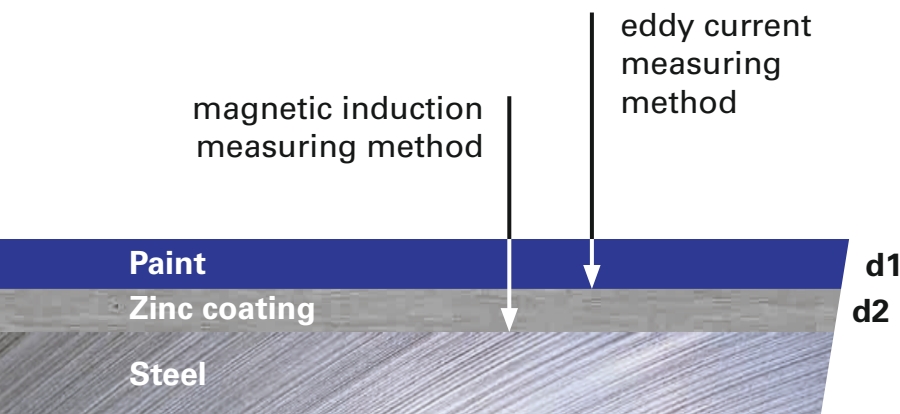




## COATING THICKNESS MEASURING on metallic substrate



Two measuring techniques are used to measure the thickness of layers over a metal substrate.

Firstly, the magnetic induction, that is, when the substrate is self-magnetizable (steel or iron), and, secondly, the eddy current method, that is, when the substrate is at least electrically conductive (other metals such as aluminum). We specialize in those two techniques, and we are sorry to say, we are unable to offer you equipment for the thickness measurement of ceramics, glass or plastic.

You will find a variety of probes to suit your specific requirements. Please note: The combined oscillating probe is designed for using both measuring techniques. You can work with both methods on all metals, with automatic detection of the substrate. The 90° pivotable probe allows you to measure even in the most difficult-to-reach corners and openings. All our coating thickness gauges are "Made in Germany".



# MEGA-CHECK DX

## Coating thickness meter

You can connect many specialized probes to the **List-Magnetik MEGA-CHECK DX** coating thickness meter.

Applications on particularly small openings, on thick coatings and on small measuring points are thus easily possible. Special functions such as scan measurement for rough surfaces and duplex measurement for galvanized and additionally coated steel round off the performance spectrum.

A completely newly developed probe technology allows very stable measurements due to its high sampling rate. For absolutely interference-free and precise measurement, the signals are already digitized in the probe. This results in very accurate, reproducible measurements.

At List-Magnetik you will find a wide range of probes for FE metals (iron and steel) and NFE metals (non-ferrous metals such as aluminum, brass, copper, bronze and non-magnetic stainless steel) as well as combined probes with automatic detection of the base material.

The magnetic induction method allows measurements of paint, varnish, plastic, rubber, ceramics, zinc plating and galvanic coatings on steel. The eddy current method allows you to measure insulating coatings (paint, lacquer, plastic, anodizing) on non-ferrous metals.

The coating thickness gauge has a graphical LCD touch panel with an innovative operator guidance and a resolution of 320x480 pixels. The menu guidance is in German and English, further language packages can be installed. The blue silicone frame effectively protects the housing from damage.

With the flexibly divisible measured value memory, the freely definable calibration memories and the Bluetooth Low Energy interface to Windows, Android or iOS, you have all the possibilities to record and further process your measured values.



The scan function allows you to scan a workpiece over a rough surface and statistically evaluate the data. With the additional analog display, the visualization of the measured values is supplemented to recognize trends and peak values even from the corner of your eye.

The duplex function simultaneously records the single layer thickness when measuring insulating layers on galvanized steel parts.

Power can be supplied by 3 AA batteries or an external source connected via USB. Thus, you can operate the device with a power bank or on the AC adapter.

The probe cable, which can be plugged in at both ends, connects the display unit and probe and can be replaced effortlessly if the cable breaks.

All **List-Magnetik MEGA-CHECK** coating thickness gauges are high-quality products "Made in Germany".

