Applying Industry 4.0 to the aluminium industry

CONFERENCE PROGRAMME

What does Industry 4.0 mean to the future of the aluminium industry and how can it assist in the quest for greater efficiencies?

Join us at the Future Aluminium Forum in Milan to join this debate, hear from experts and network with solution providers and industry peers.

The Future Aluminium Forum is a live discussion that will examine how Industry 4.0 and ‘smart manufacturing’ will revolutionise aluminium manufacturing and processing and analyse the benefits that can be gained from doing so.

Speakers from academia, across the aluminium supply chain and technology providers will explain key concepts behind the digitalisation of aluminium manufacturing; as well as covering the importance of cyber security, the role of human beings in the factory of the future, autonomous equipment and the all-important process safety and control.

www.FutureAluminiumForum.com
Welcome to the Future Aluminium Forum
Nadine Bloxsome, Editor, Aluminium International Today

Opening Welcome Address
Dr Mauro Cibaldi, President, CentroAl

Keynote: From Automating Knowledge to Doing the Impossible: Five Top Use Cases for the Aluminium Industry to go Digital
Stefan Koch, Global Lead for Metals, SAP SE

Session One: The Digital Revolution
The Origins of the Industry 4.0 Concept
Dr Mario Gibertoni, Gruppo Studio Base

Guided Maintenance with Microsoft HoloLens
Mark Breeden, HSO

Implementing Industry 4.0
Dan Miller, Innoval Technology Ltd

Session Two: Industry 4.0 in Aluminium Manufacturing: Status, Strategy and Capabilities
Combining Physically Based Models and Artificial Intelligence in Future Production of Aluminium Extrusions
Hans Erik Vatne, Trond Furu, Ole Daaland, Rune Østhus and Ole Runar Myhr, Norsk Hydro

Dedicated Data Warehouse Solution for Rolling Mills
Hans Peintinger, General Manager, QuinLogic GmbH

A Big Data Platform for Industrial Cloud Applications
Roger Feist, Digitalisation, Achenbach Buschhütten

Accelerating the Application of Material and Manufacturing Innovations Through Open Challenges
Marcos Ierides, Innovation Consultant, Bax & Company

Session Three: Plant Security and Safety
Managing the Cyber Security Risks in Advanced Manufacturing
Alexes Garcia-Perez, Reader in Cyber Security Management at the Centre for Business in Society of Coventry University (UK)

Trend of Automation and Data Exchange in Manufacturing Technologies
Dr Carl Stephen Patrick Hunter BA (Dunelm) Hon DSc FRINA FIMarEST MRAeS, CEO & MD, Coltraco Ultrasonics

Session Four: The Smelter of the Future
Towards a 4.0 in the Process Industry landscape: The Smelter of the Future
Claude H. Vanvoren, President, AVTAL Association

The Karmøy Technology Pilot – Industry 4.0 from Words to Implementation
Hans-Erik Vatne, Chief Technology Officer, Hydro

Aluminium Smelting in the Age of Renewable Energy and the Internet of Things
Geoff Matthews, Energia Potior

Primary Aluminium Production Industry 4.0 Integrated Automation
Maarten Meijer, President, GLAMA Maschinenbau GmbH

Session Five: Key Market Opportunities
DANIELI DIGI&MET – Adding value to Aluminium
Enrico Plazzogna, Danieli Automation

Smart Aluminium Temperature Sensors for Industry 4.0
Fiona Turner, Physics Section Manager, Ametek Land

What Industry 4.0 means for Aluminium Smelters and Aluminium Extrusion
Davide Brancalcioni, Rockwell Automation and Roberto Motta, Business Development Lead NSS, Rockwell Automation

SPEAKERS

Stefan Koch, SAP SE

Hans Erik Vatne, Hydro

Roger Feist, Achenbach Buschhütten

Marcos Ierides, Bax & Company

Fiona Turner, Ametek Land

Davide Brancalcioni, Rockwell Automation

Roberto Motta, Rockwell Automation

Rob Morello, Aitek

Claudio Goldbach, Termica
DAY TWO - WEDNESDAY 9 MAY

Introducing the Future Aluminium Forum
Nadine Bloxsome, Editor, Aluminium International Today

