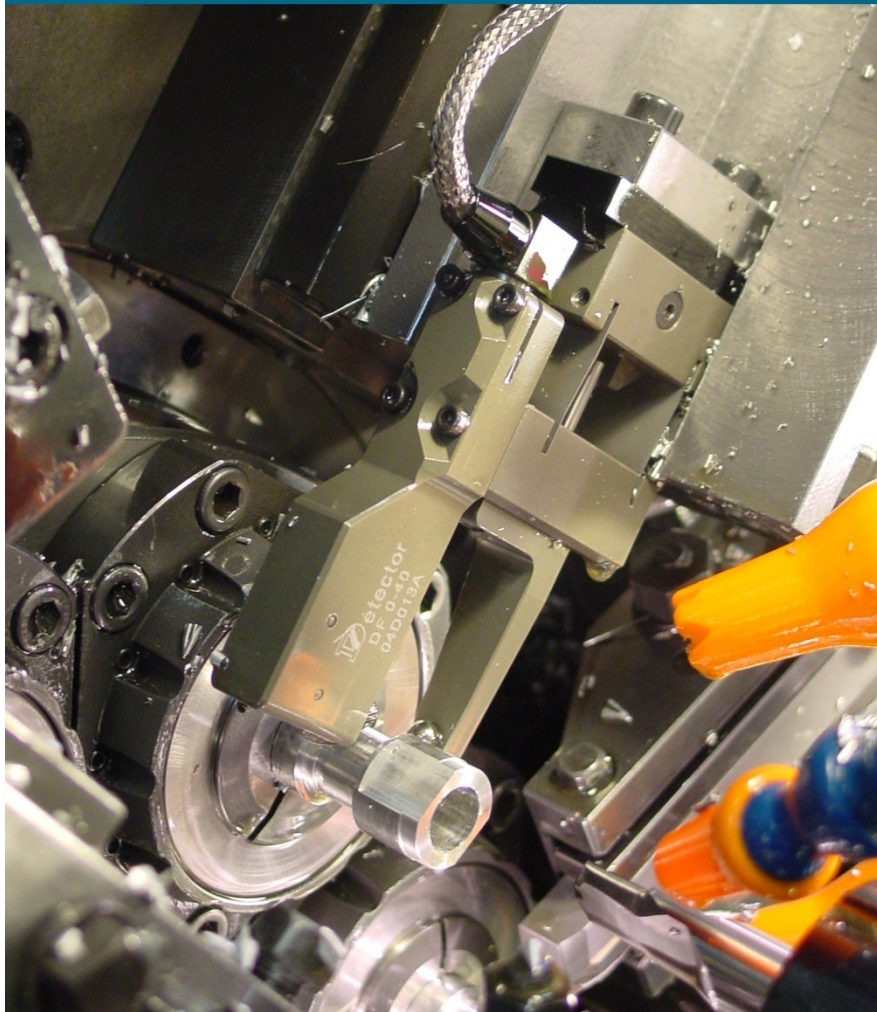


Application Story

Process Automation

## In-Machine Gauging and Detection Products

FOO - Tornos SAS16DC



*Photos and contents from  
<http://www.detector-france.com/en/>*

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## The Product

The robustness of the LVDT technology is well known in the industry world.

Moreover Feather Touch Probes are ideal for the gauging of high precision components. Long life bearings ensure that the performance of the probes are maintained through millions of cycles in industries producing high volumes of components on short cycle times.

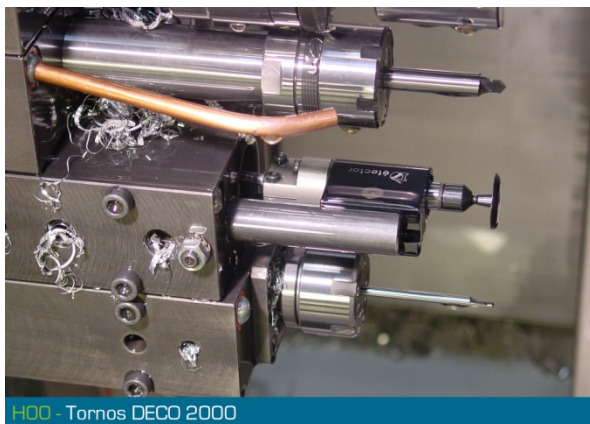
*Range: 2 mm – Accuracy: 1 $\mu$ m – Repeatability : 0.15 $\mu$ m –  
Resolution: Below 0.015  $\mu$ m*



## The Challenge

Embedded measurement tools for in-process applications is a growing demand on the market. When a part is being milled or drilled, stopping the process for verification or controlling post process the part is a lost of time. We must keep in mind that cycles time for production is essential.

Controlling a dimension during the operation permits to the production to do faster, better and smarter. The harsh environment of such applications disintegrate very quickly the measurement tools and the probes connected.



Our OEM must find a way to enclose probes in a highly protected fixture. This embedded solution will guaranty a very high accuracy combined with a considerable robustness for one of the most heavy duty in the industry.

The adaptability of the device will be merged in the Computed Numerical Control world as the probes, the machine tools and the CNC will operate synchronically like one entire smart system.

## The Solution

The AT Series is associated in each critical measurements for in process solution. The specifications of each machine tools will be addressed with a different gauging fixtures. Lengths or diameters, multiple or not, our materials are specifically designed for harsh machining environment with reinforced cable, bearings, etc...



The probes combined with a smart electronic will analyse the machine tools, its behaviour and the quality of the production parts instantaneously. Those processes include a tool quality monitoring with maintenance / changing prevention. Only one device could avoid thousands and thousands expenses, in downtime or tools spares / repairs.



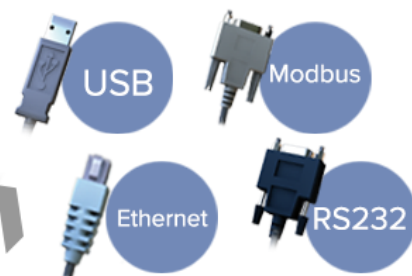
## Orbit® 3 – The Total Measurement System from Solartron Metrology

The Solartron Orbit® 3 Digital Measurement System, in conjunction with Solartron's wide range of transducers, including both contact and non-contact linear measuring transducers (gauging probes), specialist transducers and third party transducer interfaces, provides a limitless set of measuring system solutions, with numerous different interfaces to computers and PLC's, making Orbit® 3 completely flexible.

Supports all Solartron Sensors



Interface via USB, RS232,  
Ethernet and Modbus Output



Interface to various sensors  
and readouts



Up to 150 Sensors



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