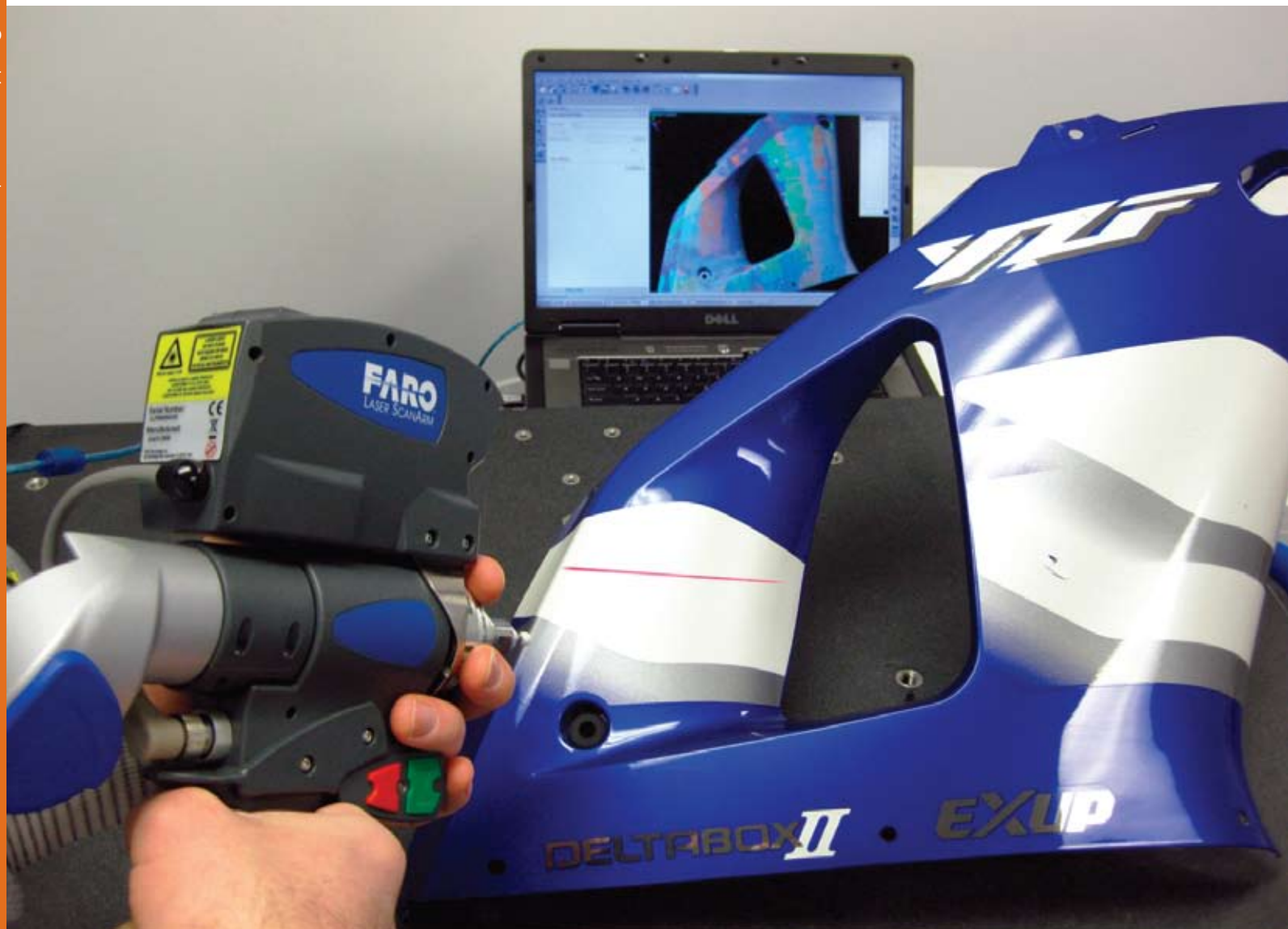


Synergeering Group Provides High-Quality Rapid Prototyping Using the FARO Laser ScanArm®

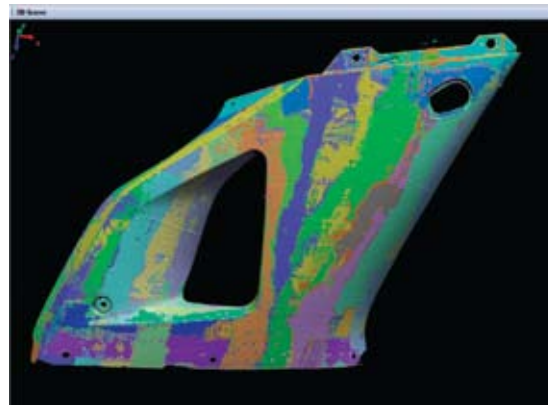


Synergeering added the Quantum FaroArm with the V3 Laser ScanArm to expand their services to include reverse engineering and better their measurement capabilities. Replacing their previous measurement methods made Synergeering's overall processes more accurate and efficient.



