DIGITAL PROBES & ORBIT NETWORK

Check position of 5-Axis fixture

The Challenge

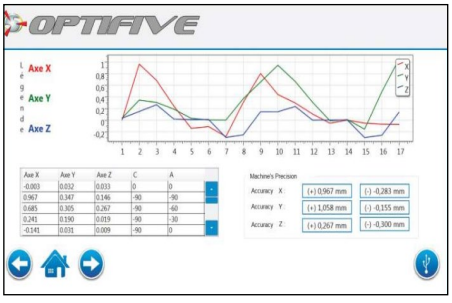
In a 5- Axis Machine, calibration is important to compensate for irregularity.

Without these, the position of a fixture could be off, leading to dimensions on a part being improperly fabricated and the part thus scrapped.

The Solution

Solartron Metrology offers a full array of sensors that have been used for calibration and fixture positioning. Advantages include:

- **High precision and repeatability for continued duplication of positioning**
- **Wide variety of sensors for all spaces and shapes**
- **Wireless Options for applications where cables cannot be used**
- **IP 68 Sealing available for oily environments**
- **Couple with Solartron's Orbit® network to output to a PC, PLC or HMI**
- **Optifive in France (www.optifive.com)** offers a system that utilizes (3) Solartron Digital probes, along with a Wireless Interface Module (WIM) to calibrate a 5-axis machine. Most of new 5-Axis machine designs now include a software package for Compensation / Calibration tool or process options. With the three Orbit Digital probes connected to a touch interface, the software will know the accuracy of the machine and subsequently will calculate the new values of rotating tool center point (RTCP, Traori).



Data is sent to Optifive's own software. Solartron Orbit Drivers make it easy to connect to a stack and allocate data.

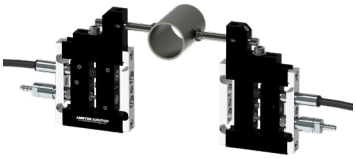
An Optifive System being used to calibrate a 5- Axis Machine

The Optifve system uses (3) Digital Probes and a Wireless Interface Module. All are powered by a 5V Battery source mounted underneath the stack.

THE ORBIT® NETWORK

ORBIT® – The Total Measurement System from Solartron Metrology

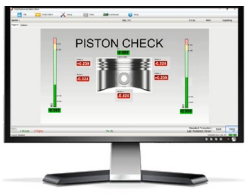
The Solartron Orbit® Digital Measuring System provides a limitless set of measurement solutions, with numerous different interfaces to computers and PLC's.


Flexures


Block Gauges


Displacement

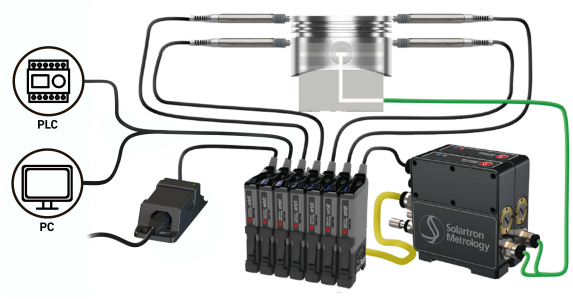

Multi Channel Wireless Gauge



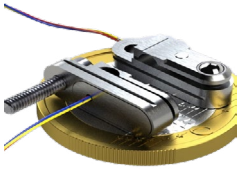
Orbit Gauge Software 4.0


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