



Portable 3D Scanning Systems **SURVEYOR[®] PS-Series**

STRUCTURED LIGHT SCANNING – Structured light 3D scanner uses projected light patterns and a camera system for precise measurement.

HIGH ACCURACY – High precision imaging means quality 3D scans.

EASY TO USE – Integrated scanning directly into Geomagic.



Portable 3D Laser Scanning Systems

SURVEYOR[®] PS-Series

The Surveyor PS-Series 3D Scanners provide high accuracy imaging for advanced 3D scanning while being one of the most affordable systems available on the market. Easy to use, the high quality 3D scans offer a powerful solution to various applications across many industries.

The PS system is a structured-light 3D scanner that uses projected light patterns, two high-speed HD machine vision cameras. Based on white light technology, the scanner offers faster scanning speed and full field scanning compared to 3D laser scanners.



The optional rotary stage automates the scanning process when parts must be repositioned to capture multiple views. Geomagic software offers many scanning and data processing options. Direct scanning into Geomagic makes the data collection process simple. It can process 3D data upon capture with built-in data editing, alignment, and merging capabilities. Color texture is included for color scans (optional).

Typically scanned objects include parts made of plastic, metal, and rubber, and cast, molded, forged, machined, and extruded components, as well as tooling, dies, or molds. Data can be output in .STL, .OBJ, .PLY, .ASC and 3D3 formats.

The digitized data can be processed further with optional meshing, surface modeling, color error mapping, and inspection software from Laser Design's solution partner, Geomagic. With Geomagic Wrap fully automated inspection reports can be created. Reports comparing the scan data to CAD models can be immediately viewed by the operator to make a fast Go / No Go decision of shape verification.

Software

Geomagic Wrap enables fast, accurate, graphical comparisons between digital reference models (CAD models or scanned physical models) and as-built parts for first-article inspection.

Options to upgrade are available. Other data processing software packages are also available including: PolyWorks, Rapidform, and Verisurf.

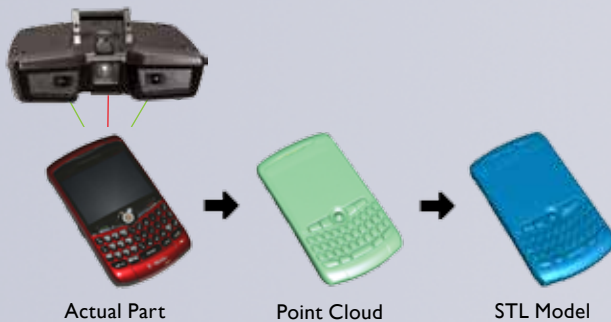


Applications

Laser Design supports scan data processing software from our solutions partners for reverse engineering and inspection applications.

REVERSE ENGINEERING

Quickly create 3D CAD surface models or low-cost production of STL files for rapid prototyping.



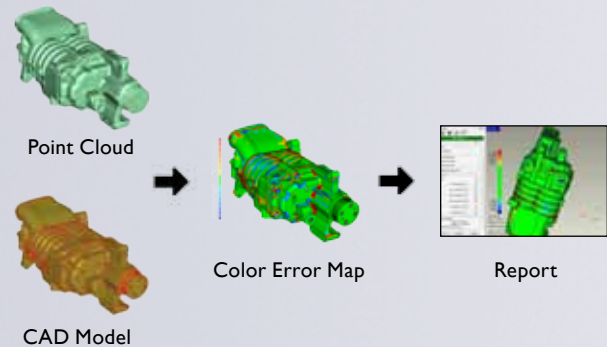
Our turnkey 3D scanning system solutions include application-specific software for output of:

- Inspection / verification reports
- 3D color error maps
- CAD models (parametric, non-parametric, parasolids, surface NURBS, etc.)
- STL meshes
- Point clouds
- Isolated key design features
- Many other analytic or geometric formats

Full training is offered either in the Laser Design classroom or at the customer site, along with maintenance support, upgrades, webinar interactive support, phone support, and website-based tutorials.

INSPECTION

Measure and analyze the variance from CAD nominal with 3D color error mapping.



Revolutionize your inspection process by implementing complete part characterization / analysis based upon millions of coordinates defining the part's shape rather than the few hundred coordinates of touch probe measuring. Any part geometry out of compliance with the CAD model is immediately revealed. The color-coded results are graphic and readily understood: green areas are within specifications; red, yellow, and blue areas are not.

Locations of critical datums and full GD&T dimensions are quickly displayed and included in easy-to-read graphic reports. Laser scan data can be combined with touch probe data in the same inspection report. Full dimensional spreadsheets can be output to conventional SPC as desired. Once an inspection report is created, it can be automated for second part output without operator involvement, making multiple part inspections much faster and more thorough than ever before.



ABOUT LASER DESIGN INC.

Laser Design's Surveyor® line of automated and portable scanning systems are ideal for inspection and reverse engineering applications involving complex-shaped parts of virtually any size, color, complexity, or material. The company's patented laser-line probe and white light projection technology dramatically reduces scanning time by collecting data substantially faster than conventional metrology methods.

Laser Design operates GKS Services, a service bureau division offering complete 3D scanning, reverse engineering, and dimensional inspection services for over 30 years. Laser Design and GKS Services have multiple labs and mobile offices in the United States and locations in many countries around the world.



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