Automotive Closures Conference (ACC 2019)

Papers and Presentations

Livonia, Michigan, USA
5 - 6 June 2019

Editors:

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VisTaTech Center at Schoolcraft College
18600 Haggerty Road
Livonia, Michigan 48152-2696
Registration: 8:30am – 9:00am, Main Street

Wednesday, June 5, 2019

AM Session	**Plenary & Keynote: Future Mobility and Technology Roadmap** **Session Chair: Carl Corman** Global Chief Architect *General Motors*	PM Session	**Closures Introductions** **Session Co-Chairs: Carl Corman** Global Chief Architect *General Motors* **Trent Bozzo** Engineer *Honda*
Time	**Room VT550**	**Time**	**Room VT550**
9:00 am	**Welcome and Introductions** Carl Corman Global Chief Architect *General Motors...1*	1:45 pm	**2019 Acura RDX Application of Resin Tailgate and Roof Mount Spindle Drive** Greg Tri, Jacob Mazzio *Honda...81*
9:15 am	**Understanding a Changing World** Jim Evangelista *Shiloh Industries...22*	2:15 pm	**Explorer Closures** Mike Watterworth *Ford...96*
9:45 am	**Overview of Automotive Market with a Look Toward Electrification** Marcos Corradin *US Steel...39*	2:45 pm	**Closures Overview of the 2019 Chevrolet Blazer** Kotomi Clegg, Kristian Bleasdell *General Motors...126*
10:15 am	**Break**	3:15 pm	**Break**
10:45 am	**The New DuPont and Enabling Future Mobility** Frank Billotto *DuPont...51*	3:45 pm	**Aviator Closures** Mike Watterworth *Ford...N/A*
11:15 am	**PO Closure Solutions Contribution to ADAS & EV Vehicle** Bertrand Hache *Plastic Omnium...62*	4:15 pm	**Evolving Use of Front Storage Space "Frunk" for Electric Vehicles** Minhkieu Ly *General Motors...145*
11:45 am	**A Supplier Perspective on Closure Systems** Mari Chellman *Magna International...72*	4:45 pm	**Tacoma OE Tonneau Cover Development** Norm Kerr *Toyota...163*
12:15 pm	**Q&A Panel Discussion**	5:15 pm	**Product Walk Through & Discussions**
12:45 pm	**Session Adjourned & Lunch**	5:45 pm	**Adjournment**

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Thursday, June 6, 2019

AM Session	**Design and Engineering** **Session Co-Chairs: Rad Raman** Application Manager *US Steel* **Madhan Ramaswami** Sr. Manager *Toyota*	AM Session	**Joining and Process Optimization** **Session Co-Chairs: Jim Evangelista** Director *Shiloh* **Ron Machin** Technical Expert *Ford*	PM Session	**Manufacturing Processes** **Session Chair: Michael Sigelko** Global Chief Architect *General Motors*
Time	**Room VT550**		**Room VT550**	**Time**	**Room VT550**
9:00 am	**Role of Front-end Closures Design in Pedestrian and Bicyclist Safety** Vishal Gupta, PhD, Mark Beauregard *General Motors...174*	9:00 am	**An Overview of Impact Welding of Structural Materials with Electrical and Optical Pulsed Power** Anupam Vivek, PhD *Ohio State University...225*	1:30 pm	**Latest Development in 3D Laser Cutting** Markus Remm, Roger Auerbach *Jenoptik...248*
9:30 am	**Side Guard Door Beam Mass Reduction Project** Jeffrey Scheuer *General Motors* Ram Iyer *ArcelorMittal...N/A*	9:30 am	**Magnetic Pulse Welding: Background and Application in Manufacturing** Oleg Zaitov *Bmax...N/A*	2:00 pm	**Micro Laser Assisted Machining of Metals, Ceramics, and Crystalline Materials** Hossein Shahinian, Deepak Ravindra, PhD *Micro-LAM, INC...N/A*
10:00 am	**Development of newly-designed 390MPa grade steel for automotive exposed panel** Jewoong Lee, PhD, Sangho Han, *POSCO...189*	10:00 am	**How to Weld GEN3 Steel Successfully, Avoiding Potential Pitfalls of RSW and Laser Welding Part I** Rick Wolf *US Steel...N/A*	2:30 pm	**Next Generation Polyurethane Structural Adhesives for Light Weight Closures and Dissimilar Material Designs** Frank Billotto, Eric Cole, Stefan Schmatloch, PhD *DuPont...N/A*
10:30 am	**Break**	10:30 am	**Break**	3:00 pm	**Break**
11:00 am	**Quantitative Surface Quality Assessment of Car Outer Panels & Doors & Closures with a Virtual Light Room** Arthur Camanho *ESI Group...193*	11:00 am	**How to Weld GEN3 Steel Successfully, Avoiding Potential Pitfalls of RSW and Laser Welding Part II** Rick Wolf *US Steel...N/A*	3:30 pm	**Body Shop Adhesive Dispense System Modeling** Eric Cole, Gary Snavely, Eric Carlson *DuPont...260*
11:30 am	**Automotive Mass Reduction Potential Utilizing the Latest Exposed AHSS While Maintaining the Dent Resistance Performance** Jianyong Liang, PhD, Feng Zhu, Jonathan Powers, Yu-Wei Wang, PhD, Scott Stevens - *AK Steel...203*	11:30 pm	**Remote Laser Welding Process of Aluminum Alloy Sheet in Automotive Industry** WeiJie Zhang, Michel Garcia, Mitchell Poirie *Gestamp...239*	4:00 pm	**Laser Blanking for the Automotive Landscape** Jay Finn LaserCoil Technologies...270
12:00 pm	**Lightweight Doors, Potential of Advanced High Strength Third Gen Steels** Harry Singh *US Steel...214*			4:30 pm	**Process Monitoring of Laser Ablation: The Importance of Inspection in Surface Critical Bonding and Coating Applications** Bill Buschle, Giles Dillingham, Brooke Campbell, Elizabeth Kidd *BTG Labs...295*
12:30 pm	**Session Adjourned & Lunch**	12:00 pm	**Session Adjourned & Lunch**	5:00 pm	**Adjournment**