



IAC Wins Two 2017 SPE Automotive Innovation Awards

International Automotive Components (IAC), a global automotive and mobility leader in light-weight and new-material interior solutions, won two 2017 Society of Plastics Engineers (SPE) Automotive Innovation Awards in the Body Interior category. The IAC Coreback™ injection molding process used to produce the 2017 MINI Countryman subcompact SUV instrument panel carrier has been recognized for its lightweight features and the caster-based BIO Foam beneath the 2018 Ford Fusion instrument panel triumphed as a sustainable innovation. The

weight performance.

For the MINI Countryman, IAC carried out extensive computer-aided-engineering work to predict foamed-part warpage. This allowed tooling to be modified in advance to avoid any potential production issues and ensured a flawless launch.

The BIO Foam material is caster based and provides weight savings of up to 40 percent while enabling higher design flexibility. It can be molded in as little as three-millimeter cross sections and exhibits better bond strength compared to traditional petroleum-based foams. On the Ford Mondeo / Fusion limousine, IAC applied BIO Foam using a foam-in-place (FIP) process, where foam is injected between the skin and retainer to produce a thin foam layer contributing to a light and sustainable instrument panel.



Coreback premium lightweight process allows for a 15-to-20 percent component weight reduction on one of the vehicle interior's largest and most important structural parts. Coreback reduces the initial instrument panel carrier wall thickness to 1.8 millimeters from a traditional solid injection-molded component of as much as 2.2 millimeters. During the process, a chemical foaming agent is added to the resin. After the resin compound is injected, the mold is opened to a maximum of 4 millimeters to generate a foam layer in the middle and creating a product with industry leading stiffness-to-

"It is rewarding to see our lightweight and sustainable products recognized by SPE, as these continue to be key for our OEM customers," said IAC Vice President of Advanced Development and Materials Engineering Dr. Rose Ryntz. "Working in close collaboration with our customers and our supply chain, we have been able to bring these innovations quickly and flawlessly into serial production. This is the unique advantage of our vertically integrated approach to development, which ranges from material development, product, process, and tooling design, validation and testing."

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Henkel offers Loctite tire bonding solution with outstanding adhesion for acoustic foams and integrated sensors

road on various luxury vehicles. "However, major automotive OEMs and Tier 1 tire manufacturers are now also targeting to phase-in the technology in the wider market of high-volume medium-size and compact cars, and we have a number of non-disclosure agreements in place with leading customers that we expect to result in appropriate new tire introductions in the near future," Boone adds.

As part of its extensive support package offered to tire manufacturers, Henkel is running a global in-tire bonding test program where customers can evaluate the processing and adhesion performance of Loctite SI 5930 FIT. Apart from tensile shear and peel test procedures, this also includes a set-up for simulating extreme environmental conditions and temperature cycling up to 200°C in a

climate chamber.

In addition, Henkel is actively collaborating with Pro-Sigma Consulting, an experienced tire market consultancy promoting silent tire bonding projects at OEMs and tire manufacturers worldwide, and with SEEB Automation (France), a leading manufacturer of tire wheel assembly equipment specializing in fully integrated solutions, including machines for automated in-tire foam bonding within a cycle time up to 12 seconds. Customers seeking to implement the Loctite SI 5930 FIT bonding technology in new tire projects can effectively leverage the know-how and experience of these partners to speed the time-to-market and maximize the cost efficiency of their next-generation products.

Rajoo Engineers Ltd Where Achieving Excellence is a Compulsion

Rajoo comes with the right blend of experience, expertise and excellence and certainly justifies their mantra "achieving excellence is a compulsion for us". It all began in 1986 and the last 30 years have witnessed the transformation of a modest beginning in a relatively unknown town of Manavadar (Junagadh) in Gujarat to an expansive global footprint with offices in India and overseas with partners world-over. Well-known in global circles as a mature and respected organisation with a zeal for quality, price consciousness and latest in extrusion technology.

With no regional bounds, the company is a market leader in blown film lines, sheet lines and thermoformers in the Indian sub-continent and is in a position of leadership amongst Asian manufacturers of similar equipment. They have become a sought-after name in global markets - exports accounting to over 50% of sales is indicative. While installations are spread across 52 countries, installations in Germany, Spain and U.K stand out as acceptance by the most stringent and developed markets of the world and with 60% of the business coming from repeat orders, it is a clear indication of the satisfaction levels of existing customers.

A technical collaboration with HOSOKAWA ALPINE of Germany (one of the most reputed companies globally in blown film technology) to produce 'hybrid' solutions with the Alpine technology at the company's manufacturing site at Rajkot benefitting markets in India and Anglophone Africa. Known for bringing world class affordable technology at the door step of the Indian processors, the company entered into a JV (in Rajkot) with Bausano & Figli S.p.a of Italy, one of the most reputed companies globally in this sector. This has revolutionized pipe manufacturing

technology in India.

Insights of Rajoo Engineers Ltd.

Our editor in chief Mr. Giju Joseph had met with the president of Rajoo engineers Ltd Mr. Sunil Jain to know about the insights of his company.

"Well, it all started in 1986 when we were a small company and we have come a long since then, we have brought a lot of new technologies in the country and the moto has been to bring affordable world class technology to the indian industry at affordable prices" these were few kind words expressed by Mr. Jain.

He further spoke about the inclusion of European technologies such as a joint venture with an Italian company ' Bausano ' for WBC's, PVC pipes and granulators and also said that they do there due diligence before getting into any exhibition and provide maximum visibility as participants and since the last edition of Plast Asia was quite a success he has ensured the involvement of the association such as PMMI to support it further and has imbued to make Plast India different.

Range of Products

- Tilting Mould Thermoformer
- Monolayer Blown Film Lines
- Multilayer Blown Film Lines
- 5 Layer Pod
- Downward Extrusion Blown Film Lines
- PS/PE Foam Extrusion Lines
- PS/PP/ABS/PET/EVA Sheet Lines
- Thermoforming & PS Foam Vacuum Forming Machines
- Twin Screw PVC Pipe Plant
- Lab Equipment

Applications

- Flexible Packaging
- Agriculture
- Infrastructure
- Automobiles
- Food & Beverages
- Pharmaceutical
- White Goods
- Stationary & Printing

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Coreback leveraged the support of material supplier SABIC and tool maker Siebenwurst. BIO Foam for FIP applications was developed in collaboration with BASF. The awards were presented during the 47th Annual SPE Automotive Innovation Awards Gala held Nov. 8, 2017, at Burton Manor in Livonia, Michigan. The program is the oldest and largest competition of its kind in the automotive and plastics industries. Dozens of teams made up of OEMs, tier suppliers and polymer producers submit nominations to earn the title of the Year's Most Innovative Use of Plastics.