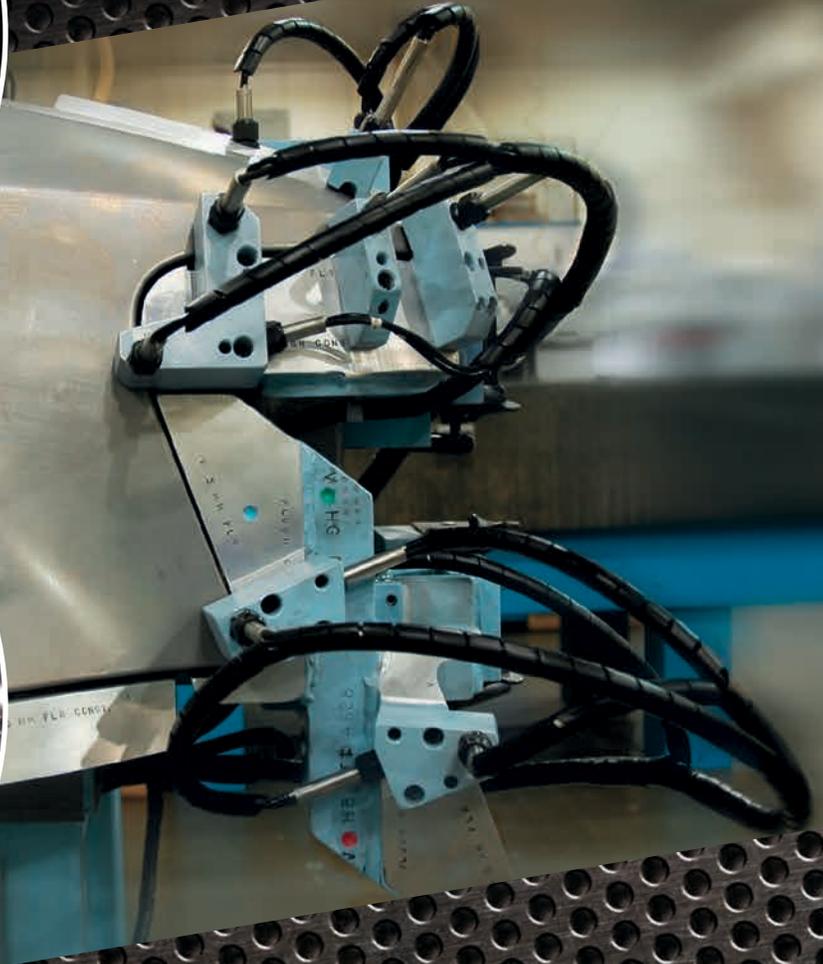


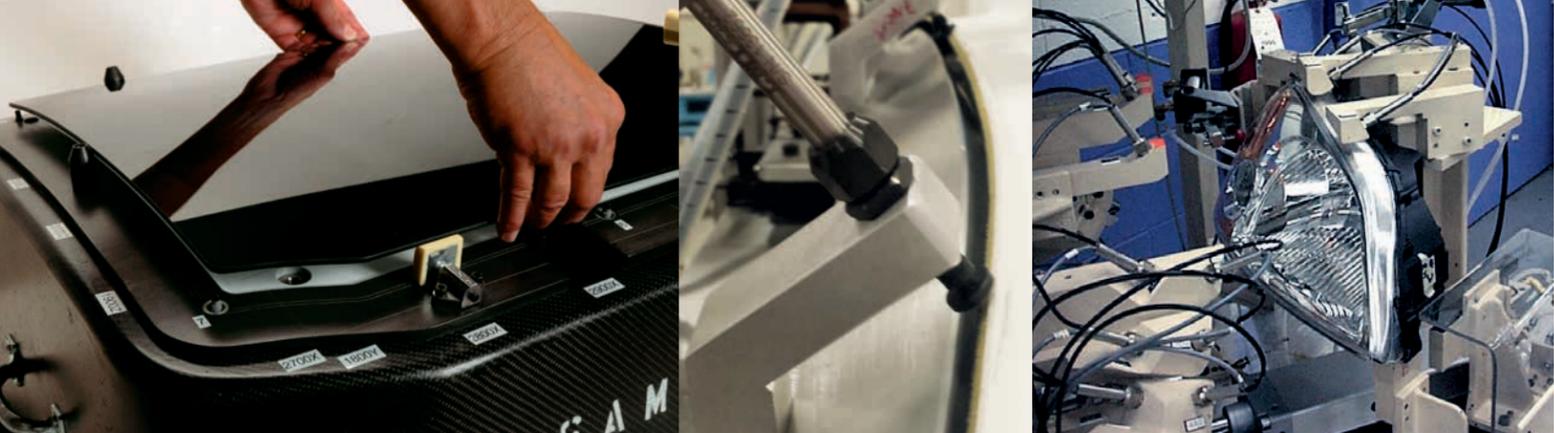
Solutions That **Make Sense**



AutoGage

Automated Measurement Systems

LMI[®]
Linear Measurement Instruments, Corp.



LMI designs and manufactures all the measurement sensors and software so we can provide you with the best turnkey solution with the service and support to guarantee success.

Sense a Solution with LMI AUTOGAGE Automated Measurement System

The **LMI AutoGage system** is a measurement and data collection solution to maximize your quality and efficiency. Manual methods are both slow and prone to human error but with AutoGage speed and accuracy are paramount. Whether you need a solution that is fully automated or you have more of a manual process the AutoGage system can be fully customized to fit your application.

AutoGage is a fully integrated system that is comprised of two parts: **Software** and **Hardware**.

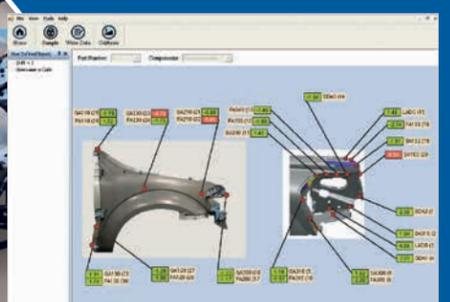
SOFTWARE

The cornerstone of the AutoGage system is the Universal Gage Interface (UGI) software. UGI is a comprehensive software package that does more than just configure inspection routines, and display and collect data. UGI gives you the power to customize your routine, communicate to a PLC to automate your process and gives you instant part quality analysis with live readings. The screen displays each measurement around a graphic that colorfully identifies whether each reading is within specification limits **GREEN**, within caution limits **YELLOW**, or out of specification limits **RED**.

Software Features

- Easy-to-use interface: Part files are easy to set up and data collection is simple
- Graphic interface — import and customize a drawing or a photo of your part
- Live readings displayed around a graphic for seeing the “big picture”
- Instantaneous part quality notification (Pass/Fail)
