



**Your Formula for Success**  
RESINS | GEL COATS | COLORANTS

# CASE HISTORY

## High Quality Skills

<b>Market Segments:</b>	Marine
<b>Composite Applications:</b>	Shallow-Draft Skiffs
<b>Resin:</b>	Altek Laminating Polyester Hydropel Vinyl Ester Vibrin Gel Coat
<b>Manufacturing</b>	Hand Lay-up
<b>Process Lengths:</b>	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.”



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

## High Quality Skills, continued

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.

### 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.”

“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.

“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.



*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.*

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](mailto:info1@sundanceboats.com), or visit [www.sundanceboats.com](http://www.sundanceboats.com) on the Internet.

### About AOC

AOC is a leading global supplier of resins, gel coats, colorants, additives and synergistic material systems for composites and cast polymers. For more information on AOC technology, quality and service, e-mail [sales@aoc-resins.com](mailto:sales@aoc-resins.com), phone (866) 319-8827, or go to [AOC-RESINS.com](http://AOC-RESINS.com).