

GAUGING PENCIL PROBES

# Measurement in Machining Centres

## The Challenge

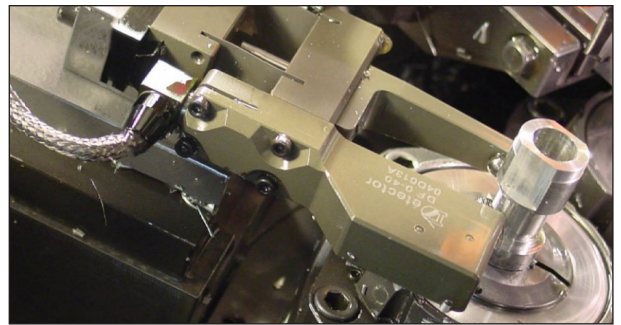
In a machining center, a cutting tool is often required to cut or drill to a very specific dimension, or the part must be scrapped.

For this, measurement equipment with a high accuracy and quick response time are required.

## The Solution

Detector, located in France, ([www.detector-france.com](http://www.detector-france.com)) manufactures length and diameter gauges, as well as broken tool detectors for the machining industry. Detector has utilised Solartron probes for over 20 years. Advantages include:

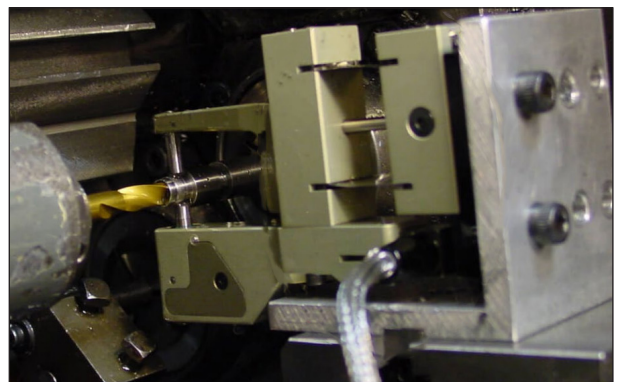
- **Highest Resolution** : For a distance monitoring application, even the slightest movement might be critical. Solartron gauging probes provide the resolution of up to 0.01  $\mu\text{m}$  in a cost efficient package.
- **Durability** : Solartron gauging probe designs endure harsh testing for millions of cycles.
- **IP 68 Option** : Standard Solartron gauging probes can be sealed up to IP 68, with no ingress of oil or fluid.
- **Rapid Response** : Solartron LVDTs can provide immediately feedback to a readout or PLC, signaling if the machine center is close to being out of specification.
- **Multiple Output Options** : Solartron offers both Analog and Digital outputs, for any PLC requirements. This includes:
  - **DC and 4-20mA** : Signal Conditioning can even be mounted to the end of the probe on our G-Type sensors.
  - **PLC Protocol** : Via Orbit®, our probes can output to multiple PLC Protocols, including Profinet®, Ethernet/IP®, EtherCAT®, and Modbus.



A Solartron gauging probe is mounted to their Diameter gauge in a machining centre. This is a custom Right Angle probe with a steel braided cable.



A Solartron Probe is mounted into this Detector Length Measurer




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.



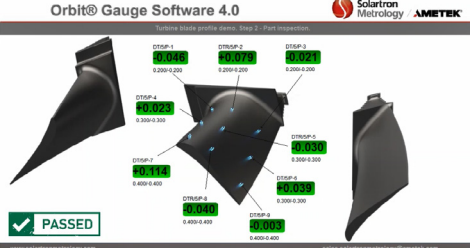
## Related Products



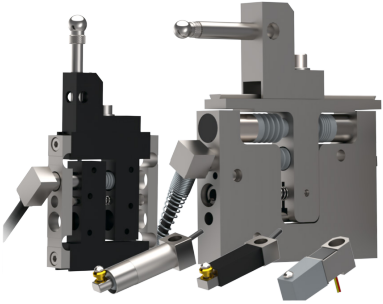
Orbit® LT




Piston Push "Jet J" Pneumatic Probes



Orbit® Gauge Software (OGS)



Specialist Transducers



SI 8400