

Off to the Races

Molding company branches out to produce its own consumer product line – with a little help from 3M

3M Thermoplastic Compounding facilities take pride in working with customers to develop unique compounds for unique applications.

One could say it all began when Dallas Trinkle, President of Acramold, Inc., spent a day at the racetrack.

Acramold, Inc. of Burlington, Kentucky is a full service tooling and injection molding company; Dallas Trinkle is a racing fan and the son of an inventor. One day at the racetrack, Trinkle found himself observing how tires were stacked in the pits. True to form, he immediately thought of making a mold – one to make a beverage holder that looked like a realistic stack of tires. In 2005, Acramold produced a successful prototype using a conventional thermoplastic elastomer material – but Trinkle wanted a “hook” to differentiate the product and give it more consumer appeal. He discovered the road forward while attending a packaging tradeshow in Chicago, where he observed how many of the products were touting their

“green” technology and sustainability. That’s when Trinkle called in 3M.

Getting into gear

Acramold has a well-established working relationship with the 3M Thermoplastic Compounding facility in Hebron, Kentucky. “This partnership has been going strong for the past 15 or 20 years,” says Trinkle. “They are always very responsive in helping us get the right compound, even in small batches or for prototyping.” Trinkle’s idea was a new challenge for the compounding facility, but one entirely in keeping with 3M’s culture of innovation – and dedication to sustainability. Together, 3M and Acramold set out to make these custom cup holders out of 100% recycled materials.

Trinkle’s cup holder consists of an outer “shell,” molded in the shape of a stack

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Off to the Races: Acramold and 3M Thermoplastic Compounding

of tires, and an inner liner made of plastic. Each presented its own unique design challenges. Trinkle wanted the shell to have the same Shore hardness as a tire, the same texture – and even the same scent. The obvious choice of material was recycled tire treads, which are notoriously difficult to work with. The liner was to be made of plastics recycled from milk bottles and other materials. Over a period of one and a half years, 3M worked with Acramold to perfect the compounds and the manufacturing process, sampling countless materials along the way. The 3M Hebron facility ultimately developed a formula that delivered the desired aesthetic qualities by using ground tire treads suspended in a vinyl acetate.

Acramold has been building molds and molding products for a variety of industries since 1979. This, however, is the first time they have marketed a product of their own. Today, 3M continues compounding this recycled material for Acramold, who in turn injection molds it into beverage holders and pen caddies for racing and car enthusiasts. Sold at racetracks, automotive suppliers and other venues, they have the smell and feel of real tires, and are a novel way to reuse a hard-to-recycle material. Acramold currently offers its products in nine tire designs to appeal to various groups of race fans, and plans to expand the line with custom branding and personalization options.

3M Thermoplastic Compounding facilities take pride in working with customers to develop unique compounds for unique applications – from complex industrial seals to trackside keepsakes. As Acramold's experience proves, by combining technical expertise with imagination, the possibilities are endless.

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3M Advanced Materials Division
3M Center
St. Paul, MN 55144 USA

Phone 1-800-367-8905
Web www.3M.com/advancedmaterials

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