



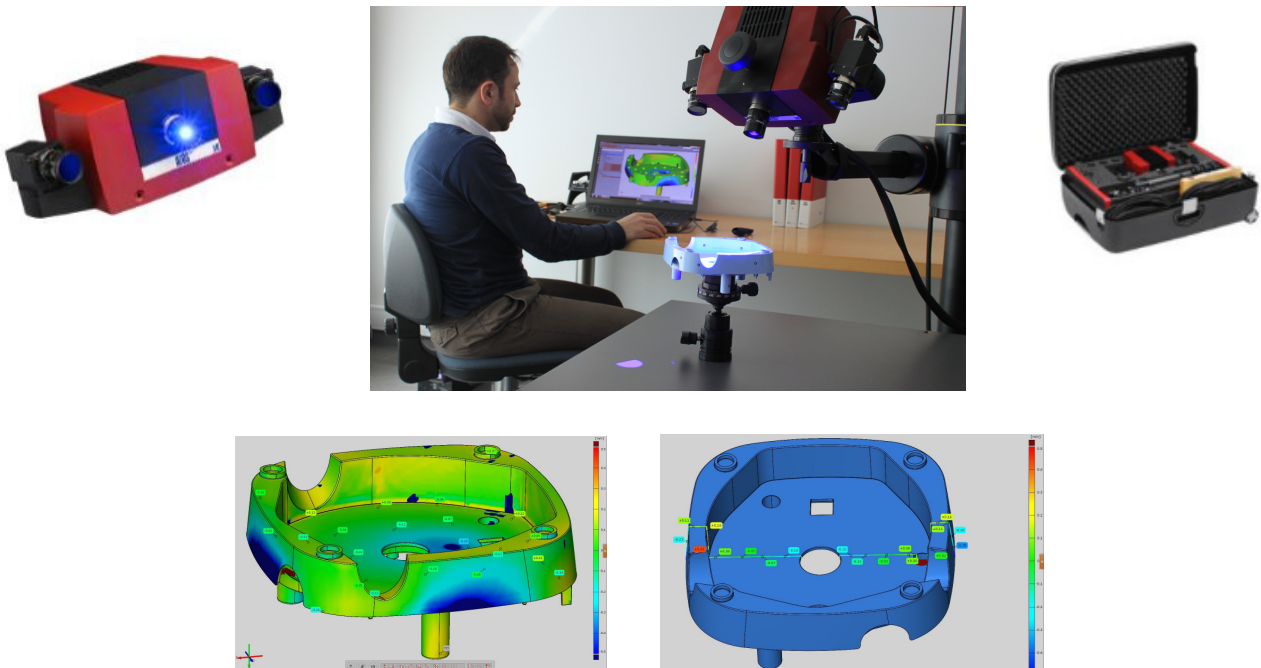
ADVANCED ENGINEERING SOLUTIONS FOR MOLDS

## **PRESS RELEASE – MARCH 2013**

With the continuing goal of providing our customers with exceptional services through innovation, technology, training and processes, we are pleased to announce that this past January, AES Molds acquired a new 3D Optical Measuring Machine from GOM. Training was completed in February. This acquisition makes AES Molds one of the first Mold Makers in the world acquiring this type of equipment.

This new equipment will complement our metrology laboratory. Along with our existing technologies, we are now capable of performing Full 3D Coordinate Measurements and Reverse Engineering.

With this technology, our customers will get a graphic representation of the plastic part compared to the 3D geometry right after we sample the mold for the first time. At a quick glance, the team will be able to understand general part size, if any features are missing from the part and the general part dimensions. Our goal with this technology is to expedite the validation process of the mold.



### **WHAT CAN WE DO TODAY THAT WE DIDN ´ T IN THE PAST?**

1. Faster Mold Qualification Time - After first shots we can provide our customers with a full 3D scan of the part showing the dimensional variation from the 3D file, this information will allow the team to understand part deformations, evaluate if any features are missing in the plastic parts and also have a quick idea of the part dimensions.
2. Reverse Engineering - We can reverse engineer any part or shape with the high grade of accuracy rapidly and reliably. Our equipment is portable so we can take the equipment to the geometry that needs to be measured or scan.
3. Full Capability Metrology Lab for our customers – One more technology available to our projects and customer needs.

## **Technical Specifications:**

### **HARDWARE:**

- Model: ATOS COMPACT SCAN 5M
- Measuring Points: 2 x 5.000.000 points per single scan/measurement
- Point Spacing: 0.017 - 0.481 mm
- Precision: 0,008mm
- Measuring Area: 40 x 30 - 1200 x 900 mm<sup>2</sup>

### **SOFTWARE:**

- ATOS PROFESSIONAL 3D Software
- GOM INSPECT 3D Software

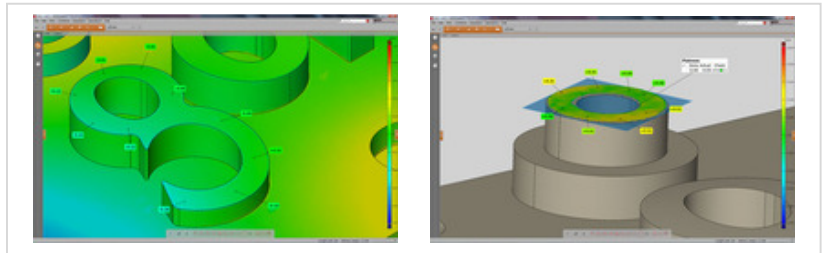
GOM INSPECT 3D is independently tested and certified by German and American national measurement laboratories (PTB, NIST). The accuracy of the evaluation software is verified by comparing the results obtained from the software with reference results. GOM Inspect has been placed in class 1, the class of the smallest deviations.

- CAD Import: IGES, STEP, JT-Open, ...
- Alignments: Automatic pre-alignment, RPS, 3-2-1, plane-line-point, best-fit and hierarchical alignments
- CAD comparison: surface, sections, points, ...
- 2D section-based analysis
- GD&T analysis based on ISO 1101 and ASME Y14.5 standards

GOM Inspect automatically converts point cloud data into high quality 3D mesh data and offers extensive post-processing functionalities

### **TYPE OF REPORTS:**

- Map with colors
- Deviation point on the 3D
- Linear Dimensions and GD&T



**Remember that we also have a CMM machine ZEISS equipped with RDS and Viscam calibrated by CARL ZEISS IMT (norm VDI/VDE 2617-ISO10360)**



**[AES MOLDS is committed to make your life easier EVERY DAY!](#)**

PORTUGAL - AES Moldes, Lda • Travessa de Oeiras • Lote 67 Nº 47 Vergieiras • 2430-523 Marinha Grande • Tel. ++ 351 244 574870

PORTUGAL - AES Manufacturing Lda • Rua das Rosas Nº 108 • Pedra de Baixo • 2430-400 Marinha Grande • Tel. ++ 351 244 775 111

USA - AES Molds Inc. • 20 Lookout • Irvine, CA 92620 • Tel. 401 617 0243

**[www.aesmolds.com](http://www.aesmolds.com)**