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RESINS | GEL COATS | COLORANTS

# CASE HISTORY



## High Quality Swimming Pools

**Market Segment:** Recreation

**Composite Applications:** In-ground Swimming Pools

**Resin:** Vipel F010 bisphenol A epoxy vinyl ester  
Altek H834 unsaturated polyester

**Manufacturing Process:** Spray-up of Barrier Skin Coat  
Hand Lay-up of Bulk Laminate

**Range of Dimensions:** 7 Feet, 2 Inch Diameter  
Circular Spas to 16 Foot by  
42 Foot Swimming Pools  
(16 by 9.25 Meters)

The demand for high quality fiberglass swimming pools and Blue Hawaiian Fiberglass Pools outstanding reputation has necessitated the opening of a second manufacturing plant to meet their demand.

The high quality of a Blue Hawaiian pool comes from a well-trained workforce and strict control of the manufacturing process. An essential component of process control is the use of consistent Vipel® F010 vinyl ester and Altek® H834 unsaturated polyester from AOC.

The majority of Blue Hawaiian Fiberglass Pools sales are to the Eastern United States and Canada, but the company has shipped as far away as Germany. Blue Hawaiian headquarters and its original plant are in Largo, Florida. The new plant being built in Rocky Mount, North Carolina, will significantly reduce transportation costs for pools shipped to several states and Canada.

### New facility, same quality

The new plant will continue a management philosophy that emphasizes professional training. New workers are trained by Largo Plant Operations Manager Nick Williams, who is a Certified Composites Technician - Instructor (CCT-I), the highest professional accreditation earned through



*Blue Hawaiian Fiberglass Pools are available in 66 awardwinning designs such as the Sandy Cove which features a curved corner and a semi-circular niche.*



*Blue Hawaiian Fiberglass Pools such as this Southwind design require significantly less maintenance and upkeep than a concrete pool.*

## High Quality Swimming Pools, continued

the American Composites Manufacturers Association. As a CCT-I professional, Williams qualifies, mentors, schools and tests Blue Hawaiian workers to become Certified Composites Technicians.

“Our high quality also gets a boost from low worker turnover,” explained Company President and CEO Roger Erdelac. “We make every worker feel like a part of the organization, and we promote from within. For example, the individual selected to manage the new North Carolina plant started out with us as a fiberglass laminator, became CCT-certified and worked his way up.”

Complementing the dedicated workforce is a highly disciplined system for controlling the manufacturing process. Pool production starts with mold preparation and application of a pigmented gel coat. To keep moisture from causing gel coat blisters, workers next spray-up a barrier skin coat of chopped glass fibers in Vipel F010 bisphenol A epoxy vinyl ester. The final layer is a hand lay-up bulk laminate using Altek H834 resin to impregnate fiberglass chopped strand mat and woven roving. Resin-impregnated combination mat is added to specific locations needing extra strength.

### AOC resin consistency

Plant Operations Manager Williams pointed out how the consistency of AOC resins plays a key role in maintaining high levels of end-product quality. “The consistency of the previous supplier’s bulk resin was so bad that we had to keep retraining our workers,” he said. “They had to learn how to adapt to the latest shipment.

“Batch-to-batch consistency has always been a hallmark of AOC resin production,” said Emilio Oramas, AOC Vice President, Global Sales. “It all starts with proprietary computer controls that eliminate the potential for human error at each step of the manufacturing process.

“The quality management systems of all AOC-owned facilities are certified as meeting the world-class requirements of ISO 9001:2000,” he said. “Furthermore, every AOC plant embraces Six Sigma - Lean which uses statistical data and teamwork to improve productivity and elevate product quality.”

### About Blue Hawaiian Fiberglass Pools

Headquartered in Largo, Florida, Blue Hawaiian Fiberglass Pools is a premiere manufacturer of FRP composite pools. The company’s pools can include such features



*A Blue Hawaiian Fiberglass product is pulled from the mold.*



*Blue Hawaiian Fiberglass Pools are shipped to dealers throughout the U.S. and Canada.*

as built-in spa, swim jets, children’s wading area, sun tanning ledge and a wet patio. Blue Hawaiian Fiberglass Swimming Pools offer 66 awardwinning designs, including designs that are unique enough to be awarded a U.S. Patent. For more information on Blue Hawaiian Fiberglass Pools designs and benefits, including a limited 35-year warranty, phone 727.535.5677 or 888.840.7699, or go to [www.bluehawaiianfiberglasspools.com](http://www.bluehawaiianfiberglasspools.com).

### About AOC

AOC is a leading global supplier of resins, gel coats, colorants, additives and synergistic material systems for composites and cast polymers. AOC develops technology, lives quality and delivers service better than any other resin supplier. For more information, e-mail [sales@aoc-resins.com](mailto:sales@aoc-resins.com), phone (901) 854-2800 or go [www.AOC-RESINS.com](http://www.AOC-RESINS.com).