QNix® 8500

NEW! QNix® 8500: Magnetic-Inductive Measurement Probe MI Fe 500 µm

Extension of our modular measurement system QNix® 8500: A pen shaped probe for precise measurements of particularly thin coatings and smallest parts.

In addition to our standard probes, operating based on the Hall-sensor principle, a magnetic-inductive measurement probe for measurements within a measuring range of 0 to 500 µm is available. Capable of the most precise measurements of non-ferromagnetic coatings, it is especially accurate within the lower measuring range.

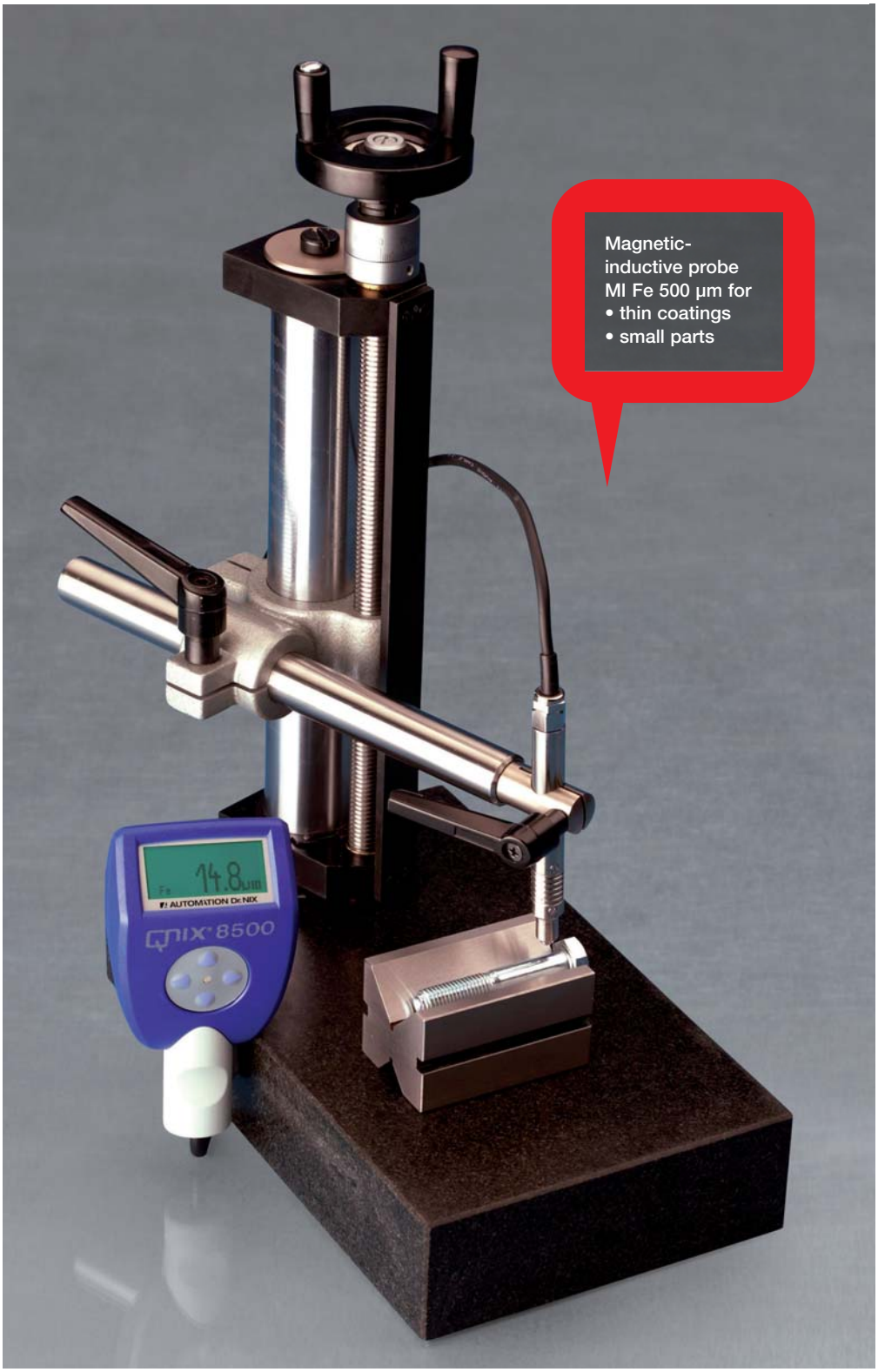
Designed to measure thin non-ferromagnetic metal coatings (such as: chromium, copper, zinc, etc) as well as lacquer, enamel or plastic coatings on steel substrates using the magnetic-inductive measuring method. Our probes provide measurements in accordance with the DIN EN ISO 2178, ISO 2808 and ASTM B499 standards.

