Wagnies | Ducker Europe | Germany

■ 16:30

Global Automotive Markets Overview

Marius Baader | VDA - German Association of
the Automotive Industry | Germany

■ 17:00

Aluminium's contribution to low carbon mobility

Patrik Ragnarsson | EA - European
Aluminium | Belgium

■ 17:30

Steel and aluminum, quo vadis?

A pathway to growth in challenging times

Nils Naujok | PWC - Pricewaterhouse Cooper
AG, Strategy & Germany | Germany

SURFACE, CORROSION, RECYCLING

SESSION 2 | ROOM PEKING

Chairman: Dietrich Wieser | ARCONIC

■ 14:30

**Progress in Resistance against Intergranular
Corrosion at Aluminium Extrusion**

Horst Gers | HAI Extrusion Germany GmbH | Germany

■ 15:00

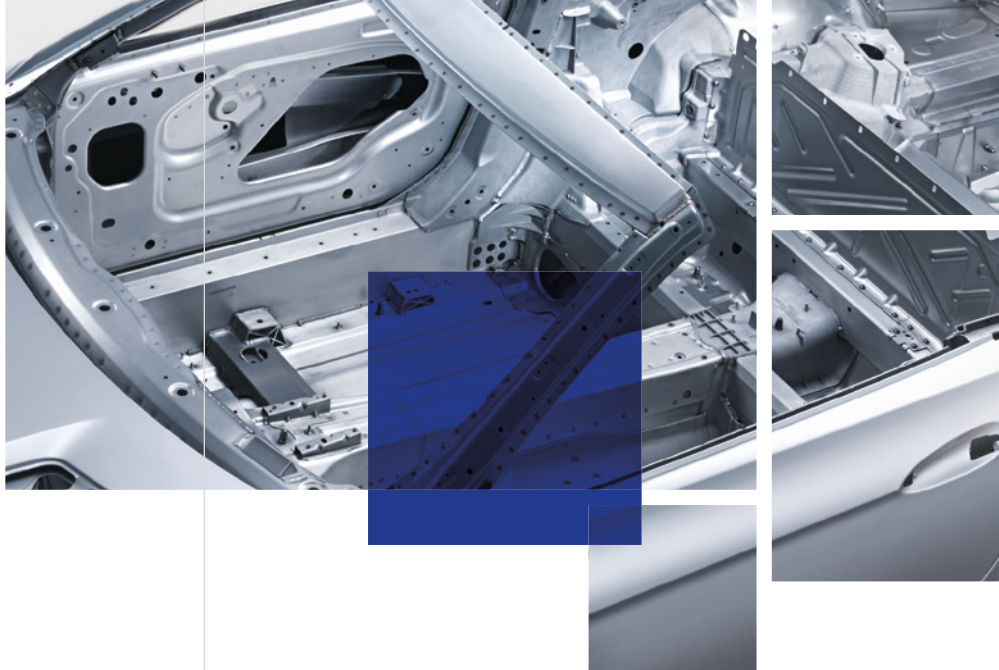
**Aluminium Skin Pass Rolling in Laboratory
Mill Trials and Industrial Practices**

Walter Wengenroth | SMS group GmbH | Germany

■ 15:30

**Principles of cognitive modelling for
recycling-friendly 6xxx series aluminium alloys**

V. M. Kevorkijan | Impol Aluminium Group | Slovenia



■ 16:30

Change of Slag Characteristics due to Chemical Composition and Refinement Process Parameters in Aluminum Alloys

Ali Ulus | Teknik Alüminyum A.Ş | Turkey

■ 17:00

From Scrap to First-Class Aluminium by using a Production Management System for Recycling Plants

Gunther Schober | PSI Metals Non Ferrous GmbH | Germany

■ 17:30

Assessing the susceptibility of a substrate to filiform corrosion without applying a paint layer

