



CASE STUDY

Swimming Pool Industry Recognizing Composite Advantages

Owens Corning's multi-end rovings provide high performance and flexible processing in a variety of spray-up molds. Introduced in September 2012, OptiSpray™ Solutions are designed for spray-up processes in a variety of applications. These include swimming pools, spas, marine, and transportation applications, and provide optimum wetting for good surface finish and mechanical strength in the finished product.

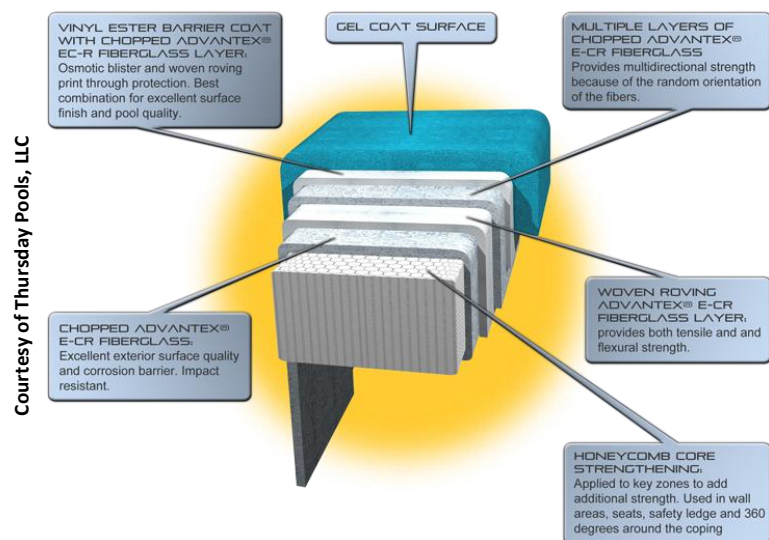


Figure 1 Laminates schedule – fiberglass swimming pool fabrication

One company, Thursday Pools, LLC, is committed to producing the highest quality swimming pools in the industry using fiberglass.

Located in Fortville, Indiana, Thursday Pools, LLC is a leading designer and manufacturer of fiberglass inground pools, and its products are shipped throughout North America. According to Edward Vondell, principal with Thursday Pools, LLC, the company began using Owens Corning OptiSpray™ H roving in late 2012. "Once we switched to using OptiSpray™ H roving, we were very quickly impressed with its easy chopping, rolling, and air release," said Vondell. "We also were impressed with the flat lay down and uniform dispersion of the product," he continued.

"We have been able to reduce our resin consumption and are currently running 30% glass to resin and hope to increase it to 35%," asserted Vondell. "We also are not changing blades as frequently and have far less dust from the glass running through our boom eyelets," said Vondell.

According to Sanghamitra Sircar, Owens Corning global product manager – Multi End Rovings, this family of products is comprised of OptiSpray™, OptiSpray™ H, and OptiSpray™ F rovings are made with Owens Corning's Advantex® glass fiber. This boron free, patented glass fiber combines the electrical and mechanical properties of traditional E-glass with the corrosion resistance of EC-R glass. "OptiSpray™ Solutions are outperforming other products currently available in the marketplace as per customer evaluations," said Bryan Minges, Owens Corning global market segment leader.

Although the swimming pool industry has traditionally used cement-based products or vinyl liners to build pools, it has only recently realized the benefits of OptiSpray™ Solutions roving. One

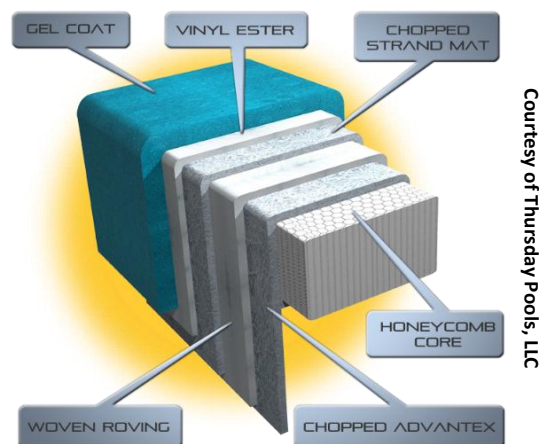


Figure 2 Laminates schedule – fiberglass swimming pool fabrication

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“With no blocking and no balling up in the chopper and the clean, smooth delivery of the roving to the gun, our productivity has definitely increased. Given the increased productivity, 25,000 square feet of manufacturing space on 54 acres, and a high efficiency climate-controlled environment, we are set to ramp up production significantly,” said Vondell.



Figure 3 Finished fiberglass swimming pool

According to Vondell, using fiberglass incorporating OptiSpray™ Solutions to produce pools eliminates the need for acid washing, painting, and replastering as when using cement-based products. And, using fiberglass eliminates cracks and leaks, algae and staining, rough surfaces, discoloration, high chemical usage, stains, as well as plaster problems.

Fiberglass composites are also stronger and more durable than traditional materials. These composite materials are waterproof and corrosion resistant, and pools made of fiberglass composites require very little maintenance over the life of the product. There are no liners to replace and no acid washes to apply. And, less energy is necessary to maintain a fiberglass pool and fewer chemicals are required.

“Although fiberglass pools represent only 10% of the current swimming pool market, their popularity is growing as customers realize the incredible benefits of fiberglass compared to traditional materials,” stated Vondell. “As we continue to ramp up production of our pools, Owens Corning OptiSpray™ H roving will continue to be a part of our winning formula,” affirmed Vondell.

Take Risk Out...Put **Advantex®** Glass In.

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