

Aluminum Body Sheet Course AGENDA

Updated 03/04/2020

March 10-11, 2020 The Inn at St. John's @ 44045 Five Mile Road Plymouth, MI 48170, USA

Tuesday, March 10th

Time	Торіс
7:30 am	Registration & Breakfast
8:30 am	Welcome and Introductions Nate Beavers, Founder & President, Automotive Aluminum Advisors LLC
9:00 am	Putting EV Materials Content in Perspective Abey Abraham, Managing Director, Automotive & Transportation, Ducker Frontier
9:30 am	Aluminum Body Sheet Product Overview Laurent Chappuis, President at Light Metal Consultants, LLC
10:00 am	Break
10:15 am	 Alloy-Temper Definitions Tempers of Heat Treatable Alloys Tempers of Non-Heat Treatable Alloys Michael Bull, President, AIFCC13 Inc.
10:45 am	 Manufacturing Overview of Aluminum Body Sheet Ingot Casting & Homogenization Cold Rolling and Hot Rolling Continuous Cast Aluminum Sheet (CCAS) Thermal Treatments Michael Bull, President, AIFCC13 Inc.
11:30 am	Surface and Coatings Judson Delancey IV, Applications Specialist, BASF/Chemetall
12:00 pm	Lunch
1:00 pm	Microstructure and Properties Property Control of 5xxx Alloys Property Control of 6xxx Alloys Property Control of 7xxx Alloys Michael Bull, President, AIFCC13 Inc.
1:45 pm	 Corrosion and Corrosion Testing Intergranular Corrosion Filiform Corrosion Other Corrosion Tests Dr. Narsimhan Raghunathan, President, Touchstone Testing Lab, LLC
2:15 pm	Break
2:30 pm	Product Selection & Applications Michael Bull, President, AIFCC13 Inc.



3:00 pm	Recycling Considerations Laurent Chappuis, President at Light Metal Consultants, LLC
3:30 pm	 Specifications, Qualification and Lot Release OEM Specifications Level 1 Qualification Level 2 Qualification Laurent Chappuis, President at Light Metal Consultants, LLC
4:00 pm	Questions and Daily Wrap-Up
4:30 pm	Networking Reception
6:30 pm	Event Adjourns

Wednesday, March 11th

Time	Торіс
7:30 am	Registration & Breakfast
8:30 am	Keynote: Materials Innovation Drives the Auto Industry into the Future Abe Vadhavkar, Materials & Manufacturing Engineering Leader, Giraffe LLC
8:45 am	 Materials Handling and Processing Incoming Requirements Flattening, Leveling, Blanking Transportation & Warehousing Don Strugala, Applications & Field Engineering, Automotive Aluminum Advisors LLC
9:15 am	 Aluminum Formability Forming Limit Diagrams Producibility Assessment Binder and Addenda Design Considerations Laurent Chappuis, President at Light Metal Consultants, LLC
10:00 am	Break
10:15 am	Tooling, Facilities & Production Considerations Laurent Chappuis, President at Light Metal Consultants, LLC
10:45 am	Elevated Temperature Forming Cliff Butcher, Assistant Professor, The University of Waterloo
11:15 am	Evaluating Mixed-Material Joining for Lightweighting of High-Volume Vehicles George Panourgias, Lightweight Innovations for Tomorrow (LIFT)
12:00 pm	Lunch
1:00 pm	Aluminum Laser Welding in Body-in-White and Closure Applications WeiJie Zhang, Material Joining Manager, Gestamp Autotech Engineering R&D USA Inc.
1:30 pm	Assembly Processes in Multi-Material Applications Bill Cameron, Ford Global Key Account Manager



2:00 pm	Break
2:15 pm	USMCA Update Kristin Dziczek, Vice President, Center for Automotive Research
2:45 pm	Supply Chain Considerations Nate Beavers, Founder & President, Automotive Aluminum Advisors LLC
3:15 pm	 Purchasing Nomenclature Metal & Conversion Price Determinants Purchasing Models Nate Beavers, Founder & President, Automotive Aluminum Advisors LLC
3:45 pm	Review, Questions and Wrap-Up
4:00 pm	Event Adjourns

Register online at <u>www.auto-aluminum.com</u>. Contact us by email at <u>info@auto-aluminum.com</u> or by telephone at 248-736-5649 for any registration questions or issues.

Registration fee includes two-day course topics, hard and soft copies of training materials, breakfast, lunch and networking event.

Automotive Aluminum Advisors reserves the right to make updates to this agenda without notice.