Alban Morel | National Research Council Canada | Canada

* Status: June 2017. Subject to change without prior notice



DAY 2* - 28.11.2017

BODY STRUCTURE AND EMOBILITY I

SESSION 3 | ROOM DÜSSELDORF

Chairman: Michael Aumüller | AMAG Austria Metall GmbH

■ 09:00

Battery frames for electric vehicles – benefits with aluminium extrusions

Jonas Bjuhr | Sapa Extrusion Europe | France

■ 09:30

High-performance crash alloys and crash management solutions for lightweighting programs

Herve Ribes | Constellium | France

■ 10:00

Contributions to the implementation of Electric Mobility with Aluminium

Andreas Kleine | TRIMET Automotive Holding GmbH | Germany

■ 11:00

Analysis Of Impact Factors On Crash Performance Of High Strength 6082 Alloys Consider Microstructure And Small Modifications Of The Profile Geometry

Andreas Schiffel | Hammerer Aluminium Industries Extrusion GmbH | Austria

■ 11:30

Friction stir welding in e-mobility applications

Axel Meyer | RIFTEC GmbH | Germany

■ 12:00

Strategies for the implementation of innovative aluminum structures in the car body

Lars Maaß | BMW Group | Germany

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PROCESSES AND JOINING TECHNOLOGIES I

SESSION 4 | ROOM PEKING

Chairman: Gerson Meschut | University Paderborn

■ 09:00

Additive Manufacturing at OTTO FUCHS – status quo and future challenges

Frank Meiners | OTTO FUCHS KG | Germany

■ 09:30

Correlation between welding time and electrode wear for resistance spot welding of aluminum alloys

Markus Tuchtfield | Volkswagen AG | Germany

■ 10:00

Cryogenic formability of aluminium alloys for automotive applications

Belinda Gruber | Chair of Nonferrous Metallurgy, Montanuniversitaet Leoben | Austria

■ 11:00

Composite extrusion of profiles for automotive applications under industrial conditions

André Schulze | Institute of Forming Technology and Lightweight Components | TU Dortmund | Germany

■ 11:30

Sustainable Source Using and Minimization of the Environmental Effects in Aluminum Sheet Production

Ali Ulus | Teknik Alüminyum A.Ş | Turkey

■ 12:00

Aluminum on the move – demands placed on a state-of -the-art floater furnace facility for automotive grade material

Carl-August Preimesberger | EBNER Industrie-ofenbau GmbH | Austria

BODY STRUCTURE AND EMOBILITY II

SESSION 5 | ROOM DÜSSELDORF

Chairman: Herve Ribes | Constellium

■ 13:30

Energy-efficient lightweight material processes for e-mobility applications

Amir M Horr | LKR | Austrian Institute of Technology | Austria

■ 14:00

Tribological engineering for automotive body sheet applications

Henk-Jan Brinkman | Hydro Aluminium Rolled Products GmbH | Germany

■ 14:30

Aluminium manufacturing parameters via in-situ analysis of precipitation and dissolution processes

Olaf Kessler | University of Rostock | Rostock | Germany

■ 15:30

How far can a BEV (battery electric vehicle) go ... OR ... how to attack the “Reichweitenangst”

Lothar Löchte | Erbslöh Aluminium GmbH | Germany

■ 16:00

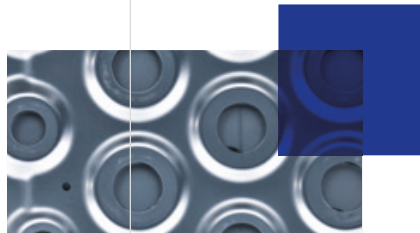
Opportunities for aluminium extrusions in the ‘ideal truck’

Lars Inge Arwidson | Sapa Extrusions Europe | Sweden

■ 16:30

5xxx series aluminium alloys for automotive applications

Paul Ebenberger | Chair of Nonferrous Metallurgy, Montanuniversitaet Leoben | Austria



PROCESSES AND JOINING TECHNOLOGIES II

SESSION 6 | ROOM PEKING

Chairman: Hartmut Janssen | Hydro Aluminium

■ 13:30

Process development for mechanical joining of 7xxx series aluminum alloys

Mathias Jäckel | Fraunhofer Institute for Machine Tools and Forming Technology | Germany