Measure manually or use a measuring stand

Thanks to our pen shape probe manual adjustments on measuring objects are easy to achieve and accurate. For applications demanding highest precision, we recommend mounting the probe on a measuring stand, available with additional sample holders.

Broad range of applications

Our new probe – the latest modular addition to the QNix® 8500 measurement system – allows for individual customization to conveniently measure thin coatings on small parts.



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Examples of use

- Measurements on angle brackets, fasteners, shim washers, screws, bolts and nuts.
- Ensuring – within a measuring range of 20 µm – the reliability of protective coatings on steel bolts and nuts used for e.g. rotor mounts of wind energy plants, fasteners on bridge or window fixings.
- Used for hard thin film coatings (Physical Vapour Deposition – PVD-coatings), such as: TiN, TiCrN, CrN and TiAlN

Product advantages

- Designed for manual measurements and the use of stand equipment
- Proven easy-to-use guided operation of the QNix® 8500 measurement system
- Magnetic-inductive and (optional) Hall-effect measurement methods can be combined in one gauge
- Interchangeable probes
- Individual naming of calibration programs and memory
- Excellent probe adjustment thanks to the pen shape
- Rugged probe with stainless steel housing
- Digital measurement electronics linked with measuring probe for keeping the zero ballance while interchanging probes

Available application-software

Now, user-oriented PC software complements the QNix® 8500 measurement system, adding a variety of options for real-life data analysis and gauge configuration:

- Wireless communication between PC and gauge
- Gauge memory read-out
- Flexible data evaluation with Microsoft Excel
- Gauge configuration using the PC
- Supports all common languages
- Online measurements

Scope of Supply

- Measuring probe MI Fe 500 µm
- Carrying-case (probe case only or together with the QNix® 8500 carrying-case)
- 2 alignment rings
- Steel reference plate, circular, 25 mm in diameter
- Reference foils: ca. 6, 11, 24, 50 µm
- Certificate
- Instruction manual

Optional

- Measurement stand
- Sample holder

Technical Data QNix® 8500 Magnetic-Inductive Measurement Probe MI Fe 500 µm

Measuring Principle	Magnetic Measuring Method Fe: magnetic-principle ref *Fe
Standards & Regulation	DIN EN ISO 2808, DIN 50981, ISO 2178, BS 5411 (11), BS 3900 - C5, ASTM B499, ASTM D 1186, ASTM D 7091
Probe Type	QNix® 8500 probe type
Measurement Range	Fe: 0.0 to 500 µm or approx. Fe: 0.0 to 20 mil
Metric System µm/mil	with the QNix® 8500 gauge
Measuring Interval	1600 ms
Repeatability regarding the Automation-Standards	± (0.1 µm + 0.8% of the measurement value)
Trueness regarding the Automation-Standards after Calibration	± (0.3 µm + 2% of the measurement value) after calibration
Minimum Measuring Area	Diameter: 7.0 mm Measuring radius: 3.5 mm (*1)
Minimum Curvature	smallest convex radius : 4 mm (*1) smallest concave radius: 5 mm (*2)
Minimum Thickness of Base Material	Fe: 0,4 mm (*1)
Operating Temperature	0° C to 50° C (32° F to 122° F)
Storage Temperature	-10° C to 60° C (14° F to 140° F)
Power Supply	From gauge
Dimensions (L x W x H in mm)	Probe without extension cable 120 mm x 12 mm x 12 mm (4.72" x 0.47" x 0.47")
Weight	approx. 95 g

*Fe Measuring of non-ferromagnetic coatings on ferromagnetic substrate, e.g. measuring on steel- or iron substrates
*1 in regard to a maximum deviation of 10 % of the measurement value at coating thicknesses higher than 1 % of the measuring range. Measurements on smallest geometrical forms are possible with specific one-point or two-point calibrations.
*2 in regard to the measuring probes geometry

Technical data subject to change without notice

3 Years Warrenty

* According to our terms of sale

DB E 8500 MI Dig 03/10/750. Subject to change.

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