# MEASURING PROBES

## for MEGA-CHECK DX

Type	FE or NFE	Model	Measuring range	Smallest area	Smallest curvature radius	
					convex	concave
DX52-D	magnetic inductive + eddy current	Dual probe with sliding sleeve and prism	FE 0-5.000 $\mu\text{m}$ NFE 0-2.000 $\mu\text{m}$	$\varnothing$ 8 mm	FE 4 mm NFE 6 mm	38 mm
DX52-DP	magnetic inductive + eddy current	Dual probe with sliding sleeve and prism, pivotable	FE 0-5.000 $\mu\text{m}$ NFE 0-2.000 $\mu\text{m}$	$\varnothing$ 8 mm	FE 4 mm NFE 6 mm	38 mm
DX5-F	magnetic inductive	Standard probe with sliding sleeve and prism	0-5.000 $\mu\text{m}$	$\varnothing$ 4 mm	4 mm	38 mm
DX5-FP	magnetic inductive	Standard probe with sliding sleeve and prism, pivotable	0-5.000 $\mu\text{m}$	$\varnothing$ 4 mm	4 mm	38 mm
DX1-F	magnetic inductive	Spring-loaded probe for small parts and complex surfaces	0-1.000 $\mu\text{m}$	$\varnothing$ 2 mm	1 mm	6 mm
DX30-F	magnetic inductive	Two-point probe for very thick layers	0-30.000 $\mu\text{m}$	$\varnothing$ 40 mm	15 mm	60 mm
DX1-FT	magnetic inductive	Transverse rod probe for small interiors and tubes	0-1.000 $\mu\text{m}$	$\varnothing$ 2 mm	2 mm	16 mm
DX3-FT	magnetic inductive	Transverse rod probe for small interiors and tubes	0-3.000 $\mu\text{m}$	$\varnothing$ 3 mm	2 mm	8 mm

## Performance table and technical Data

# MEGA-CHECK DX

Application:	Depending on the selection of the probe, measurement of paint, lacquer, plastic and galvanic layers on steel, measurement of insulating layers on non-ferrous metals with automatic recognition of the base material	Scan function:	for accurate measurement on rough or blasted surfaces
Standards:	ISO 2178, ISO 2360, BS 5411, ASTM	Duplex function:	for exact determination of single layer thickness when measuring insulating layers on galvanized steel parts (zinc layer must be > 60 $\mu\text{m}$ )
Measuring probe:	measuring range depending on probe on steel and iron up to 30 mm (30.000 $\mu\text{m}$ ), on NFE metals up to 2 mm (2000 $\mu\text{m}$ ), minimum area, minimum radius of curvature and calibration value are also depending on probe	Measured value memory:	10,000 measurements, flexibly divisible
Accuracy:	below 100 $\mu\text{m}$ : $\pm 1 \mu\text{m}$ , 100-1000 $\mu\text{m}$ : $\pm 1 \%$ , 1000-2000 $\mu\text{m}$ : $\pm 3 \%$ , > 2000 $\mu\text{m}$ : $\pm 5 \%$	Statistics:	count / maximum / minimum / average / standard deviation
Resolution:	1-100 $\mu\text{m}$ : 0.1 $\mu\text{m}$ , 100-1000 $\mu\text{m}$ : 1 $\mu\text{m}$ , > 1000 $\mu\text{m}$ : 10 $\mu\text{m}$	Calibration memory:	flexible number of calibration configurations storable
Measuring units:	$\mu\text{m}$ and mils	Interface:	Bluetooth Low Energy interface for communication with Android, iOS and Windows App for Android, iOS, Windows: free of charge via Google Play Store, Apple App Store, List-Magnetik homepage
Ambient temperature:	0 - 50° C	Power supply:	3x 1.5 V AA Mignon. External power supply can be connected via USB-C
Display:	LCD touch panel color 320x480 pixel	Operating time:	approx. 25 hours
Multilingual menu:	German, English, other language packages available	Dimensions:	150 x 85 x 35 mm
		Weight:	320 g with batteries



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