

FAROARM SCANNING SERIES

www.laserdesign.com

The Leader in 3D Laser Scanning Since 1987



Laser Design Inc., the world leader in 3D laser scanning, introduces next-generation scanning technology combined with the world leader in Articulated Arm CMM's, Faro Technologies Inc. This high accuracy, portable 3D Laser Scanning System is the industry's fastest, more flexible and easy to use scanner. Laser Design's SLP probes have been designed for this integration with the Faro Arms for both their 7 Axis and 6 Axis configurations. The Dual Receptor design of the SLP probes reduces the scanning motions to completely scan any kind of part or object. The SLP Probe's high speed makes scanning extremely fast.

SLP Laser Scanning Probes come in 3 line lengths (from 1.5" (33mm) to 8" (200mm) allow for scanning of small high detailed parts to very large parts for automotive, aerospace, or almost any kind of large item or product. System Scanning Accuracy to +/- 0.00225" (System configuration dependent – Ball Bar B89 Test) is available.

The Faro Platinum, Titanium and Advantage Articulated Arm CMM's are the world's most popular measuring systems for simple to complex shapes. Touch probe measuring input is included with each arm at a basic level with industry leading metrology capabilities available as an option. This can make the FAROARM Scanning System the most capable measuring device for the widest variety of measuring requirements imaginable.

The FAROARM Scanning System offers bundled software from Geomagic Inc. to easily process the 3D scan data for Inspection Reports or Reverse Engineering applications. Geomagic is the world's leading scan data processing company making this the most advanced combination of measuring arm, scanning technology and data processing software available in the market. Geomagic software can also be used as the scanning system interface.

FAROARM® 3D Laser Scanners

Laser Design's FAROARM 3D Laser Scanning Systems in conjunction with optional software from our Solutions Partner, Geomagic, can solve the most demanding inspection and reverse engineering applications.

- **Portable, Easy to Use . 3D Laser Scanning System for simple or complex parts. Fast set up, fast and easy calibration for the highest accuracy.**
- **Rapid Inspection Compare scan data from actual parts to 3D CAD models for computer aided verification.**
- **Quality Control Obtain discrete dimension information directly from 3D scan data with automated report generation and Excel spread sheet output.**
- **Reverse Engineering Apply surfaces to scan data for 3D CAD model creation.**
- **CMM Capability Optional CMM software for touch probe only measurements (Faro's CAM2) is available along with any of the Faro accessories.**



Faro's 7 Axis Wrist configuration provides for the greatest ease of use for Laser Scanning applications. The 7th Axis Wrist comes with a built in pistol grip with convenient trigger for laser on/off and easy orientation of the laser probe to the work piece.

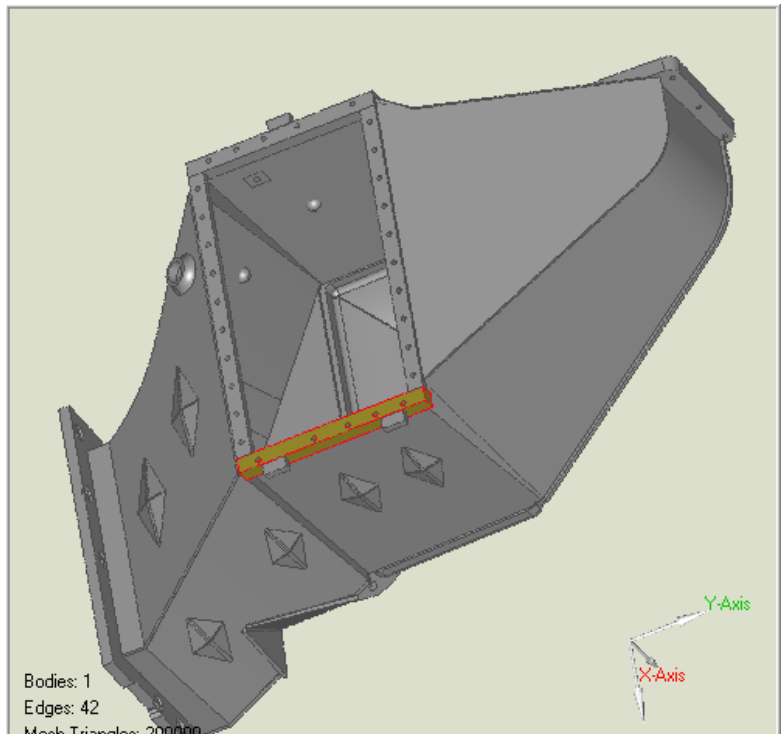


Mounting Kit for SLP Probe to Faro 6 Axis Arms allows dual purpose capabilities for existing Faro Arm users. Touch Probe or Laser Scanning capabilities for any Faro Platinum, Titanium, or Advantage Arms already in use.

REVERSE ENGINEERING



This sheetmetal housing was scanned to obtain millions of coordinate points which were used to reverse engineer into a CAD model to update the customer's data base of components. CAD modeling from scan data proved to be more than 8 times faster than estimated by the customer's in house touch probe / CAD process typically used. Fast turn around of projects like this allow the user to update their database of products that have changed and evolved since the original CAD models were made. New products are developed from existing products by modifying the old products at a CAD model level rather than starting from scratch.

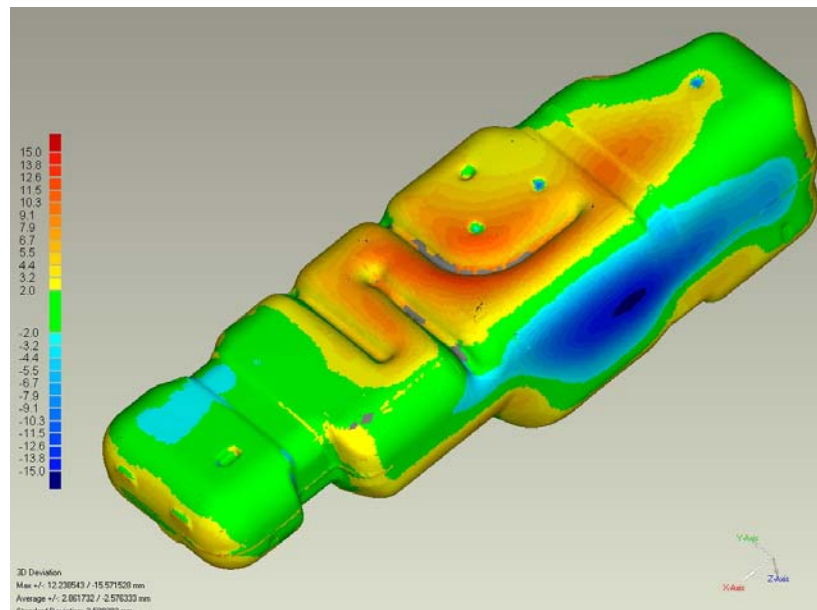


A CAD Surface Model is output from Geomagic SHAPE STUDIO via IGES and STEP formats to any CAD or CAD/CAM environment for manufacturing or further modification.

INSPECTION / VERIFICATION



The Color Error Map from Geomagic QUALIFY compares the scan of the part to its original design intent. Green is a match to the original CAD model; yellow to red shows the part growing away from the CAD model and blue shows shrinkage from the CAD model. Dimensional features are also provided with a full Inspection Report automatically generated.



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