

Automotive Cockpit 2010 Conference:

Instrument Panels, Doors and Seating Systems

October 21 and 22, 2010 • Novi, Michigan USA

ITB

Organized and Hosted by The ITB Group



Picture Source: General Motors

Final Program

Sponsored by:

Ticona
Performance Driven Solutions™

Exhibitors:

- **Alfmeier Friedrichs & Rath**
- **Arkema**
- **Hickory Springs Manufacturing**
- **Inteva Products**
- **JSP**
- **Preh**
- **Recticel Interiors Solutions**
- **Ticona Engineering Polymers**



Automotive Cockpit Conference: Instrument Panels and Doors

Day One Agenda: October 21, 2010

7:30 -

8:30 a.m. **Registration and Continental Breakfast**

8:30 a.m. **Welcome and Opening Remarks**
Mitra O'Malley, Managing Director
The ITB Group (U.S.A.)

Skins: In Search of the Holy Grail

9:00 a.m. **Recticel Colo-Sense® - A New Position for Aliphatic Spray PU for Interiors**
Recticel Interior Solutions (U.S.A. and Belgium)
This presentation will focus on the launch of a new generation of aliphatic spray polyurethane products (Colo-Sense®) that achieves improved material characteristics with cost benefits. This new PUR product will expand the envelope on green, grain, low weight, integration and perceived quality.

9:30 a.m. **Ultrasuede® EcoDesign™ Materials**
Toray International (U.S.A.)
An introduction of Ultrasuede® EcoDesign™, a surface material made of 100% post industrial recycled microfiber PET, will be provided. Advantages on how this material will help reduce weight and improve durability in A-surface applications for interior systems will be highlighted.

10:00 a.m. **Mid-Morning Break**

10:30 a.m. **In-Mold Painting Combined with PVC Slush Molding: Breakthrough Technology Opening Freedom of Design for Two Tone Instrument Panels**
Arkema Resinoplast (France and Mexico)
The IMP process is simpler, more precise and cost effective for two tones instrument panel compared with traditional techniques such as double slush. In addition, the In Mold Paint SpraySol® was developed to ensure a superb resistance to UV and heat aging even in light colors, and can integrate special effect pigments to create improved specific visual appearance. Latest advances in PVC slush molding including environmental aspects will be presented.

11:00 a.m. **High Speed Slush Casting - Changing the Rules**

Konal Automated Systems (Canada)
Konal Automated Systems has developed a new technology that enables slush skins for instrument panels, doors and consoles to be manufactured in six seconds or less. This presentation will highlight the equipment that enables the manufacturing complete with videos and the supporting scientific empirical data.

11:30 a.m. **Invision® SLX (Thermoplastic Polyolefin TPE) Material for Interior Skin Compositions**
Inteva Products (U.S.A.)
Inteva will discuss the material properties and processing requirements for the development of thermoplastic polyolefin (TPE) compositions for slush molding of interior skins. Benefits and targets for this material will be provided.

12:00 p.m. **Lunch**

Innovations in Interiors

1:00 p.m. **Celstran® PP LFRT Provides Weight and Cost Savings for Automotive Instrument Panel Substrate**
Ticona Engineering Polymers (U.S.A. and Germany)
Celstran® customized engineering thermoplastics with long glass fibers chemically coupled to base polypropylene (PP) resins, offer an exceptionally well balanced property profile. This presentation will provide comparison test data on the performance of this material in various interior applications including instrument panels, doors and consoles.



Picture Source: Ford Motor Company

1:30 p.m. Internally Illuminated Interior Door Handle
Amerisafe Corporation (U.S.A.)
 The Internally Illuminated Interior Door Handle developed by Amerisafe in conjunction with Admiral Tool & Manufacturing is a step ahead of the current methods used to illuminate the position of the door handle. The trends in interior vehicle lighting will be discussed along with the ways in which the internally illuminated interior door handle can not only improve styling, but add to brand imaging.

2:00 p.m. Next Generation SPECFLEX™ PU Foam Systems for Instrument Panels & Interior Trim Applications
Dow Automotive Systems (U.S.A.)
 Dow Automotive Systems has developed and commercialized lower density semi-rigid PU foam systems for instrument panels and interior trim applications that achieve 20% reduction in mass and meet the most stringent OEM VOC requirements. This presentation addresses the development and implementation of this new polyurethane foam technology for a range of automotive applications.

Electronics – Changing the Interior Paradigm

2:30 p.m. Technical Trends in HVAC Control Designs
Preh (U.S.A.)
 The presentation discusses the future of HVAC control designs: Is there a global trend that would turn away from integrated solutions to separate ECUs and control surfaces without electronics and software intelligence? It also features current technical trends, such as non-ventilated temperature sensors.

