Metrology Solutions for BEARINGS

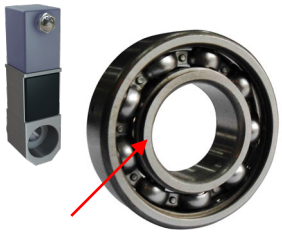
Solartron Metrology

AMETEK

Solartron Metrology, a world leader in Precise Linear Measurement, provides multiple solutions for the gauging of Bearings.

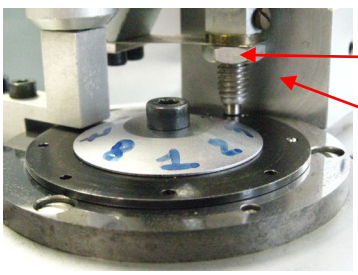
- **Resolution:** Solartron sensors have resolution as high as 0.01 microns and accuracy as high as 0.05% F.S. accuracy. This means the ability to accurately measure bearings with the tightest of tolerances.
- **Repeatable**: Solartron sensors have the repeatability of up to 0.15µm, even under a sideload. If bearings are shuffling under a probe during measurement, no precision in reading will be lost.
- **Robust Design**: Solartron has probe designs with extra components for better repeatability, including a pin and additional sleeve around the bearings.
- **Endurance:** Solartron sensors have been tested to 13 million cycles under the harshest of conditions that include a sideload. In the field, they have lasted for hundreds of millions of cycles, without no loss of 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.
  - Digital Orbit® products with Min/Max outputs
  - Specialized sensors for tougher measurements
- **Lower costs:** The quick cycle times and repeatable measurements means cost savings in labor as well as higher quality standards

Solartron Flexures can be used to easily check bearings with high resolution and repeatability

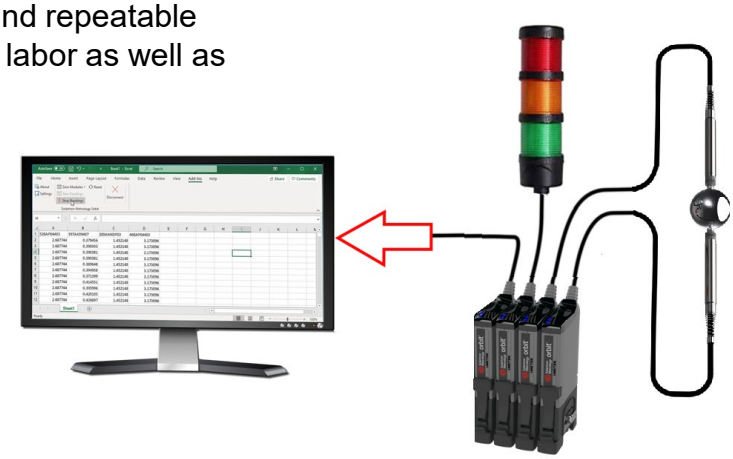


Solartron Mini Probes can be used to check the ID of a roller bearing

Tight tolerance carbon ball bearings and an anti rotation device lead to excellent repeatability and endurance



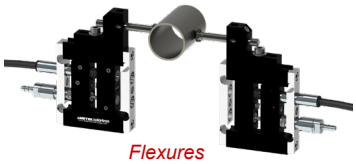
Solatron probe checking a high tolerance bearing diameter. Bearing is loaded into rotating shuttle.



Use the Orbit Netwrk to connect multiple sensors and output to a PC or PLC. A Digital Input/Ou tput Module (DIOM2) can provide I/O to a PLC or light tower

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

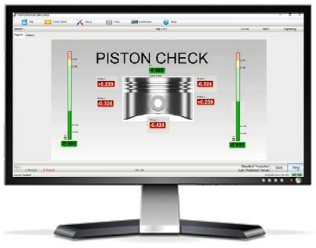
Displacement

Multi Channel Wireless Gauge

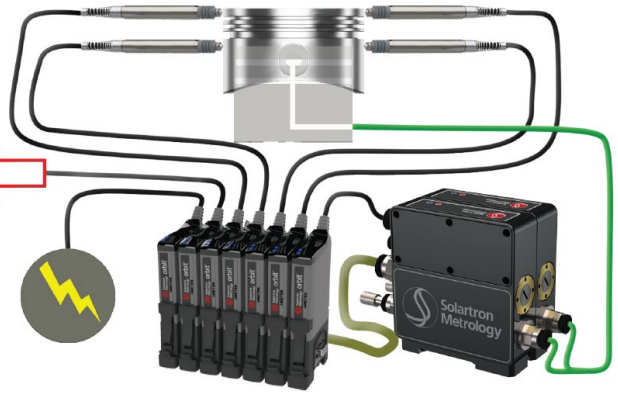
G-Type (With signal conditioning mounted at the end)

Bore Gauging

Orbit LT Lasers and Digital probes gauging a Battery Cell



Orbit Gauge Software 4.0



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