

# CMM LASER SCANNING PROBE

www.laserdesign.com

The Leader in 3D Laser Scanning Since 1987

## CMM Laser Scanning Probe Kit

Laser Design Inc. offers 3D High Speed Laser Scanning technology mounted to your existing CMM (Coordinate Measurement Machine) system for full time or occasional use. Our laser scanning probe is integrated to your CMM via a one-time connection to your CMM's linear scale readout wiring. This interface is provided by Laser Design's certified technicians and will not interfere with your CMM's current functions or operation. It's almost as easy as adding a new touch probe. Your machine's existing control system, joystick and software will be used in its current form to provide motion control and movement of the laser probe over the parts being scanned. The laser scan data will be captured in a new, high-performance computer running Laser Design's Surveyor Scan Control (SSC) software and optional data processing software for modeling and inspection.

**Compatible with all leading CMM manufacturers including:**

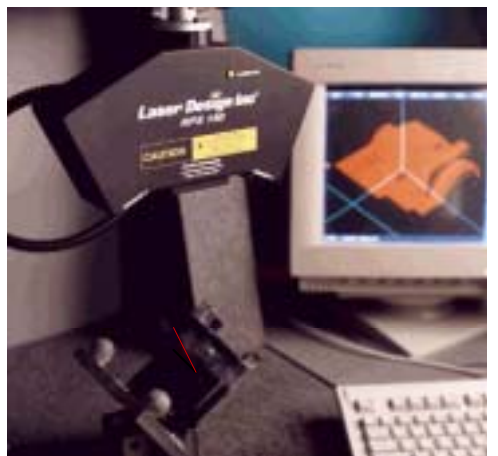
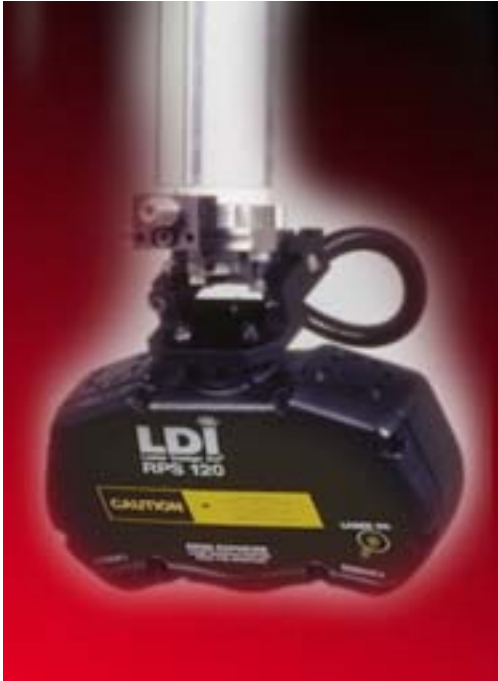
Brown & Sharpe	Helmel	Mora	RAM	Tarus
CE Johansson	IMS	Mycrona	Resource Eng	Wenzel
Coord3	LK	Numerex	Rotondi	Werth
Cordax	Micro Vu	Poli	Sheffield	Zettmess
DEA	Mitutoyo	Portage	Starrett	Zeiss

Laser Design's laser probe will be mounted to your CMM with a simple mounting device and electrical connection. Because your existing machine platform and motion control system are used, the benefits of rapid laser scanning are made affordable without the need for a messy system retrofit. With our technology added to your CMM, you will be able to scan parts with complex shapes and free form surfaces dramatically faster than with touch probes.

Our Surveyor Scan Control software will run on a separate, high-performance PC provided with this system package. This PC collects the 3D laser scan data from the surface of the part being scanned. Data will be organized into a single coordinate system after scanning all surfaces of the part utilizing the software's multi-orientation scanning features. Manual coordination or programmed scanning motions can be initialized by the operator to scan parts at up to 14,400 coordinates per second. Laser scanning speeds of 1 - 2 inches per second are common for most scanning processes. Complete part scanning or portions of the part can be scanned in just a few minutes. The most complex parts can be scanned using the system's Manual Head Indexer (laser orientation device).

Surveyor Scan Control gives you the ability to perform useful editing functions on the collected scan data including filtering, smoothing, merging, aligning, trimming, deleting, and shading. SSC also includes noise and data spike suppression features allowing the user to manually or automatically improve problematic data. Our software has been specifically designed to pack as much power as possible into a modern easy-to-learn and use graphical interface.

Laser Design's CMM Laser Scanning Probe Kit makes it easy and economical to upgrade your existing CMM with the power of 3D laser scanning.



# CMM Laser Scanning Probe Kit Includes



## RPS Laser Probes

Line laser technology allows Laser Design's RPS laser probes to quickly and accurately scan complex shapes. Different RPS probe models with varying laser line lengths and accuracies are available depending on your particular application. See the RPS spec sheet for complete specifications.



## Surveyor Scan Control (SSC)

Easy-to-use and learn software allows users to capture and manipulate laser scan data. Powerful editing functions are easily accessed. SSC's modern graphical interface, help screens and automated wizards guide the user through the scanning and laser alignment functions. See the Surveyor Scan Control spec sheet for full information.



## Dynamic Scanning

The Dynamic Scanning module connects our laser probe solution to your CMMs linear encoder scales providing us with real-time, 3D positioning information. Dynamic Scanning increases the data capture rate to 14,000 points per second with outstanding accuracy. A full spec sheet is available with more information.



## Laser Wrist

The laser wrist allows the user to align the laser probe in various orientations to assist in scanning complex part geometry. See Accessories spec sheet for more information.



## Laser Line Monitor

Our laser line LCD monitor shows you instantly if the laser is in focus and reading the surface of your part.



## Reverse Engineering and Inspection Software

Data processing software from Raindrop Geomagic is available as an option with your CMM laser scanning probe kit. Refer to the Geomagic spec sheets for more information.

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