



Application Story

Checking multiple points in a tight area

The Challenge

In the automotive and electronics industry, critical machined components continue to shrink, all while tolerances get tighter. However, dimensional checks over a small area are still required, requiring tiny sensors with high resolution and precision.

For these measurement checks, non contact may be insufficient, as parts could be greasy or the precision requirements too tight. Standard contact sensors might be too large or have too high a tip force.

The Solution

Solartron Metrology offers a full array of thinner body probes to check multiple points within a tight space. This includes spring and pneumatic 6mm diameter probes, as well as the worlds first 3mm diameter gauging probe. A 4mm wide flexure, as well as Lever Probes are also available for multiple points on small components.

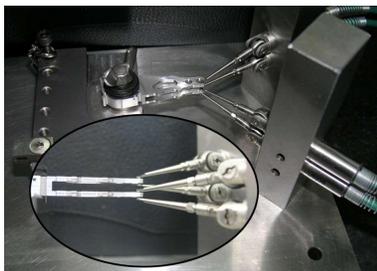
- **Longer stroke pneumatic:** With the 6mm diameter probes, a 12mm Jet range is available with a small air connection, enabling the ability to actuate multiple tips in tight quarters
- **Light Touch:** Both the 3mm and 6mm diameter probes have versions in Feather Touch tip forces, of roughly 30g.
- **High Repeatability/Resolution:** Despite the tighter diameters, 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® Network.



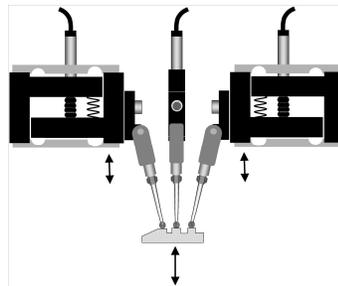
8mm, 6mm, and 3mm diameter probes



D6J/12/P Probes Checking a coin



Lever Probes checking several points on an HDD component



DU/0.5/S Flexures with special tools, Top. The DU/0.5/S is just 4mm wide and 40mm high



3mm probes checking different ridges.

Orbit® – The Total Measurement System from Solartron Metrology

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

