

High Quality Skiffs

Application: Shallow-Draft Skiffs

Lengths: 14 to 22 feet
(4.3 to 6.7 meters)

When Sundance Boats decided to make only shallow-draft skiffs in the 14 to 22-foot (4.3 to 6.7-meter) range, company officials insisted they would fill that niche with the best skiffs possible. They developed a tightly-controlled manufacturing process that produces a higher quality, more affordable skiff while meeting strict government standards for environmental emissions and workplace conditions.

The resins and gel coats best suited for Sundance needs come from North American resin leader AOC. AOC earned the resin specification by winning the “Great Resin Shootout,” conceived by Sundance President Wally Bell. The positive experience with AOC’s Hydropel® and Altek® marine resins led to Sundance’s conversion to AOC’s Vibrin® gel coats.

“When we conducted resin trials individually, it was difficult to compare the differences among alternative systems,” Bell says. “So instead of conducting separate trials, we set up side-by-side comparisons on the shop floor, using production conditions. We invited three different resin producers for a trial on a specific date – only we didn’t tell any of the participants that other resin companies would be there at the same time.”

A primary Sundance strategy is to meet U.S. Environmental Protection Agency (EPA) Maximum Achievable Control Technology (MACT) emissions standards through the use of resins with low hazardous air pollutant (HAP) content. Creating a resin for MACT-compliance was a simple matter of formulating the material with a styrene content of less than 35 percent. Meeting Sundance process and quality specifications was a more daunting task.



Vibrin® high performance marine gel coat-resin systems from AOC help Sundance Boats make high quality skiffs for fishing and boating enjoyment.

How Sundance Makes Boats

Sundance Boats open molds skiffs in female molds that are built in-house from wood master patterns. The first three manufacturing steps are the application of 1) a mold release, 2) a gel coat and 3) a skin coat of chopped glass fibers and resin that is applied with non-atomizing flow coaters.

"Behind the gel coat and skin coat, we laminate layers 'wet on wet' so all the resin for the entire boat 'cooks' at the same time. We manufacture our own high-density urethane foam cores which are glassed in place on top of the skin coat. Then we hand lay resin-impregnated woven roving in the hull and begin laminating in foam I-beam stringers."



Encapsulating custom-made foam cores with fiberglass and AOC resin is part of Sundance's process for manufacturing an integral hull in a single cure cycle.



Vibrin® gel coats are applied in Sundance's state-of-the-art production facility and produce state-of-the-art surfaces.



More layers of woven roving are laminated on top of the foam preforms. The end result is a solid integrated sandwich without the use of wood cores which have the potential to rot. The boat's interior surface is finished off with the splatter application of a low-gloss gel coat.

"We are asking a lot from the resin we use," Bell points out. "The resin has to be low in styrene. It has to have a good working viscosity with both chopped fibers and woven roving. It has to provide good adhesion between the laminate and cores. And most importantly, the resin cannot outgas during cure. Outgassing leads to 'lift'- and unwanted voids - between the laminate and core.

"None of the resins in our initial Shootout successfully met all our criteria," says Bell. "The resin company technical teams went back and fine-tuned their products." At the Lakeland, Florida, plant of AOC, Tech Service Manager Bob Reese and Tech Service Rep Darrell Bryant worked diligently to develop and optimize resin systems for Sundance Boats specifications. The results of their efforts are noted by Bell: "In the second round of the Great Resin Shootout, AOC exceeded our expectations and clearly outperformed the others."

Vibrin® Gel Coat Inside and Out

After the Shootout, Sundance Boats started benefiting from AOC resin performance and tech support as well as excellent customer service from AOC Sales Representative Jody Johnson and Composites One Sales Representative Jerry Smith. It was time to evaluate Vibrin® high performance marine gel coats.

"I checked with two other boat builders who use Vibrin® gel coats," Bell recalls. "I respect those guys a lot, and they spoke highly of Vibrin® gel coats and AOC's responsive service.

"AOC Technical Service Specialist Lester Lowery audited our process and paid close attention to what we were asking for," Bell says. "Lester came back with an exterior gel coat with excellent gloss and resistance to moisture. And the interior gel coat has the flatness, fast hiding characteristics, flexibility and durability that helps set Sundance boats apart," he says. "We now manufacture with a complete AOC resin-gel coat system."

About Sundance Boats

Located in Blackshear, GA, USA, Sundance Boats, Inc., manufactures superior shallow draft and modified-V skiffs for fishing and pleasure cruising. Sundance performance features were affirmed when a Sundance Boat was used by the winner of the 2004 National Striped Bass Association competition. Sundance customer satisfaction is affirmed by the unsolicited letters and photos posted on the company website. For more details, phone (912) 449-0033, e-mail info1@sundanceboats.com, or visit www.sundanceboats.com on the Internet.

About AOC

Headquartered in Collierville, TN, USA, AOC is a leading global supplier of resins, gel coats, colorants, additives and synergistic systems for composites and cast polymers. More composite boats in North America have been made with AOC resins than any other kind. AOC is dedicated to serving customers with innovative technology, manufacturing of the highest quality and consistency, and the industry's most knowledgeable technical support. For more information, contact Steve Martin by e-mailing smartin@oc-resins.com or phoning (901) 854-2847. Or visit the AOC website at www.aoc-resins.com.