

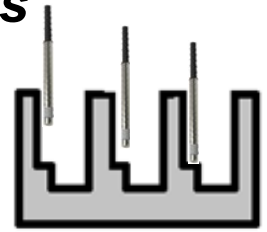


Application Story

Check Ridges in Tight Gaps and Diameters

The Challenge

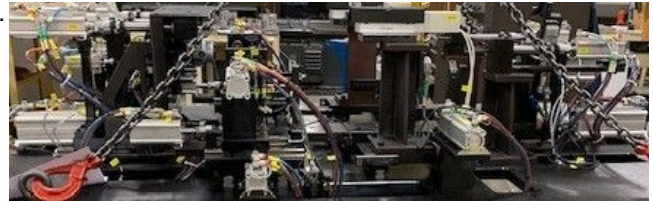
In the automotive and heavy machining industries, awkward features such as small ridges and steps can be difficult to check with standard probes or non contact sensors, especially if they are within a bore. These dimensions may be critical to fit, finish, and performance of high tolerance components and may need to be confirmed before shipment.



Solartron 3mm diameter probe

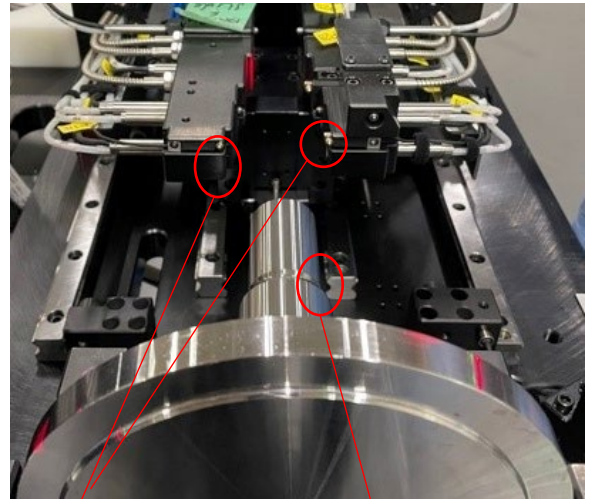
The Solution

Solartron Metrology offers a full array of thinner body probes to check any dimension within a tight space. This includes the world's only 3mm diameter LVDT, which has been used for gauging these high tolerance parts.



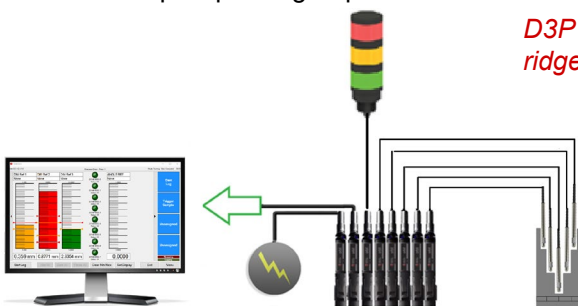
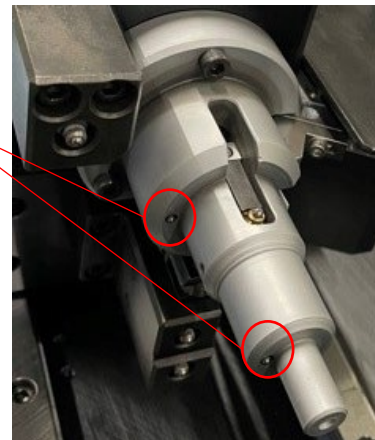
This gauge by Landau Gage in Windsor, Ontario, Canada (www.landaugage.com) utilizes D3P probes to check small ridges on the outside and inside of a sun shaft.

- **1mm range:** Solartron's D3P probe has a 1mm measurement range, with 0.2% accuracy reading.
- **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.
- **Longer stroke 6mm diameter 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.