Synergeering Group provides high-quality rapid prototyping and rapid manufacturing services to customers in the automotive, aerospace, medical, and consumer products industries. Based in Farmington Hills, Michigan, Synergeering (www.synergeering.com) prides itself on being the best.

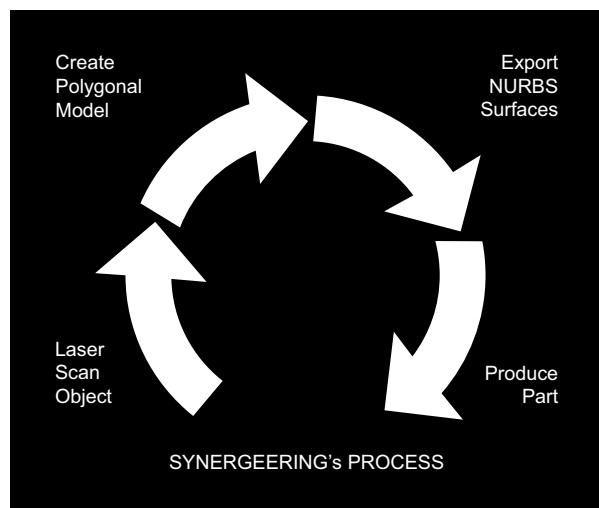
Their capacity for rapid manufacturing and building fully functioning rapid prototype parts is unrivaled. Synergeering's experienced staff produces functional parts utilizing Laser Sintering (LS) of nylon plastic and 3-D printing with the highest resolution process and materials available. Synergeering also utilizes Electron Beam Melting (EBM) of titanium and cobalt chromium directly from CAD data.



Problem

Synergeering previously used a large variety of tools and technologies – including hand gauges and calipers – to measure and inspect parts of all types and sizes. These past methods were often inaccurate, incomplete, and not as detailed as Synergeering and their customers required. To try to solve these problems, they looked at a traditional fixed CMM, but that presented another long list of problems and disadvantages.

Solution



One solution that not only solved Synergeering's metrology problems, but did so while providing them the speed, versatility, and scanning capability they were looking for was the Quantum FaroArm® with the all-new Laser ScanArm V3 attachment. The FARO system's ease-of-use and speed helped Synergeering to not only increase their overall accuracy, but also improved their productivity.

Implementing the improved technology was very easy.

"The process was extremely easy, especially with the on-site help and experience of Les Baker, FARO's Application Engineer," said Founder and CEO Thomas Gogoe. "The technology was quickly accepted by our team, again thanks largely to Les' great training and the simplicity of the software."

Synergeering uses PolyWorks® 10.1 which is a powerful point-cloud software that processes the Laser ScanArm data. The ScanArm hardware and PolyWorks software provide the perfect combination of ease-of-use and functionality – so much so that Synergeering uses their ScanArm for measuring and scanning daily.

They use their ScanArm for reverse engineering, 3-D modeling, point-cloud generation, and part inspection. The combination of the FARO hardware and PolyWorks software provides Synergeering comprehensive 7-axis, high-resolution scanning ability and the best inspection system capable of creating Nurb-based surfaces that can be imported back into native CAD systems as .IGES or .STEP files.

Return on Investment

Synergeering added the Quantum FaroArm with the V3 Laser ScanArm to expand their services to include reverse engineering and better their measurement capabilities. Replacing their previous measurement methods made Synergeering's overall processes more accurate and efficient.



Synergeering can laser scan customers' parts and create fully-surfaced 3-D CAD models, then produce fully functional components from their unique rapid prototype capabilities, and deliver within days.

"Synergeering's ongoing dedication to research and development, as well as our experience producing thousands of functional components has, without fail, provided reliability and value to our customer base," said Gogoe. "Our experienced engineers continue to master both the art and science of creating the highest quality Free-Form-Fabricated parts. And our processes are constantly being refined with new methods — like those provided by FARO — that will save our customers time and money."