

## **New milestones in optical 3D metrology: ATOS Core, ATOS ScanBox and ATOS Triple Scan**

### **PR 01: The new ATOS Core - stand alone or plug-in for different applications**

GOM Italia is set to show its new optical 3D scanner ATOS Core, which is ideal for digitizing small to medium-size components such as ceramic cores, cast and plastic parts for 3D printing, adaptive manufacturing, reverse engineering and 3D inspection applications. The new ATOS Core can be used as stand-alone, but also as additional Measuring Volume for different applications.

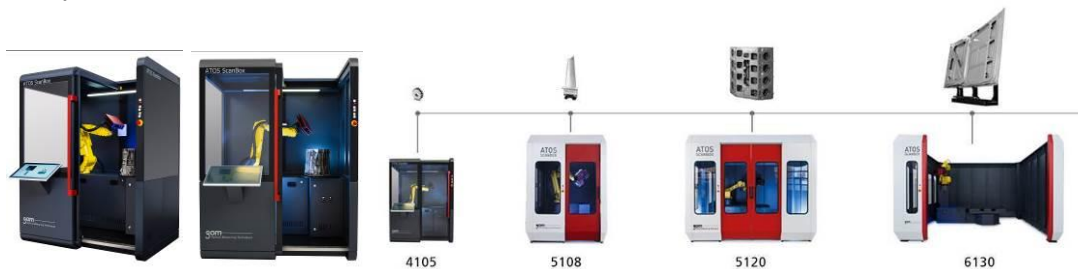


### **PR 02: ATOS Triple scan & ATOS Core: together for flexible scanning**

ATOS Triple Scan combines flexibility and ease of use with industrial-grade sensor hardware. ATOS Triple scan can work together with ATOS Core (used as additional Measuring Volume) in order to deal with different applications: it's the "big brother" which combines high technology and flexibility, and there's no need for re-calibration!

### **PR 03: New ATOS ScanBox: automated process control & low economic impact**

GOM shows its latest development in its successful ScanBox series for the first time. ATOS ScanBox 4105 is the most compact of the four models now available, and is especially suited to automated 3D digitizing and inspection of small and medium-size components.



### **PR 04: Free software GOM Inspect**

High value, free of charge: With GOM Inspect, GOM has provided a software package that offers a range of functionalities for mesh processing as well as inspection and analysis of 3D data – independent of the measurement system used. The free software can also be used as a 3D viewer to share measurement data with colleagues or customers.

## **PR 01: New ATOS Core – small, light and stable**

Looking at the growing complexity of shapes and functions, scanning, analysis and inspection tasks for small parts are rapidly gaining importance. At MECSPE 2014 in Italy, Parma, GOM Italia is proud to present a sensor in exactly this field, which is ideal for digitizing small to medium-size components such as ceramic cores, cast and plastic parts for 3D printing, adaptive manufacturing, reverse engineering and 3D inspection applications. The new sensor is small, light and stable, thanks to integration of optics and electronics in a very compact format. Its small size allows the sensor to take measurements at short working distances and in confined conditions.

### **Combining ATOS Triple Scan and ATOS Core: ATOS Core as additional measuring volume**

The ATOS Core system can also be used in addition to ATOS Triple Scan or ATOS Compact Scan to provide an additional measurement volume. The sensor head is easily exchanged if different resolutions or measurement field sizes are required. After the change, there is no need for re-calibration.



## **PR 02: ATOS Triple Scan: the “big brother” for flexible scanning**

The ATOS Triple Scan uses a specially developed measuring and projection technology from GOM.

Using this new technology, ATOS Triple Scan produces high accuracy and improved measurement of shiny surface, complete data on complex components with deep pockets or fine edges (such as turbine blades, etc.), reducing the number of individual scans and resulting in a simple handling.

ATOS Triple Scan combines flexibility and ease-of-use with industrial-grade sensor hardware. ATOS Triple Scan produces process safe, high resolution, high quality measurement data even on complex, shiny or dark object surfaces.



### **PR 03: New ATOS ScanBox 4105 with compact dimensions**

GOM Italia is set to present its latest development in its successful ScanBox series for the first time at MECSPE in Parma, Italy. ATOS ScanBox 4105 is the most compact of the four models now available, and is especially suited to automated 3D digitizing and inspection of small and medium-size components.

The standardized measuring cell has extremely compact dimensions, requiring a space of only around three square meters. As a ready-to-use solution, ATOS ScanBox can be set up fast and is easy to integrate in the production process. All that is needed is a power supply. The measuring cell contains process-safe software solutions and hardware components. These include a robot, rotation table and image processing computer as well as industrial safety. The key component of ATOS ScanBox 4105 is a compact, robot-driven sensor from the ATOS Core series for fast, non-contact and full-field measurements.

#### **Compact and versatile**

ATOS ScanBox 4105 offers new possibilities for efficient automation for smaller measurement volumes. The measuring cell is suitable for objects of up to 500 mm in size and 100 kg in weight. Possible applications include production-related quality control on ceramic cores, cast and plastic parts. The ATOS ScanBox can be moved in order to support production launch – for short distances even on its integrated wheels.

#### **Process-safe software solutions**

Since the entire measuring and inspection processes up to the inspection report are executed fast and easily, ATOS ScanBox can be operated directly by production staff. This is made possible by the standard VMR (Virtual Measuring Room) software solution, which simulates the real environment of the ATOS ScanBox down to the smallest detail. This means that the robot can be controlled without using the robot operator panel. Besides this, measurement and inspection processes can be prepared in the VMR on the basis of CAD data without the need for a real component.

#### **Centralized quality management**

GOM has developed its ATOS ScanBox specifically for automated inspection and quality assurance in production environments. The measuring cell allows trend analyses which make prompt and systematic detection of errors possible within the production process. This in turn improves company productivity. In addition, the automated measurement and inspection processes guarantee a higher throughput and thus enhanced performance in quality assurance. Ultimately the ATOS ScanBox makes it possible to establish a central quality management system, since the standardized measurement and inspection processes can be applied in the same way at different sites by different operators. As a result, the entire quality control process is made transparent and traceable.



## **PR 04: Free software for mesh processing, inspection, and 3D viewing**

High value, free of charge: With GOM Inspect, GOM has provided a software package that offers a range of functionalities for mesh processing as well as inspection and analysis of 3D data – independent of the measurement system used. The free software can also be used as a 3D viewer to share measurement data with colleagues or customers.

GOM Inspect is the right choice for all users who want to view process and evaluate 3D data – generated by fringe projection systems or laser scanners, computer tomographs, or other measurement systems. The download is highly attractive for CAD/CAM, CAE and CAQ professionals.

The package includes all necessary tools for the shape and dimension analysis of components up to inspection reporting, but is also suitable for processing 3D data for rapid prototyping, CAD/CAM, and simulations. In addition, employees, vendors, and customers can use the software to share 3D measurement results, for faster decision taking.

The GOM website offers a free download of the software and further training and information. Support material includes video tutorials as well as user instructions, sample data and a forum. National and international introduction seminars are also held on a regular basis. To register, go to [www.gom.com](http://www.gom.com).