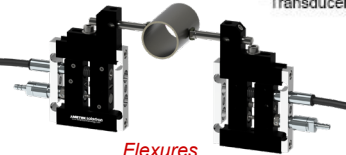
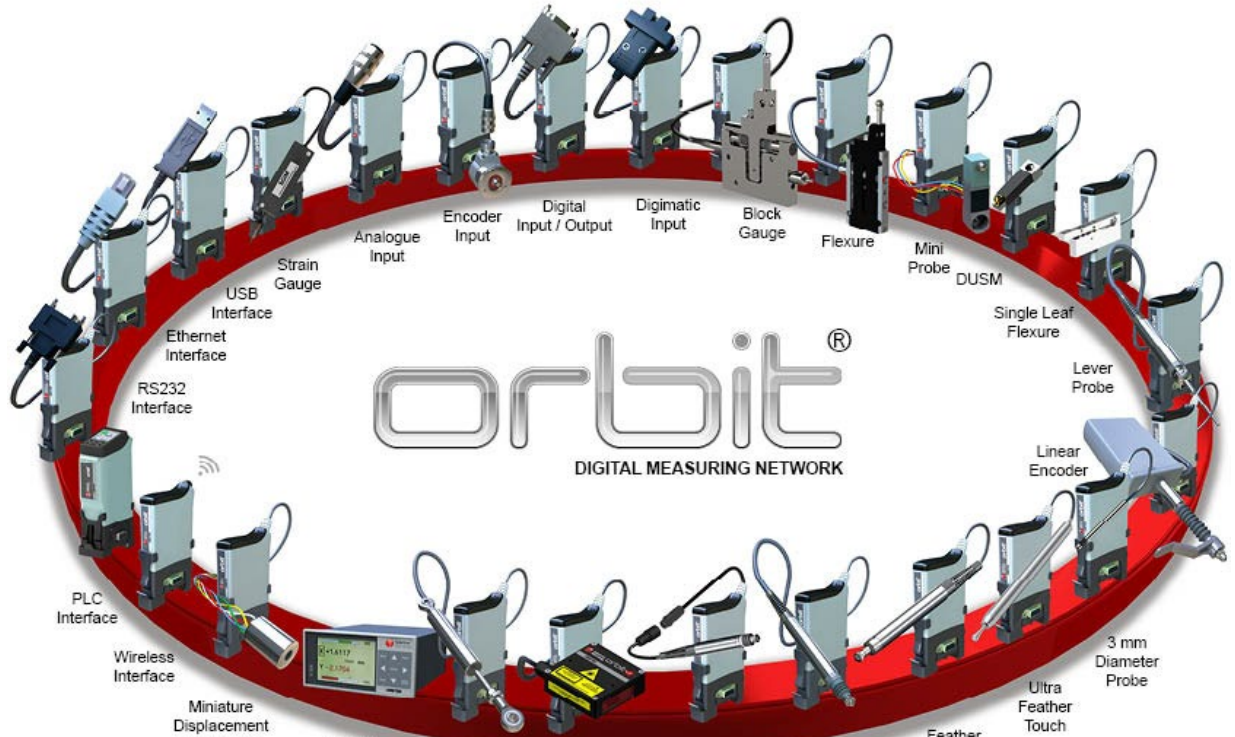
D3P probes for checking ridges on outside....

D3P probes checking ridges in ID as well....



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.



Flexures



Block Gauges



Displacement

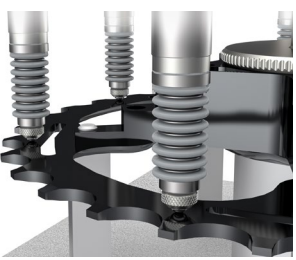


Multi Channel Wireless Gauge



Bore Gauging

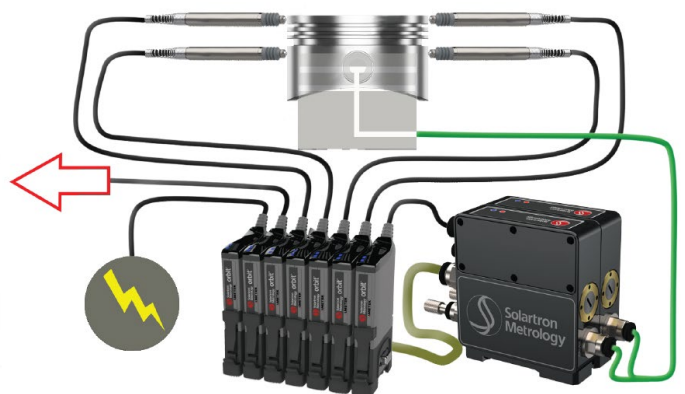
G-Type (With signal conditioning mounted at the end)



Gauging Flatness of a Bicycle Gear



Orbit GCS Software



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