

MARINE CONCEPTS IMPROVES EFFICIENCY

CASE STUDY

ABOUT MARINE CONCEPTS

Founded in 1976, Marine Concepts strived to be one of the first companies to provide a full line of design & engineering services for its customers while ensuring that all projects from design to production, are completed to the highest quality standards. Eventually, the company would be recognized for its services and become known as “The Next Generation In Design, Engineering, and Tooling.” Marine Concepts employs specialists with years of experience in design, engineering, CNC milling, plug building, and mold production.

Marine Concepts is headquartered in Cape Coral, Florida and has recently expanded. In 2012 the company opened an additional facility in Sarasota, Florida to fulfill its growing demand. Between the two locations, Marine Concepts has over 300,000 square feet of manufacturing and office space.

With experienced staff and state-of-the-art CNC machines they provide a variety of composite and fiberglass solutions to their clients. Customers in a variety of industries from boating, wind power production, aerospace, automotive, and even theme parks utilize quality products made by Marine Concepts.

CASE STUDY



OMNITRAC 2 & VPROBE

In 2017 Marine Concepts analyzed their metrology department, and in the interest of their customers, decided to explore the newest technologies in metrology. The company's analysis concluded it needed a laser tracker with extended capabilities. Marine Concepts required a tracker that could not only inspect parts, but also maintain the accuracies needed to compensate their CNC mills. The company also needed to find equipment that would allow them to go beyond the capabilities of an SMR. Marine Concepts contacted Automated Precision Inc, (API) for assistance with finding a laser tracker with this functionality. API introduced Marine Concepts to the Omnitrac 2 (OT2) laser tracker paired with the vProbe. With in-line accuracy of 0.0066mm at 20 meters, the OT2 allows Marine Concepts to quickly gather accurate data on their 73' long CNC. With the added benefit of the OT2's built in auto-lock capabilities, the company no longer worries about interferences with the laser beam.

At just 11kg, and completely wireless, the OT2 is perfect solution for Marine Concepts to measure even the smallest of parts. In the past, the company had to haul bulky equipment around and wait nearly 45 minutes to take measurements. With the OT2's easy setup and quick warm-up, they can get to work much quicker. The added versatility of the vProbe also enables Marine Concepts to inspect grooves and scribe lines in a matter of seconds. The old solution for this inspection was more time-consuming and required additional setups that reduced the accuracy of the results. Overall, the OT2 with the vProbe have greatly improved efficiencies in Marine Concepts metrology department.

Marine Concepts inspects complex parts for customers in a variety of industries which include shipping, energy, and aerospace. Due to the critical nature of these industries, there is no room for error when inspecting parts. Marine concepts counts on the OT2 and vProbe to ensure these parts are inspected to the highest level of accuracy possible.

ABOUT API

For over 30 years, Automated Precision Inc. (API) has used advanced metrology to develop customized solutions for the world's leading companies like Boeing, Lockheed Martin, Northrop Grumman, Voith Hydro, Duke Energy, Ford and many others. API offers a unique mix of innovative engineering capabilities, superior product quality, and outstanding customer service to help improve your business and bottom line. API's award-winning products are manufactured in the United States and are used by many of the world's leading automotive, aerospace, shipbuilding, machine tool, and energy companies.