ORBIT AIR GAUGE MODULE

Check Pinion Carrier for Transmission

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The Challenge

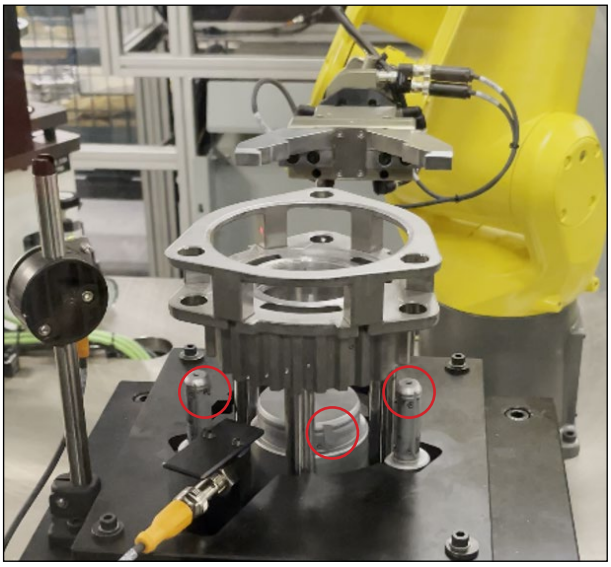
A Pinon Carrier for a transmission has several inner diameters that must be checked quickly and efficiently on a manufacturing line. Given how small they are, air gauging is the mostly likely option to check these dimensions.

However, multiple measurement points must be taken, as taper and ovality will also be checked. All points must then be instantly checked and recorded for data tracking purposes.

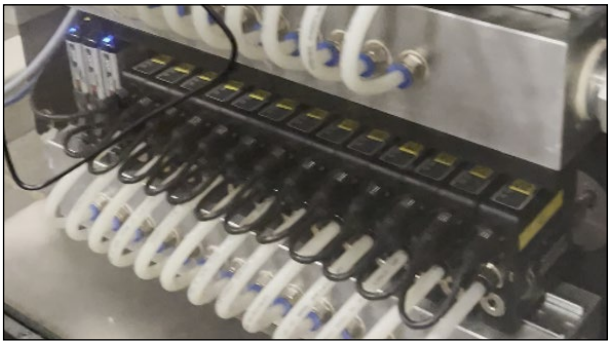
The Solution

Landau Gage* in Windsor, Ontario, Canada, utilized the **Solartron Air Gage modules**, along with the Orbit® Network, to perform all dimensional checks. Data was then recorded using **Orbit® Gauge Software**. Automation handshaking was also performed, as the system utilized robots for part transfer and placement.

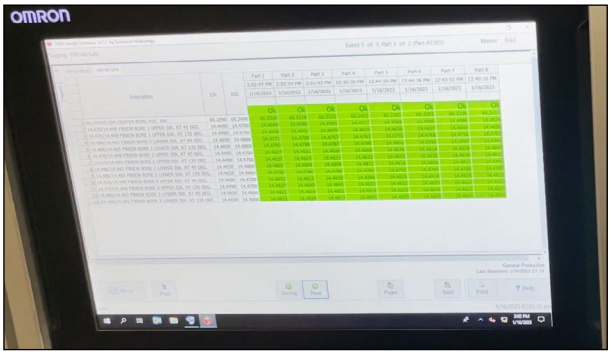
- **Easy Connections and Setup -** Solartron Air Gauge modules can fit most air gauging heads, and then calibrated using a free software pack.
- **Robust Networking -** The Air Gauge Module connects to the Solartron Orbit® Network, which can connect up to 200 sensors, and then easily output to a PC or PLC. Here Orbit easily networked 34 Air Gauge sensors.
- **High Performance Software -** Solartron Orbit® Gauge Software was then tasked for performing all calculations, recording data, as well as connecting with the systems PLC for automation handshaking. Data could also be exported to a variety of formats for SPC analysis, including Qdos and others.



In this application, the Pinion carrier is mounted to a gauge where several spindles check Inner Diameters at once.



In this application, (34) Air Gauge Modules were networked with Orbit®



Use Orbit® to output data to software like OGS4

* www.landaugage.com

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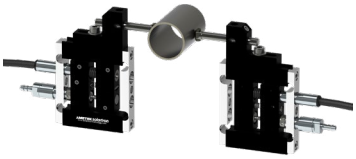
THE ORBIT® NETWORK

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.

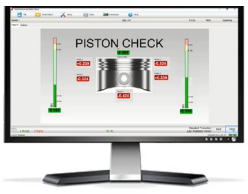


Flexures

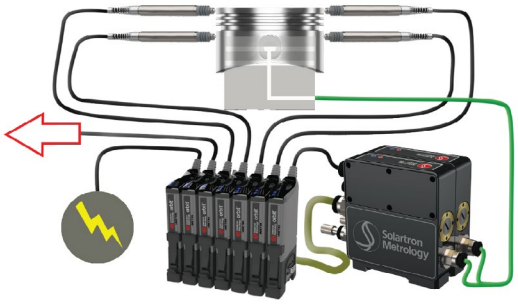
Block Gauges

Displacement

Multi Channel Wireless Gauge



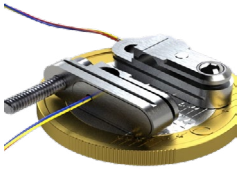
Orbit Gauge Software 4.0



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

Digital Probes and Lasers checking an EV pouch

Bore Gauging



Microflex Sensor

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