3:00 p.m. Afternoon Break

3:30 p.m. Wireless Charging for Automotive Interior Applications
Leggett & Platt Automotive Group (U.S.A.)
 Wireless charging is the next logical step in the evolution of small device technologies. An overview of the new global standard for low power wireless charging, the developments in the charging surface and the device side of the equation (cell

phones, cameras etc.) will be provided.
4:00 p.m. Reflex Technology™ – Getting Back in Touch with Your Car
Bayer MaterialScience (U.S.A.)
 Reflex haptic actuators, based on Bayer MaterialScience subsidiary company Artificial Muscle's patented electroactive polymer (EPAM™) technology, revolutionizes feedback and can add the sense of touch back into capacitive switches. The presentation will focus on how the technology works and integrates into devices.

4:30 p.m. HMI Trends: New Technologies for Enhanced Design
Preh (Germany)
 Current trends in HMI designs are highlighted. It shows not only how once innovative concepts, e.g. black panel surfaces and touchpad integration, have found their way into present-day production cars, but features brand new technological developments, such as the LTC display technology. The focus will be on ways to remove clutter and to reduce driver distraction.

5:00 p.m. Closing Remarks

6:30 p.m. Exhibits Close

Exhibitors (Day One)

Arkema

Hickory Springs Manufacturing

Inteva Products

Preh

Recticel Interior Solutions

Ticona Engineering Polymers

Automotive Cockpit Conference: Seating Systems

Day Two Agenda: October 22, 2010

8:00 –

9:15 a.m. **Registration and Continental Breakfast**

9:15 a.m. **Welcome and Opening Remarks**

Mitra O'Malley, Managing Director

The ITB Group (U.S.A.)

How to Reduce Weight in Seats?

9:30 a.m. **Application of BETAMATE™ Structural Adhesive and BETAFOAM™ Structural Foam in Delivering Mass Efficient Seating Structures**

Dow Automotive Systems (U.S.A.)

The benefits of BETAMATE™ structural adhesives and BETAFOAM™ structural foam in enabling OEMs and Tiers to meet the mass and performance targets in seating structure applications are showcased. Results will focus on highlighting how designed-in alternative products can deliver mass efficient solutions while meeting or exceeding the requirements.

10:00 a.m. **Ultrasuede® EcoDesign™ Materials**

Toray International (U.S.A.)

An introduction of Ultrasuede® EcoDesign™, a surface material made of 100% post industrial recycled microfiber PET, will be provided. Advantages on how this material will help reduce weight and improve durability in A-surface applications for interior systems will be highlighted.

10:30 a.m. **Green, High Performance, Low Mass: Novel Automotive Foam Solutions for Improved Fuel Efficiency and Reduced Environmental Footprint**

Woodbridge Foam (Canada and U.S.A.)

Automotive seating foams with enhanced incorporation of renewable material can now be produced. The novel integrated seat cushion design, to be presented, combines several technologies that allow for a significant

mass reduction of the seat assembly, as well as targeted functionality and seat comfort, contributing together toward the goal of improved fuel efficiency and a reduced environmental footprint.

11:00 a.m. **Innovations in Seating with Expanded Polypropylene**

JSP (U.S.A.)

Seating systems based on Expanded Polypropylene allow greater design versatility, functionality and can dramatically reduce system weight. Expanded Polypropylene provides an anti-submarining design to help increase rear passenger protection in crash conditions, and help save labor by making system assembly simpler.

11:30 a.m. **Lunch**

Innovations in Seats

12:30 p.m. **One Step Seating Technology**

Raymond Costello, Vice President of Sales - North American Operations

Konal Automated Systems (Canada)

A manufacturing process that enables production of a finished seat in the same tool from start to finish is introduced. Konal has recently launched a seating line in the non-automotive market that produces a finished seat every 120 seconds from raw material to finished part. The process has the potential to produce a low cost head rest, rear seat or third row seat at a lower cost with less capital equipment and a small percentage of the tooling costs by comparison of the current status quo.

1:00 p.m. **Next Generation POM (Acetal) for Automotive Seating and Safety Systems**

Ticona Engineering Polymers (U.S.A.)

Ticona will discuss the next generation acetals that open the door for part designers to utilize the



advantages of these materials in a wide variety of applications where performance requirements had previously been an obstacle to their use. The high-impact, high-strength properties of the next generation acetals make them ideal for use in automotive applications for seats, and safety systems (e.g. seat belt components, head rest guides, levers, seat adjusting components, etc.) for improved performance and durability, weight savings, and cost effectiveness.