**Session Six: Sustainable Innovations: How is the Latest Technology Aiding the Move Towards a Greener Aluminium Industry?**

Aluminium Smelting in the Age of Renewable Energy and the Internet of Things
Jerome Lucaes, UC Rusal

How Industry 4.0 Will Affect Potroom Operations
Mark Dorreen, Energia Potior

Tracking Sustainable Aluminium
Dr Melanie Williams, Sustainability Consultant

Smart Recycling and the Circular Economy
Dr Gino Schiona, President, Ciai

**Session Seven: Striking a Balance with Automation and Productivity**

In-situ Chemical Specification Analysis with Automated Alloying and Homogenisation
Rob Morello, Marketing Manager & Technical Sales, Altek

Cobots Enable Flexible Manufacturing for Industrial SMEs
Marc Verbenkov, Innovation Consultant, Bax & Company

Digitalisation of Heat Treatment Makes your Furnaces Talk to You!
Claudio H. Goldbach, Business Development, Termica

**The Innovation Hub: European Aluminium Panel**

Founded in 2015, the European Aluminium Innovation Hub is a proactive community of innovative companies from across Europe’s aluminium value chain. The goal is to trigger research projects that advance a sustainable future and tackle technological challenges, thereby advancing the industry’s Sustainability Roadmap to 2025.

In this panel session, European Aluminium invites members of the Innovation Hub to present latest technology and developments. Here, delegates will be able to learn about our industry’s innovation goals and challenges.

Panellists to be announced.

**Session Eight: Industry 4.0 and its Challenges: What Does the Future Look Like?**

Aluminium & Digital: Path to the Future
Vikas Devnani, VP, Operations & Business Head, AlCircle.com

Role and Limitations of the Equipment Supplier in the Deployment of Industry 4.0 Strategies in Aluminium Production and Processing
Pascal Côté, Director, Development and Innovation, STAS

**Session Nine: Smarter Manufacturing for a Streamlined Supply Chain**

A Sophisticated Industry Tool Delivering Data for Aluminium Production 4.0
Alexander Schlemminger, SECOPTA Analytics GmbH

Digitalisation Of Aluminium Casting Process Improves Competitiveness Based on Real Time Monitoring and Quality Predictive Model
Nicola Gramigna, Chief Technical Officer, EnginSoft SpA

Data-Driven Industrial Modelling Of Future Wrought Aluminium Alloys
Dr. Varuzan Kevorkian, Managing Director, Impol

Aluminium Alloys for Additive Manufacturing
Riccardo Casati, Department of Mechanical Engineering, Politecnico di Milano

Programme correct at time of press, for up-to-date information please check

www.FutureAluminiumForum.com
DELEGATE REGISTRATION RATES

The conference fee includes a two-day conference programme, refreshments, a networking lunch and conference proceedings.

Register online to subscribe to the Future Aluminium Forum membership package which will include a subscription to Aluminium International Today, AIT Directory, relevant news alerts and admission to the Future Aluminium Forum, 8-9 May, Hotel Michelangelo Milan, Italy.

Delegate registration fees for this conference are as follows:

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<thead>
<tr>
<th>Standard Rate</th>
<th>£990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Bookings (5+ delegates)</td>
<td>£792 (per delegate)</td>
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ACCOMMODATION

Future Aluminium Forum has secured preferential rates the Hotel Michelangelo for participants of the event.

The Hotel Michelangelo is perfectly situated in the centre of Milan and is one of the most convenient 4 star hotels in the city. With over 300 rooms to choose from, it couldn’t be a better place to stay.

With great transport links surrounding the hotel including the main train station, and the tram line, Hotel Michelangelo provides lots of evening opportunities for international travellers.