2012 SPE® Grand Award Winner

High-Strength Celstran® LFRT from Ticona Used in Instrument Panels Honored for Innovative Use of Plastics

Florence, Ky., Sulzbach, Germany, Shanghai, PR China, Nov. 8, 2012 – An automotive development team that included Ticona, the engineering polymers business of Celanese Corporation, was the Grand Award winner Wednesday night at the Society of Plastics Engineers (SPE®) 42nd annual 2012 Innovations Award Competition & Gala in Detroit.

The advanced instrument panel (IP), molded by Inteva Products LLC of Troy, Mich., and found on several GM platforms, won the Body Interior Category. The IP substructure is injection molded with a Celstran® long fiber reinforced thermoplastic (LFRT) polypropylene (PP) resin from Ticona.

“The Grand Award represents the best combination of innovation in design execution, processing and materials, as judged by our SPE Blue Ribbon Judging Panel,” said Jeffrey H. Helms, Ph.D., global automotive manager — Ticona, as well as SPE
Automotive Division chair and SPE 2012 Innovation Awards Committee chair. “There were many excellent candidates from each of the category winners.”

Found in the 2013 Buick Enclave, Chevrolet Traverse and GMC Acadia SUV, Celstran LFRT PP GF30 from Ticona formed a structural foundation for the IP, enabling Inteva Products to reduce production costs and use contour stitching on the all-olefin, multi-grained full surface with complex geometry.

The glass-filled line of Celstran LFRT PP products offers excellent processing properties that ensure uniform glass fiber distribution and a good surface finish. Celstran LFRT offers a superior property profile: mechanical integrity in large/structural parts, stiff and exceptionally tough, and dimensional stability, fatigue resistance.

‘This is a great honor for Ticona” said Phil McDivitt, Celanese vice president and general manager - Ticona. “We continue to help drive innovation in the automotive industry with material solutions that deliver high quality, high performance and value.”

Also, Ticona was a finalist the the following categories:

**Body Interior**

- Inertial Latch for Center Console on 2013 Lincoln MKZ — The patented console-bin latching system from TRW Automotive uses an inertial mechanism molded with Celcon® acetal copolymer (POM) M90 that is combined with the seatbelt retractor technology to lock the console when subjected to load. The latch is fully compliant with quality and safety requirements, yet there is no unsightly latch feature visible when the armrest is open. It is cost neutral and eliminates paint and chrome necessary for traditional latch decoration.
Chassis/Hardware

- Power Liftgate Drive Motor initially launched on the 2005 Expedition SUV and subsequently implemented on all Ford power liftgates — To reliably open / close large and heavy automotive power liftgates with the push of a button, Hi-Lex America Inc. developed a power liftgate drive motor that uses Celcon M90™, Celcon GC25T and Celstran PA 66-GF50 for new injection molded high-precision plastic shafts and gears. Not only was a 500 percent cost reduction achieved, but the gear train meets extreme thermal constraints and is highly tuned to noise, vibration and harshness (NVH) performance required by the customer.

Process, Assembly and Enabling Technologies

- Two-Shot Window Lift Carrier Plate on 2013 Ford Escape CUV — Two-shot overmolding of high-molecular-weight Celcon M25 with a Shore D 25 Riteflex® thermoplastic polyester elastomer (TPC-ET) 425 resin enabled Hi-Lex America to integrate the down-stop and glass anti-rattle bumpers while adding a glass-guidance feature. The result delivered design flexibility, weight and cost savings, simplified assembly and a reduction of process steps.

Sponsored by the Automotive Division of the SPE, the Innovations Awards Gala is the oldest and largest recognition event in the automotive and plastics industries, and honors the most innovative uses of plastics in automotive applications.
About Celanese and Ticona

Celanese Corporation is a global technology leader in the production of specialty materials and chemical products that are used in most major industries and consumer applications. Our products, essential to everyday living, are manufactured in North America, Europe and Asia. Known for operational excellence, sustainability and premier safety performance, Celanese delivers value to customers around the globe with best-in-class technologies. Based in Dallas, Texas, the company employs approximately 7,600 employees worldwide and had 2011 net sales of $6.8 billion, with approximately 73% generated outside of North America. For more information about Celanese Corporation and its global product offerings, visit [www.celanese.com](http://www.celanese.com) or the company’s blog at [www.celaneseblog.com](http://www.celaneseblog.com).

Ticona, the engineering polymers business of Celanese Corporation, produces and markets a broad range of high performance products, and posted net sales of $1,298 million in fiscal 2011. Ticona employs more than 1,500 individuals at production, compounding and research facilities in the USA, Germany, Brazil and China. For more information, please visit [www.ticona.com](http://www.ticona.com) or [www.ticona.cn](http://www.ticona.cn) (Chinese language).

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