- Password protection to insure file integrity and control changes
- Standard data exports available as well as an Export Wizard to customize your data export format

- Data can be exported to multiple file locations
- Trace labels (operator, part#, shift, etc...) Unlimited number of user configurable inputs allows easy tagging of data and can be entered manually or automatically at the beginning or the end of the part file
- Calculations: A variety of standard calculations and functions are available to determine MIN/MAX, Rate Of Change, TIR, parallelism, perpendicularity, etc.
- Null Indicator feature available to verify the part is properly located and centered prior to measurement
- Direct Programmable Logic Controller (PLC) interface
- Calibration frequency can be controlled by the software which will insure accurate data



- ### System Benefits
- Easily measure complex parts and assemblies
 - Reduce inspection time — measures 128 points simultaneously
 - Maximum flexibility to minimize cost
 - Eliminates operator error
 - Durability and reliability that LMI is known for
 - Direct manufacturer support and service
 - Direct manufacturer installation

HARDWARE

The **AutoGage hardware** is comprised of a multiplexer and the individual pencil probe sensors. The **LMI 5001 Master Mux** is a 32 port multiplexer that provides each sensor with power and consolidates all the sensor readings and connects them directly back to the PC via an RS232 port. Each Mux can be linked with additional units to daisy chain out to 128 points simultaneously. The robust LMI Probes are durable sensors for the most demanding industrial environments. Each probe has a standard 10.0 mm measurement range and come in either spring or pneumatic actuation.

LMI can customize each system and provide a complete turnkey solution.