2:30 p.m. Closing Remarks

3:30 p.m. Exhibits Close

1:30 p.m. Innovations in Human Vibration Transmissibility Testing

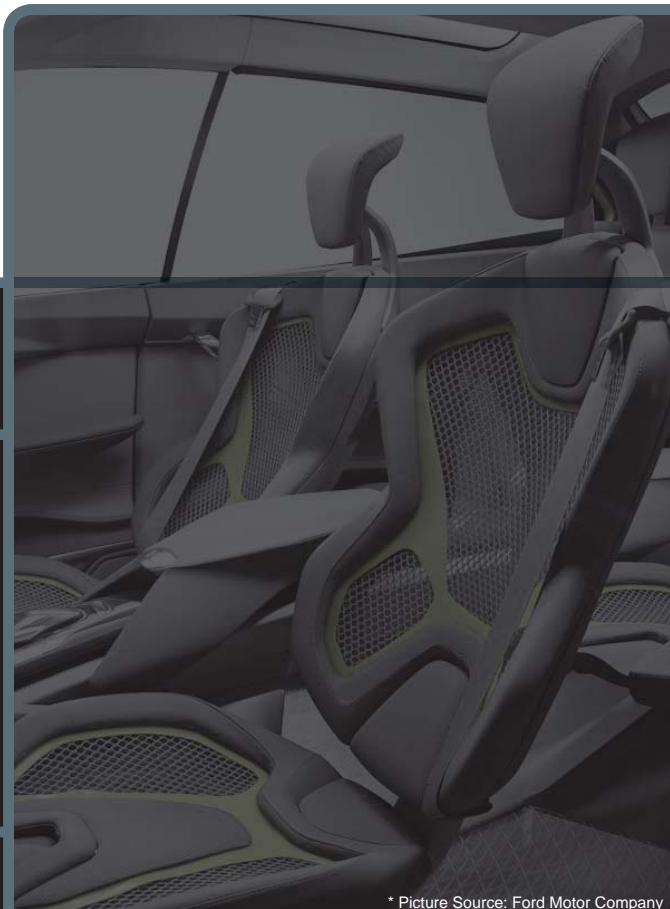
Lear (U.S.A.) and XSENSOR Technology (Canada)

Lear engaged XSENSOR Technology to develop pressure mapping sensors that were capable of accurately capturing the high load and frequency content involved in automotive ingress/egress events. This development involved several technical and testing innovations which will be outlined in this presentation.

2:00 p.m. Control Mold and Mildew in Automotive Seating

Aegis Environments (U.S.A.)

This presentation will provide specific information about the factors that contribute to microbial growth in the interior environment



Exhibitors (Day Two)

Alfmeier Friedrichs & Rath
Hickory Springs Manufacturing
JSP
Ticona Engineering Polymers

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2010

List of Sponsors and Exhibitors

Ticona Engineering Polymers

Celstran® composites encompass long-fiber and continuous-fiber reinforced thermoplastics. Nearly all types of semi-crystalline and amorphous thermoplastic polymers used as matrix materials can be combined with a wide range of fibers and additives. Our portfolio of molded-in-color and appearance polymers, including our new MetaLX™ metal-effect polymers, deliver cost savings and aesthetics for interior trim / structural components. New S-series and HS15 Hostaform® POM for improved part performance.

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www.ticona.com



Alfmeier Friedrichs & Rath

Alfmeier Friedrichs & Rath is a tier two supplier of seating comfort products. Our electro-pneumatic seat contour adjustment includes lumbar, bolster, shoulder, and seat length bladders integrated with the Shape Memory Alloy actuators and proprietary air pumps. Our components are designed to work as a modular system to reduce the design and development time from concept to production.

Contact: David Eisenbacher, Sales Manager North America
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Arkema

The global chemical company Arkema consists of three business segments: Vinyl products, Industrial Chemicals and Performance Products. Present in over 40 countries with 14,000 employees, Arkema achieved sales of 4.5 billion euros in 2009. With its six research centers worldwide and internationally recognized brands, Arkema holds leadership positions in its principal markets.

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Hickory Springs Manufacturing Company

Hickory Springs is a globally operated, diverse manufacturer of formed steel and wire components, springs and flexible seating support structures, die-cut foam, extruded foam, woven suspension materials and rebond foam components. We provide world-class products to multiple industries including transportation, consumer goods, furniture, marine, electronics and packaging.

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Inteva Products

Inteva Products has more than 90 years of experience and expertise, empowering some of the best minds with resources at 18 facilities on three continents. Inteva designs, engineers, manufactures, and assembles interior systems, cockpits, closure systems, door module and window lift systems, and advanced materials for customers around the globe.

Contact: Ken Gassman, Engineering Group Manager
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JSP

As a pioneer and world leader in engineered plastic foam technologies, JSP created and developed ARPRO® Expanded Polypropylene (EPP), a remarkably versatile material for seating and many other automotive interior components. JSP engineers work with customer design teams to tailor the performance of these expanded foams to specific design requirements.

