



INTERPLASTIC

C A S E

history



Sleekcraft® and Magic® Powerboats

From young adults to retired, life-long boaters, Sleekcraft and Magic Powerboat customers take to the water in style with one common denominator – **they love their boats!**

With unique hull designs, meticulous rigging, quick planing, and breathtaking acceleration, these powerboats are built to handle rough water with ease. And you'll find a large concentration of Sleeks and Magics on lakes and in the Pacific Ocean all along the West Coast.

Sleekcraft and Magic boats range in length from 26- to 44-feet-long. They are designed for high-end recreation and they go very fast with base horsepower at 425! Sleeks and Magics are built in Lake Havasu City, (AZ) by one of the most experienced boat manufacturing teams in the industry. Hulls are offered in V-bottom and catamaran styles and customers choose a hard deck or an open bow boat layout. Eye-popping, custom gel-coated graphics get plenty of attention on and off the water. Boat interiors are also designed to suit customer desires.

Premium Materials

Mike Lee, Sleekcraft/Magic Plant Manager, says their boat owners keep coming back for the excellent quality built into every boat. "We use the best composite raw materials for the fit because quality is everything to us." Interplastic Corporation's CoREZYN® low HAP vinyl ester resin and Vectorply® E-glass reinforcement are used to produce their high quality laminates. The materials combination is important for boats like Magic and Sleekcraft brands, which are trailered, beached, docked, run at high speeds and used in rough waters.

Vinyl esters are more expensive than polyester resins, but they provide unbeatable laminate physical properties and performance characteristics that demanding use requires. In addition, vinyl ester resins present the best defense against blistering and delamination. Interplastic Corporation's testing and case studies demonstrate far superior performance and blister resistance from boats built with their CoREZYN vinyl ester resins compared to polyester resins.

Vectorply's E-glass is a knitted, high-strength reinforcement and specified for many marine applications. All Magic and Sleekcraft models are hand-laminated using Vectorply reinforcements in a carefully engineered laminate schedule.

Light RTM and Vacuum Infusion Arriving

Emissions compliance initiated the change to a low HAP resin and the evaluation of different manufacturing techniques at Magic/Sleekcraft. However, Lee says they will build stronger boats and increase manufacturing efficiencies as well.

Light RTM (light resin transfer molding) is planned for small parts such as hatches, consoles, doors, etc. LRTM is a closed mold system whereby resin is injected into the mold and then pulled via vacuum through a flow medium. The flow medium aids the saturation of the resin in the reinforcement which eliminates air pockets or dry spots that can compromise the finished quality of the laminate.



The vacuum infusion process (VIP) will be used on decks and hulls. Similar to LRTM, VIP is also a closed mold system where the resin is pulled through the reinforcement, but it does not require a flow medium. It gives an excellent glass to resin ratio which translates to a very lightweight, strong composite.

LRTM and VIP provide a number of benefits. Existing molds can be remodeled instead of scrapped. Styrene emissions are captured and contained, which helps manufacturers remain in compliance with EPA standards. The cost savings garnered by the reduction of materials waste and labor is typically how the processes pay for themselves. Consistent finished parts quality, and the further reductions of scrap, over-building and rework, make these very attractive manufacturing techniques.

The changeover to LRTM on small parts and VIP on their hulls will evolve over time, according to Lee. An Interplastic vinyl ester infusion resin that has the appropriate molding and physical properties will be used for LRTM and VIP. Many of their older molds are not closed-mold conducive; however Lee says they have five models targeted to change immediately.

The changes in materials and processes are not expected to significantly reduce manufacturing costs. "We'll increase our efficiencies, lower emissions and provide a better product. However quality is paramount and nothing will be done to compromise that," concludes Lee.

Learn More

Interplastic Corporation's vinyl ester resins can be explored at
www.resinnavigator.com

Magic and Sleekcraft Powerboats
www.sleekcraft.com



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