

CaseHistory

Superior Class A for Trucks

Composite

Applications: Hoods and fenders

Manufacturing

Process: Compression Molding

Dimensions of largest hood-fender assembly:

Width: 95 inches (421 centimeters)

Length: 72 inches (183 centimeters)

Height: 48 inches (122 centimeters)

Having established a new standard for Class A surface excellence for cars and light trucks, Atryl® resin is expanding into medium- and heavy-duty trucks. Atryl technology incorporates a proprietary toughness that results in a dramatic decrease or elimination of “paint pop” defects on the surface of painted SMC parts.

With the revolutionary resin from AOC, truck OEMs are getting the best that sheet molding composite (SMC) has to offer. The material system’s lower weight, low tooling investment, parts integration, design freedom and corrosion resistance are combined with a high quality surface finish that has become an essential element of new truck marketing.

Leading the trend in Atryl use beyond cars and light trucks are Meridian Automotive-produced hood-fender assemblies on Freightliner Century Class S/T and Columbia models and fenders on the Sterling Acterra. These are the first production parts to be molded of a new Atryl formulation that can be compression-molded at lower pressure.



“For large fleets as well as owner operators, appearance plays a decisive role in the purchase of a medium- or heavy-duty truck,” stated Mike Dettre, Business Manager - Closed Mold for AOC. “To satisfy the need for superior aesthetics and durability, more truck body engineers are discovering how Atryl resin has radically elevated the surface quality of SMC.”

Best Composites in Trucking

The new truck parts for Atryl resin are compression molded of 28% fiberglass-reinforced SMC in the Salisbury, NC, plant of Meridian Automotive Systems. Bob Moore, Manufacturing Engineering, Manager, Heavy Truck, for the Salisbury, NC, plant,



Sterling Acterra

Superior Class A for Trucks, continued

said Atryl offers distinct advantages. “Compared to other SMC resins, Atryl is more user friendly, molds better and holds dimensions better,” said Moore. “And with this resin, we can mold at 20 percent lower pressure which is easier on the presses.”

The parts use an in-mold coating in conjunction with Atryl to achieve the ultimate in Class A finishes. After the hood and two fenders are molded, the components are adhesive-bonded together into hood-fender assemblies. The 95-inch wide by 72-inch long by 48-inch high (241- by 183- by 122-centimeter) assembly for the Columbia is the largest Atryl application to date.

More on the Vehicles

Headquartered in Portland, OR, Freightliner Trucks, Inc., is the North American leader in Class 8 heavy duty diesel trucks. The Freightliner Century Class S/T incorporates state-of-the-art technologies in design, performance, fuel efficiency, comfort and safety. The high-selling Freightliner Columbia delivers maximum reliability and durability in a more traditional truck.

Headquartered in Willoughy, OH, Sterling is a division of Freightliner. The Sterling Acterra is a popular choice for Class 5 through Class 8 trucks for construction, distribution, food and beverage, refuse, utility, government and service applications. In a 2003 J.D. Power and Associates customer satisfaction study, vehicles from Sterling Truck Corp., ranked highest among conventional medium-duty trucks.

About Meridian Automotive

Meridian Automotive Systems, Inc., is a leading supplier of technologically advanced components, modules and systems to automobile and truck manufacturers. Meridian supplies OEMs and major Tier One parts suppliers from 22 plants in the United States, Canada and Mexico. Meridian is the leader supplier of exterior sheet molding composite (SMC) for passenger cars and light-, medium- and heavy-duty trucks. For more information, go to www.meridian-autosystems.com.



About AOC

Headquartered in Collierville, Tennessee, USA, AOC is a leading global supplier of resins, gel coats, colorants, additives and synergistic systems for composites and cast polymers. AOC is the world leader in innovative resins for automotive composites. For more information on AOC materials and the industry's best technical support, phone Steve Martin at (901) 854-2846, e-mail smartin@aoc-resins.com, or visit www.aoc-resins.com on the Internet.

Atryl® Applications

- Cadillac XLR front roof
- Cadillac XLR rear roof
- Ford Thunderbird hood, decklid & fenders
- Ford Sport Trac fenders
- Ford Econoline hood
- Freightliner Century Class S/T hood assembly
- Freightliner Columbia hood assembly
- Lincoln Aviator fenders/reinforcements
- Lincoln Navigator hood & fenders
- Sterling Acterra fenders


CLOSED MOLD RESINS