

## Improved SMC for Corvette

<b>Composite Applications</b>	Outer door panels Roof bow Tonneau
<b>Manufacturing Process</b>	Compression molding
<b>Resin</b>	Atryl® unsaturated polyester
<b>Dimensions of Largest</b>	4 by 2 feet (122 by 61 centimeters)
<b>Weight of Largest Parts</b>	10 pounds each (4.5 kilograms)

Getting a great Class A finish on exterior body panels is always a priority for automotive engineers. But when the automobile is a showcase sports car, the standard for surface excellence is even higher.

That's why Meridian Automotive Systems expanded its use of AOC resin and technical support to sheet molding composite (SMC) parts on the new 2006 Chevrolet Corvette. In addition to providing to an excellent surface finish, the AOC resin helps reduce the scrap rate for painted exterior parts.

The 2006 Corvette's outer door panels, roof bow and tonneau are compression molded of Meridian SLI-323, a new and improved SMC formulation. The compound is based on AOC Atryl® resin technology for smooth, Class A surfaces. Meridian's SLI-323 is a 28% fiber-glass-reinforced composite that is compounded and molded using conventional techniques. The difference is in finished part quality, says Lou Dodyk, who manages SMC material development for Meridian Automotive.



### Higher quality

"Using the improved SLI-323, we are seeing a dramatic decrease in the number of parts rejected because of material-related paint defects," Dodyk says. "With the Atryl resin, we also get the excellent support of the AOC technical staff. Whenever there is an issue or we need special help, they are always very responsive."

The Corvette parts are compression molded in Meridian's Shelbyville, Indiana, facility. The largest Corvette part molded of SLI-323 is the door panel which is approximately 4 feet wide by 2 feet high (122 by 61 centimeters) and weighs about 10 pounds (4.5 kilograms). In addition to the Corvette parts, Meridian uses SLI-323 to mold the front roof panel, tonneau and fuel filler door of the Cadillac XLR.

## Improved SMC for Corvette cont.



“SMC is a priority at AOC,” points out Mike Dettre, Business Manager - Closed Mold for AOC. “With innovative resin technology and value-added technical support, we are determined to lead SMC into a new era of excellence and growth.”

### **About Meridian Automotive Systems**

Meridian Automotive Systems is a leading supplier of technologically advanced front and rear end modules, lighting, exterior composites, console modules, instrument panels and other interior systems to automobile and truck manufacturers. From manufacturing plants in the United States, Canada and Mexico, Meridian supplies Original Equipment Manufacturers and major Tier One parts suppliers. For more information about Meridian's SMC expertise, contact Lou Dodyk by e-mailing [ldodyk@meridianautosystems.com](mailto:ldodyk@meridianautosystems.com) or phoning (260) 627-7802.

### **About AOC**

AOC is a leading global supplier of resins, gel coats, colorants, additives and synergistic systems for composites and cast polymers. AOC products are manufactured in facilities strategically located in North America, Europe and Asia. AOC-owned manufacturing plants are ISO 9001:2000-certified, use proprietary technology to ensure resin batch-to-batch consistency, and follow Six Sigma-Lean principles for improved efficiency. For more information on AOC resins and technology for closed molding, e-mail Mike Dettre at [mdettre@aac-resins.com](mailto:mdettre@aac-resins.com), phone him at (901) 854-2800 or visit [www.aoc-resins.com](http://www.aoc-resins.com) on the Internet.