Master Mux Features

- Multiplexer is manufactured for shop floor use
- Easy plug and play configuration, no hardware configuration to add or remove sensors
- 32 Probes connected to one Mux with up to 128 points simultaneously
- Standard interface to actuate 24 volt air valve
- Pendant or palm button connection available for manual operation and sampling
- Multi-connector option allows for quick part change over



5001 Master Mux



5001M Multi-Connector Mux

- Interface to:**
- Pneumatic True Position Sensors
 - Valves and Clamps
 - Barcode Scanners
 - Label Printers
 - Optical Lockout Sensors
 - Non-Contact Lasers
 - PLC's

Multiple Parts, One Solution

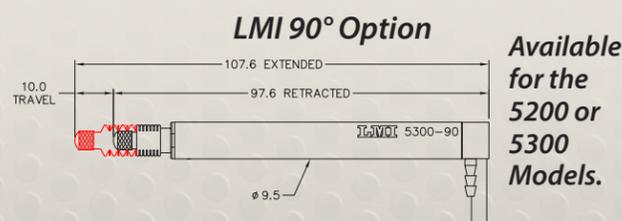
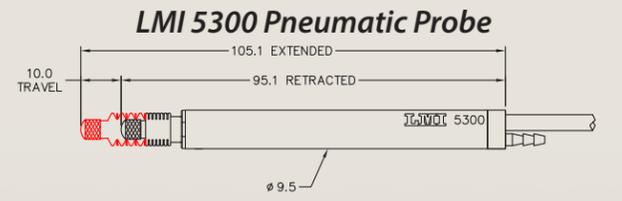


Reduce Setup • Increase Inspection Speed • Minimize COST • Maximize Flexibility

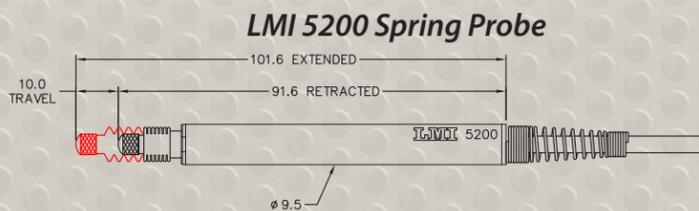


- Robust stainless steel construction
- Durability — Probes are able to resist shock and side load better than other comparable probes
- Accuracy: 30µm
- 10.0 mm measurement travel
- Tip force at nominal: 1.5oz. (43 g)
- Not affected by (EMI) Electromagnetic Interference
- Fits standard 3/8" diameter bushing
- Available in spring or pneumatic actuation
- Variety of tip styles available
- 90 degree back cap available for limited space applications
- Costs less than other comparable probes

5000 Series Probes



Available for the 5200 or 5300 Models.



LMI DIGI-PROBE



NEW Digital Output

LMI is excited to introduce its new line of digital probes. The new digital probe provides a variety of interface options to easily get measurement data into an SPC software. Plug the gage in and get readings immediately without calibrating. A simple two button interface allows users to change the measurement sign, counting direction, units of measure and even the zero position. Red and green LED's give feedback for each gauge setting. No more bulky and fragile digital indicators; the new Digi-Probe is small and robust, and is designed to fit your needs perfectly.



Digi-Probe Features

- Robust stainless steel construction
- Durable – Probes are able to resist shock and side load better than other comparable probes
- Accuracy: 30µm
- 10.0 mm measurement travel
- Tip force at nominal: 1.5oz. (43 g)
- Fits standard 3/8" diameter bushing
- Available in spring or pneumatic actuation
- Variety of tip styles available
- 90 degree back cap available for limited space applications



Interface Features

- Direct connection to a variety of gauge interfaces: MicroRidge, Midwest FlexSystems, Advanced Systems and Designs (ASD)
- Simple two button interface for all features
- Selectable measurement units: in/mm
- Selectable counting direction
- Red/Green LED's indicate counting direction and units
- Zero the gauge anywhere along the travel
- Absolute measurement device: When the gauge is powered it returns the correct output regardless of movement while the unit is off
- Draws power from host interface, no batteries or external power required



Want A Competitive Advantage?

Contact LMI for an on-site demonstration and more information on the AutoGage Automated Measurement System!



LMI[®]
Linear Measurement Instruments, Corp.

101 N. Alloy Drive, Fenton, MI 48430
Phone: 810.714.5811 Fax: 810.714.5711
Email: sales@lmicorporation.com
Visit our website: www.lmicorporation.com