

DIGITAL 3D LASER SCANNER

NIKON LC15Dx

High accuracy with high resolution



VIABLE ALTERNATIVE
TO A TACTILE PROBE SYSTEM

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HIGH ACCURACY WITH HIGH RESOLUTION

By using Nikon sensors on a WENZEL CMM, WENZEL offers its customers an additional benefit. The expanded portfolio of optical sensors means that the right sensor can be offered for every customer in terms of measurement time, accuracy and level of detail. CMMs in use can also be upgraded by WENZEL with the new optical sensors. All this is rounded off by the use of the powerful WM | Quartis measurement software.

The LC15Dx is a viable alternative to a tactile probe system. Users get a better estimate of the dimensional quality of their products without sacrificing cycle times. Numerous workpieces, geometries and materials can be measured more effectively, including many parts that are too delicate or sensitive for a tactile probe

FEATURES

- **PH10M/MQ autojoint** - automatic scanner and probe change
- **Temperature stabilizer** - zero warm-up
- **Reflection filter** - neutralizes unwanted reflections
- **Daylight filter** - absorbs ambient light
- **Fully integrated** - laser signal routed via probe interface
- **Range-Finder** - user guidance for manual operation
- **High quality Nikon lens** - improves accuracy and data quality

APPLICATIONS

The LC15Dx offers significant advantages in dimensional quality control of numerous precision parts and geometries, including small details, semi-rigid materials and complex components.

- High-precision parts and small geometries (composites, blades, compressors, medical devices, etc.) with complex surfaces
- Features (slotted holes, bores, pins, etc.)
- 3D digitizing with great detail



TECHNICAL DATA

Probing error MPE_p ¹ [μm]	1,9
Ball bar length (MPE_E) ² [μm]	4 + L/350
Multi-stylus test (MPE_{AL}) ³ [μm]	3,9
Maximum point rate [points./s]	max. 70.000
FOV Width [mm]	18
FOV Depth [mm]	15
Working distance [mm]	60
Laser safety	2
Probe head compatibility	PH10M, PH10MQ, PHS

All accuracy specifications valid for a CMM with an accuracy of $2\mu\text{m} + L/350$ or better using manufacturer supplied test sphere

¹Nikon Metrology Test comparable to ISO 10360-2 MPE_p using 1σ sphere fit.

²Nikon Metrology Test comparable to ISO 10360-2 MPE_E

³Nikon Metrology Test comparable to ISO 10360-5 MPE_{AL}

YOUR ADVANTAGES AT A GLANCE

■ Closing the accuracy gap

Latest laser technology | Non-contact 3D laser triangulation | Integrated temperature stabilizer

■ Versatile scanning without the hassle

ESP3 technology provides intelligent adjustment of laser settings | No input of measurement parameters or spraying necessary

■ Advanced filters

Neutralization of unwanted reflections | Daylight filter absorbs ambient light laser

■ Better appreciation of product quality

Complete 3D view of dimensional quality | Highlighting of critical areas by means of color coding, etc. | Simple or complex design of inspection reports

INNOVATION MEETS TRADITION

The WENZEL Group is a market leader in innovative Metrology. WENZEL offers a comprehensive product portfolio in the fields of Coordinate Metrology, Computed Tomography and Optical High Speed Scanning. The technology of WENZEL is used in all industries, including the automotive sector, aeronautics, power generation and

medicine. WENZEL looks at today on an installed base of more than 10,000 machines worldwide. Subsidiaries and agencies in more than 50 countries support sales and provide after-sales service for our customers. The WENZEL Group today employs more than 600 people.



YOUR LOCAL CONTACT PERSON

WENZEL GROUP GMBH & CO. KG

Werner-Wenzel-Straße

97859 Wiesthal

Phone: +49 6020 201-6006

E-Mail: sales@wenzel-group.com

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