Contact: Joe Mihelich, Sales Manager
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Preh

Preh was founded in 1919 and is headquartered in Bad Neustadt a.d. Saale, Germany. The company achieved about 250 million euros in revenue in 2009 with about 2,300 employees in Germany, Portugal, France, Mexico, the U.S.A., Romania and China. Preh develops and produces driver control systems, sensors, ECUs and instruments.

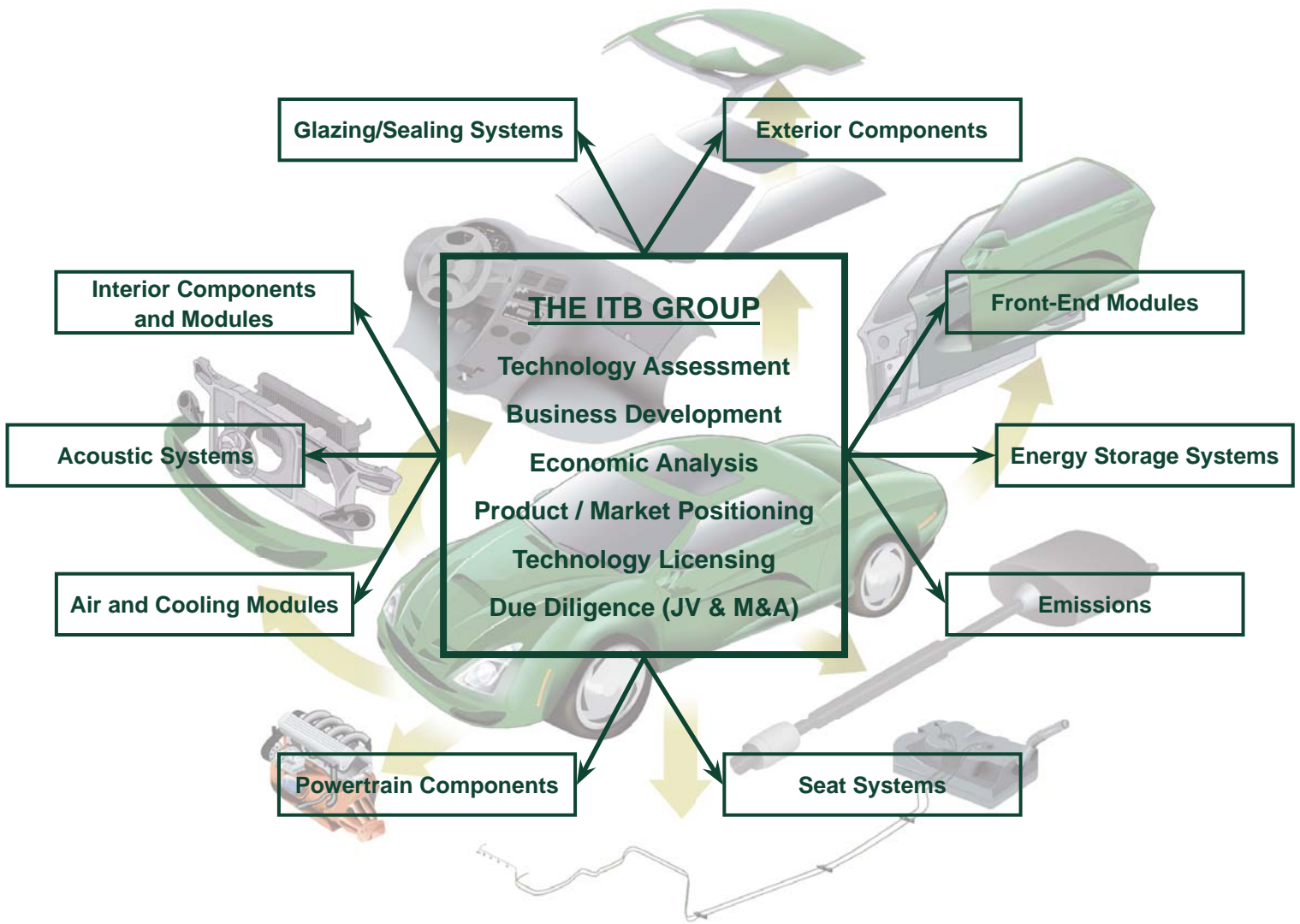
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Recticel Interior Solutions

Recticel Interior Solutions is a Tier 2 global producer of spray aliphatic polyurethane interior components and systems. We are experts in A-Surface development, as well as polyurethane chemistry and manufacturing. Our products are highly durable, and provide the greatest design freedom and quality to our customers.

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