

## DEA MICRA

Coordinate Measuring Machine





The DEA MICRA coordinate measuring machine (CMM) is naturally predisposed for quality inspection of small high-precision parts. The miniaturized LSP-X1c high-tech scanning probe head provides DEA MICRA's foundation. With this high-accuracy 3D probing system, the DEA MICRA offers both single-point inspection and surface scanning as standard features.

Designed for applications of micromechanics and convoluted surface parts, DEA MICRA is the ideal blend of compact size, uncompromising high measurement accuracy and flexibility.

The perfect integration of DEA bridge CMM technology and the Leitz LSP-X1c scanning sensor makes DEA MICRA a multifunctional measurement tool for single point probing of prismatic parts and Continuous High-Speed-Scanning of profiles and complex geometries.

In addition, the DEA MICRA has a small footprint and can be transported quickly and flexibly. The light-alloy frame has been specifically designed for added rigidity. It is combined with the exclusive portal configuration of the X traverse utilizing the TRICISION® architecture. This design optimizes the relationship between rigidity and weight, supports high accuracy and long-term stability.

Regardless whether using CAD-based construction information or if measuring complex, difficult geometries: the DEA MICRA – armed with the PC-DMIS or QUINDOS software – represents the state-of-the-art quality inspection for small-part measurement.

## **Applications**

- Precision Machined Parts
- Dentistry and Orthopedics Components
- Medical Instruments
- Electronics and Telecommunication
- Watchmaking
- Powertrain Industry
- Tools and Inserts

#### Features & Benefits

- Stiff all-aluminium moving bridge type CMM with TRICISION® patented beam and oversized structures for maximum rigidity and long-term stability
- CLIMA structural multisensor temperature compensation and CTE (Coefficient of Thermal Expansion)-certified optical scales
- Point-to-point, scanning and self-centering measuring modes available
- PC-DMIS CAD++ or QUINDOS software available
- Leitz LSP-X1c probe head as standard, LSP-X3 or TESASTAR-sm as option with automated probe changers
- Manual or automatic load-unload system and conditioned room available on request
- Measurement volume 400 x 500 x 300 mm
- Small footprint and compact, easy to transport
- High accuracy and high throughput in both point-to-point and scanning measuring modes

## PC-DMIS CAD++

PC-DMIS CAD++ is the top version of PC-DMIS, the world's leading modular software for CMMs.

PC-DMIS CAD++ lets users measure the most complex parts. It includes the ability to measure intricate, contoured surfaces including thin-walled sheet metal as well as plastic, blades, dies and moulds.

CAD++ supports numerous scanning devices and applications. It includes algorithms for managing copious amounts of data. Linking to CAD users are able to compare measurement results directly against models for unsurpassed speed and accuracy. CAD++ is feature rich, yet easy to use. Many years of experience in developing metrology software for various applications in more than 100 industries stand behind PC-DMIS. Thus, it offers programming tools for even the most difficult measurement tasks.

## QUINDOS

QUINDOS is the ultimate software for special geometries. The programming of features, which usually can only be created interactively, as well as the inspection of special geometries are trademarks of QUINDOS. It is the ideal measuring software for the dimensional inspection of complex contoured shapes (gears, gear tools, blades, etc.) and accurate prismatic parts.

The latest version QUINDOS 7 now features a Windows user interface that can be tailored to your specific needs. It offers easier programming, automatic measuring tools and object-oriented design. QUINDOS 7 imports 3D models in the most common CAD formats and allows to generate, view and evaluate measuring points. In addition, with QUINDOS 7 you can design your own reports including pictures, tables and artwork.

Connecting the server version of QS-STAT from Q-DAS, QUINDOS 7 directly accesses the statistics package from its user interface.

#### LSP-X1c Probe Head

The LSP-X1c is part of the Leitz Scanning Probe Head X-series that has been specifically designed to meet today's requirements for CMMs. Probe extensions up to 115 mm length in vertical orientation and 50 mm in horizontal orientation are possible. Its small outer diameter allows measurements deep inside a work piece. The LSP-X1c supports all standard probing modes like Single Point Probing, Self-Centering as well as Continuous High-Speed-Scanning for fast and accurate form and profile measurements. Like all other Leitz probe heads, the LSP-X1c provides simultaneous and unclamped probing in all axes, always orthogonal to the contact surface.

### LSP-X1c Automatic Styli Changer

To increase the measuring system versatility, the 3 ports version of the changer rack is available for DEA MICRA. It can handle different probe configurations within a single part program without the need to repeat the qualification procedure. The magnetic docking of the stylus holder allows fast and repeatable changes.

# DEA MICRA STROKES, OVERALL DIMENSIONS AND WEIGHT

Series	Strokes (mm)			Overall Dimensions (mm)			
	Х	Υ	Z	Length	Width	Height	Weight (kg)
04.05.03	400	500	300	950	1405	2087	650



The mini CMM that delivers maximum performance. For real experts.



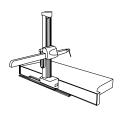
LASER TRACKERS & STATIONS



PORTABLE MEASURING ARMS



BRIDGE CMMS



HORIZONTAL ARM CMMS



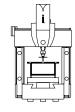
**GANTRY CMMS** 



MULTISENSOR & OPTICAL SYSTEMS



WHITE LIGHT SCANNERS



ULTRA HIGH ACCURACY CMMS



SENSORS



PRECISION MEASURING **INSTRUMENTS** 



SOFTWARE SOLUTIONS



Hexagon Metrology offers a comprehensive range of products and services for all industrial metrology applications in sectors such as automotive, aerospace, energy and medical. We support our customers with actionable measurement information along the complete life cycle of a product – from development and design to production, assembly and final inspection.

With more than 20 production facilities and 70 Precision Centers for service and demonstrations, and a network of over 100 distribution partners on five continents, we empower our customers to fully control their manufacturing processes, enhancing the quality of products and increasing efficiency in manufacturing plants around the world.

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