■ 14:00

Formability of aluminium alloys to steel using friction stir welding with a newly developed type of weld joint

Phuc Lanh Nguyen | University of Stuttgart - Institute for Metal Forming Technology | Germany

■ 14:30

Changing times in the aluminum heat treatment process - Minimizing costs and CO₂ emissions through the introduction of the mobile and modular rental systems

Markus Belte | ATC ALUVATION Technology Center Paderborn GmbH | Germany

■ 15:30

Friction spot welding of high strength aluminium alloys with and without additional Sealer

Christopher Schmal | Laboratory for Materials and Joining Technology (LWF) University of Paderborn | Germany

■ 16:00

Virtual Modeling of High Strength Aluminum Forming at Elevated Temperatures

Michael Machhammer | AP&T AB | Sweden

■ 16:30

RUSAL products for automotive weight reduction
Dmitriy Ryabov | RUSAL | Russia

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Registration information

Event registration for the European Aluminium Congress 2017 may be done online as well as by post:

GDA – Gesamtverband der Aluminiumindustrie e.V.
Am Bonnhof 5 | 40474 Düsseldorf | Germany

eac 2017@aluinfo.de | www.aluminium-congress.com

For questions, please contact:

Mr. Georg Grumm

Phone: +49 211 4796 160 | georg.grumm@aluinfo.de

Select and register

To register by post, please fill out the form, including your session selection and your address details.

☐ I will attend the EAC 2017

☐ I will attend the Get-together

- ☐ SESSION 1 Markets
- ☐ SESSION 2 Surface, Corrosion, Recycling
- ☐ SESSION 3 Body Structure and eMobility I
- ☐ SESSION 4 Processes and Joining I
- ☐ SESSION 5 Body Structure and eMobility II
- ☐ SESSION 6 Processes and Joining II

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-€ 100
Early-
registration
discount

The registration fee for the congress is 970 Euro per person plus VAT. There is an early-registration discount of € 100 for all registrations received by 15 September 2017– the registration fee is then 870 Euro per person plus VAT.

The registration fee includes: admission to all presentations and the exhibition, congress documents, refreshments during breaks, an evening meal and lunch.

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Street

Country

Phone

First name

Department

Zip-Code/City

E-Mail

VAT identification Nr.

X

Date and Signature

Hotel Accommodation

A limited number of rooms has been reserved for congress participants at a reduced rate of € 159 per single room incl. breakfast. The rooms can be booked using the code "GDA" and will be allocated in the order in which they are received. On our website you may download a form for booking your hotel room.

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How to find us

By car: Leave the motorway A44 at exit "Düsseldorf Flughafen". Follow signs "Arrivals" and then "Airport City". The Maritim Hotel Düsseldorf is now directly in front of you.

By rail: Take the train to "Flughafen Düsseldorf Fernbahnhof" and change to the sky train. Leave the sky train at the end of the line at "Terminal C". Guests travelling via "Düsseldorf Hbf/Main Station" can change there on to the S7 local train, which runs directly to the "Düsseldorf Flughafen Terminal C".

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By plane: Please use the direct access from "Düsseldorf Flughafen Terminal C" to Maritim Hotel Düsseldorf.

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Registration details

You are kindly requested to register by post, or online. Once your registration has been received, we will issue an invoice, which is also confirmation of your booking. If the invoice is not paid within the period allowed for payment, we cannot guarantee your participation. You will not be issued with a ticket for admission in advance. Instead, when registering on 24 November 2017, you will receive a name badge that will allow access to the events.

In case of non-attendance, the full registration fee is payable. However, a replacement can be nominated at no extra charge. If registration is cancelled in writing on or before 31 October 2017, the full registration fee will be refunded less a fixed-sum cancellation charge of 150 Euro.

GDA reserves the right to make programme changes for urgent reasons. In the unlikely case that the event has to be cancelled, any registration fees already received by GDA will be refunded in full. Any further liability is excluded.