Nikon Portable Laser Scanner

What is it? And how does it work?

- Optical CMM
  CMM - Coordinate Measuring Machines
- 3 Cameras reflect off LEDs for displacement and Laser detects surfaces.

Applications

- Full freedom scanning of large objects
- Car components of any size
- Aerospace Products
- On-site measurement applications
- Part-to-CAD dimensional inspection
- Reverse engineering

Features & Benefits

- Measure anywhere
- Fully portable and easy setup
- Suited for metrology lab and shop floor measurements
- Motion compensation of measurement object, through dynamic object referencing
- Omni-directional use of probe without mechanical constraints
- Laser stripe width up to 200mm (7.87in)
- High-resolution digital acquisition
- Superior accuracy, tolerance up to .135mm (0.005in)
- Full digital processing
- Optimized LED positions for continuous and precise probe tracking
- Large (17m³) (600 cft) and expandable measurement volume
- SpaceProbe touch probe for tactile measurements

Specification and Requirements

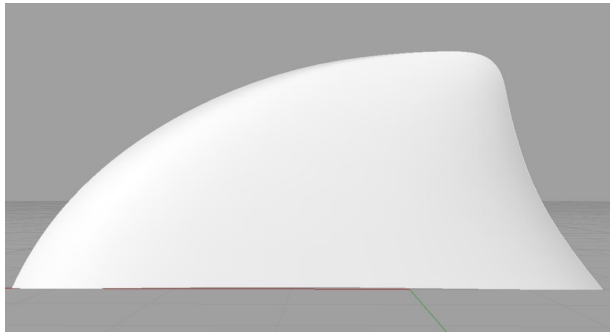
- Operation temperature ranges from 32F to 95F
- Minimum 5ft of distances from the object

Case Study

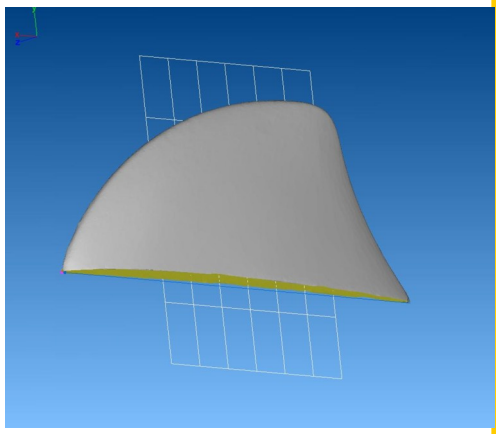
2 in Surfing Fin

Actual Product:

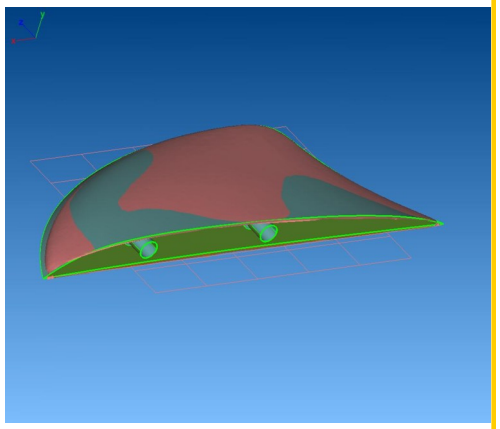
CAD Model:



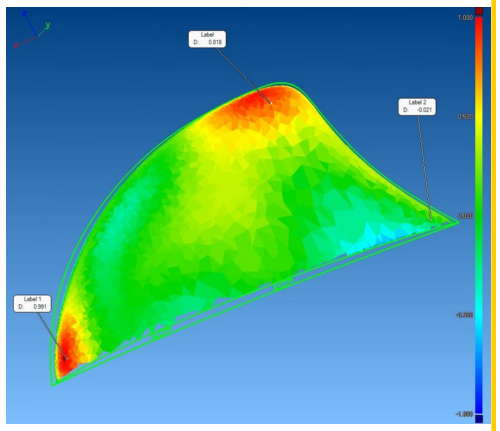
Scanned Model:



CAD and Scan Model Alignment

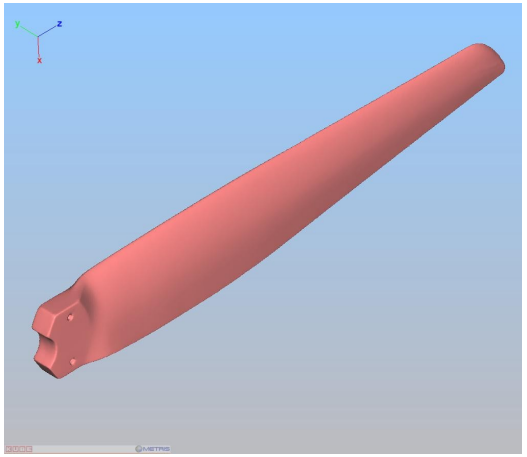


Inspection: Part Deviations (mm)

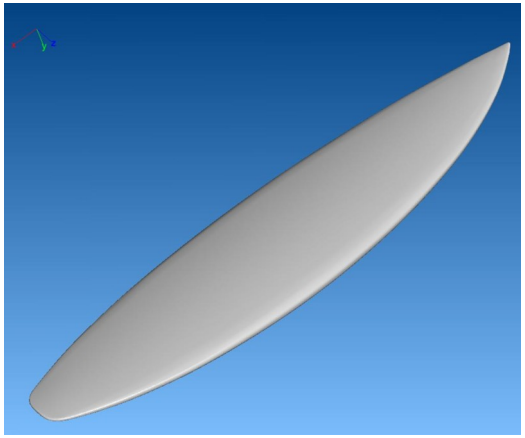


Other Examples:

Wind Turbine Blade



Surfboards:



Other Services Willamette Pattern Works Provide:

- **Tooling Design**
- **Composite Tooling**
- **Foundry Services**
- **Scan to CNC Machining**

Willamette Pattern Works

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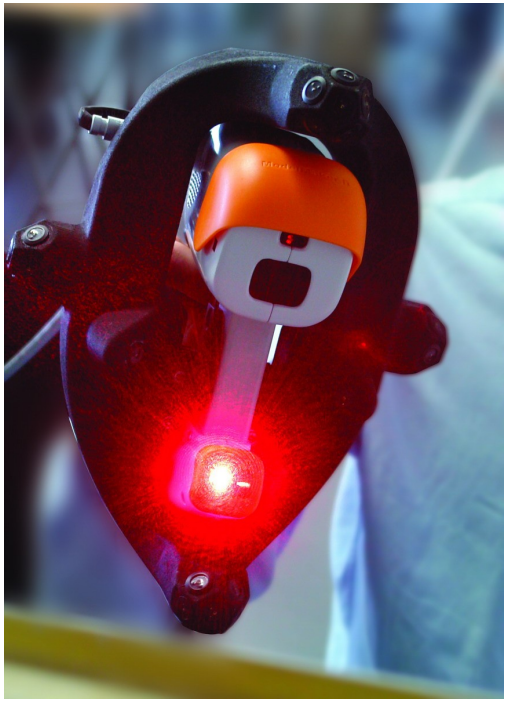
Willamette Pattern Works

Since 1906

Metrology Service



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