

# Multisensor

Innovative Metrology for your Quality Products





The world's most accurate multisensor coordinate measuring machines, the Werth VideoCheck<sup>®</sup> series, offer task-specific configurations with low measurement uncertainty and high measuring speed

# Werth sets standards in innovative coordinate metrology

In recent years, our technical solutions in the area of coordinate metrology with optical sensors, computed tomography and multisensor systems have often contributed to the rationalization of quality assurance processes. We continue to develop our future-proof technology, despite challenging economic conditions. Because of this, we are in a position to largely compensate for the rather cautious investment in the automotive sector through growth in other business areas such as medical technology. In this year's edition of Multisensor, Werth Messtechnik presents new technical solutions and new applications in various industries.

In manufacturing companies, confidence in measurement results from X-ray computed tomography grows steadily due to positive experience. Extremely short measuring times and simple operation offer great potential for rationalization. For example, our TomoScope® XS and TomoScope® S series are vastly superior to alternative solutions thanks to CT technology specially optimized for coordinate metrology. This is mirrored in the attainable accuracy, the measuring speed and the long maintenance intervals. On average, we achieve five times better cost-efficiency compared to alternative concepts.

We also continue to offer cutting-edge technology in the field of multisensor systems. The VideoCheck<sup>®</sup> HA and VideoCheck<sup>®</sup> UA machines are currently the world's most accurate multisensor coordinate measuring systems, offering length measurement errors of  $(0.25 + L/900) \mu m$  or  $(0.15 + L/2000) \mu m$  respectively. In the patented Raster Scanning HD mode large workpieces with many details, such as fiber optic couplers with thousands of small holes, can be measured quickly and fully automatically. The resolution of up to 20000 megapixels is more than a thousand times that of high-resolution photography. As part of SEMI (Semiconductor Equipment and Materials International) certification, we have also optimized Werth machines for the semiconductor industry.

With WinWerth<sup>®</sup> version 10.46, we have placed particular emphasis on improving ease of use, both for simple and demanding measurement tasks. For example, the measurement of complex geometrical deviations according to current ISO standards can be just as easy as dimensioning on a CAD model. New requirements from our users have initiated developments in the area of computed tomography, allowing us, for example, to inspect automotive batteries completely in just about 20 seconds. In an extremely short measurement time the new Werth ClearCT provides almost artifact-free CT volumes to ensure reliable automatic inspection.

This issue of Multisensor gives you an insight into how our team carries out the initial commissioning of our Tomo-Scope® XS machines. We introduce Werth Magyarország, which was founded in 2011, and the expansion of the sales and service teams at our other subsidiaries around the world. The Control trade show in Stuttgart will once again be the most important platform for exchanging ideas with regional and international users this year. We will also be presenting our machines at a number of other events for various industries and offering regional technology days to exchange information with our users. We are looking forward to interesting discussions again this year, which are sure to provide important ideas and stimulate activities on both sides.

Ralf Christon

**Dr. Ralf Christoph** President and owner of Werth Messtechnik GmbH Giessen

### **Multisensor 2024**



#### News about Multisensor Systems

05 Perfectly integrated multisensor systems in all dimensions



- 06 Precision Tool Pro with new tool types and simplified operation
- 07 Multisensor coordinate measuring machines for microstructures in electronics manufacturing

# Werth Featured Article

08 Small plastic workpieces - precise down to the My



#### News about X-ray Computed Tomography

- 12 Increased ease of use with WinWerth<sup>®</sup> version 10.46
- 13 Automatic CT measurement of individualized implants in medical technology
- 14 Flexible volume section for inspection and measurement
- 15 Fast battery cell measurement close to production with Werth TomoScope® XS Plus



#### News about the Werth Group

- 16 Werth Magyarország in Hungary
- 17 TomoScope® commissioning
- 18 News in Brief

# Coordinate Measuring Machines with Optics, Computed Tomography and Multisensor Systems



The "Multisensor" is the Company-

Newspaper of the

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www.werth.de · mail@werth.de Telefon +49 641 7938-0 Publisher and Managing Director Dr. Ralf Christoph

**Editor** Dr. Schirin Heidari Bateni

Graphics and design Isabel Neef

Print Druckhaus Bechstein GmbH

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