

DIGITAL FEATHER TOUCH PROBES

# Checking Headlamps

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## The Challenge

In the automotive industry, headlamps have gone from flat and square to various shapes that must tightly fit the lines of an automobile. These types of new lamps require tighter manufacturing processes and tolerances that must now be checked before shipment to the auto assembly plant.

For these measurement checks, dial gauges can be slow cumbersome, and non-contact technologies lack the repeatability required.

## The Solution

Solartron Metrology Feather Touch probes have been used to check the geometry of headlamps for a multitude of reasons:

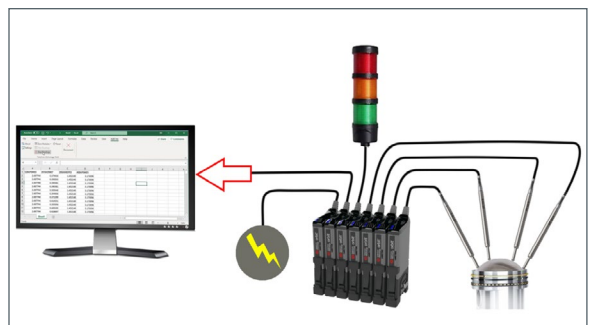
- **Light Touch** - Solartron's Feather Touch Probes provide 0.18 N to 0.3N of tip force, preventing any scratching of the surface of the headlamps. Ultra Feather Touch probes, with 0.05g of tip force, are also available.
- **High Repeatability/Resolution** - Despite the low tip force, Solartron Probes provide class leading resolution and repeatability
- **Quick Readings** - Gauging with Solartron means multiple, quick reliable measurements of any free form shape using a custom gauge. All readings can instantaneously be output to a PC or PLC for data recording using the Orbit® 3 Network. Dial Gauges or other measurements would be considerably slower
- **Lower costs** - The quick cycle times and repeatable measurements means cost savings in labor as well as higher quality standards. In addition, the likelihood of a recall is extremely low.



Feather Touch Pneumatic Probes



Sample Headlamp Fixture



Ultra Feather Touch Probes checking a headlamp, with the data output into a PC via Orbit®. Custom software can be created with Orbit® Support Pack drivers or Excel Pack.

THE ORBIT® NETWORK

# ORBIT® – The Total Measurement System from Solartron Metrology

The Solartron Orbit® Digital Measuring System provides a limitless set of measurement solutions, with numerous different interfaces to computers and PLC's.



Flexures



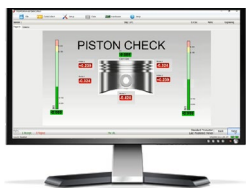
Block Gauges



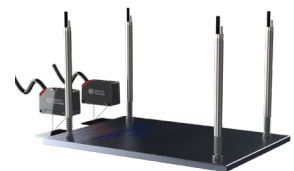
Displacement



Multi Channel Wireless Gauge



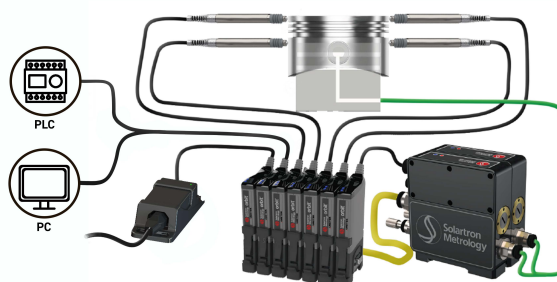
Orbit Gauge Software 4.0



Digital Probes and Lasers checking an EV pouch



Bore Gauging



Measurement of Piston with Air Gauging checking ID, and connected to Orbit with the Air Gauge Module. OD Checked with Digital Probes.



Microflex Sensor