Manual

MEGA-CHECK DX

OPERATION MANUAL

COATING THICKNESS METER

MEGA-CHECK DX

Firmware Version 498 and up

2023-12

QM-System
ISO
9001:2015
zertifiziert

INTRODUCTION

You can connect many specialized digital probes to the **List-Magnetik MEGA-CHECK DX** coating thickness meter.
Applications on very small apertures, on thick layers and on small measuring points are easily possible. Special functions like scan measurement for rough surfaces and duplex measurement for galvanized and additionally coated and additionally coated steel.

A completely newly developed digital probe technology enables very stable measurements due to its high sampling rate. The signals are digitized in the probe for absolutely interference-free and precise measurements. This results in very accurate and reproducible measurements.

List-Magnetik offers a wide range of probes for FE metals (iron and steel) and NF metals (non-ferrous metals such as aluminum, brass, copper, bronze and non-magnetic stainless steel) as well as dual probes with automatic detection of the base material. of the base material.

The magnetic-inductive method allows the measurement of paint, varnish, plastic, rubber, ceramics, zinc coatings, and galvanized coatings on steel. With the eddy current method, you can measure insulating layers (paint, varnish, plastic, anodizing) on NF metals, anodizing) on non-ferrous metals.

The coating thickness meter has a graphical LCD touch panel with an innovative user interface and a resolution of 320x480 pixels. The menu navigation is in English, German, French, Italian and Spanish. The blue silicone frame effectively protects the housing from damage.

With the flexibly divisible data logger, the freely definable calibration profiles 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. The additional analog display complements the visualization of the readings, allowing you to see trends and peaks even out of the corner of your eye.

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

Power can be supplied by 3 AA batteries or an external power source connected via USB. This allows you to use the instrument with a power supply or AC adapter.
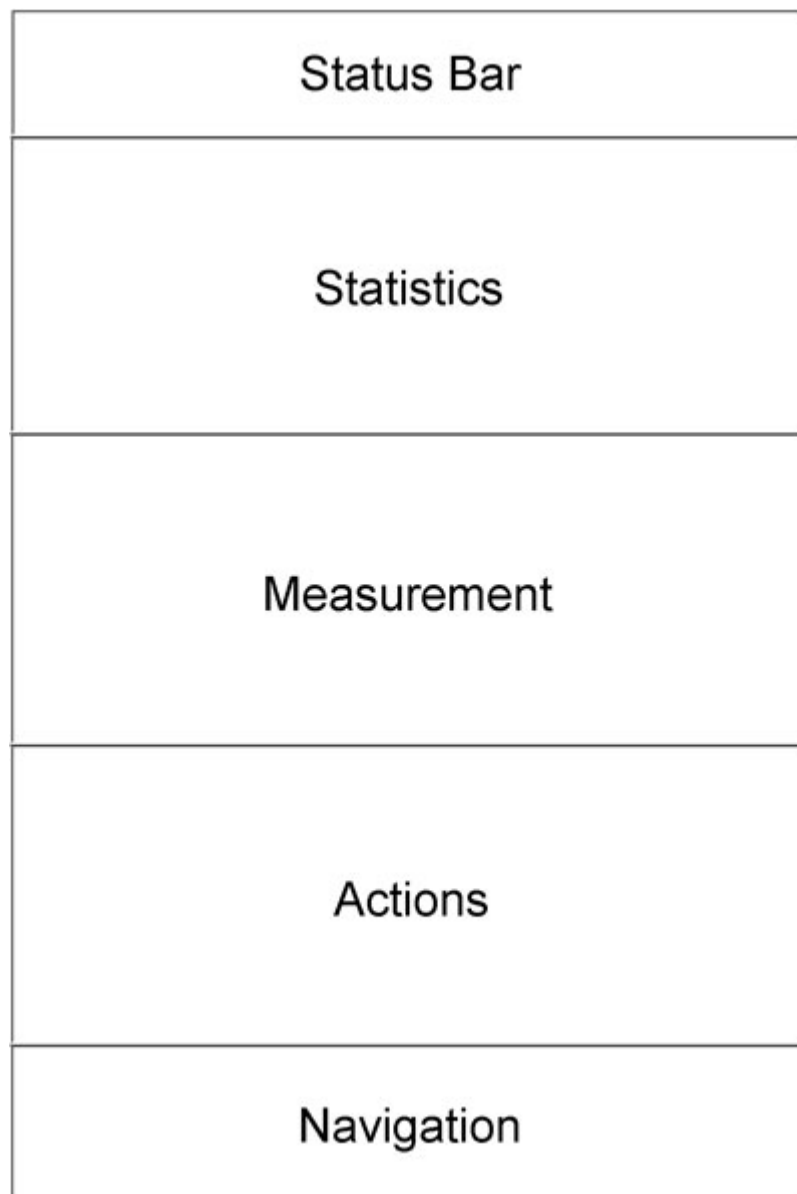
The probe cable, which can be plugged in at both ends, connects the display unit to the digital probe and can be easily replaced if the cable breaks.

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

QUICK START

- First connect the probe cable to the probe and the instrument.

- Switch on the **MEGA-CHECK DX** with the red power button.

- **The instrument is factory calibrated.** Before taking a measurement, perform a control measurement with the control foil (~ 100 µm) and calibrate the instrument only if there is a noticeable deviation. For special geometries and materials, please perform a calibration.

- The probe is recognized by the instrument and the model is automatically displayed in the upper left corner of the status bar.

- Place the probe on the coating to be measured until the reading appears in the display and the instrument confirms the measurement with a beep.

- When using a dual (FE/NF) probe, the instrument automatically selects the correct measurement method after the probe is placed on the coating. **FE** for the magnetic induction method or **NF** for the eddy current method appears on the display after the reading.

- If you want to switch the instrument to German when it is set to English, go to Settings (⚙), Interface and Language

DISPLAY STRUCTURE

```
┌─────────────────────────────────┐
│           Status Bar            │
├─────────────────────────────────┤
│                                 │
│           Statistics            │
│                                 │
├─────────────────────────────────┤
│                                 │
│                                 │
│          Measurement            │
│                                 │
│                                 │
├─────────────────────────────────┤
│                                 │
│            Actions              │
│                                 │
├─────────────────────────────────┤
│           Navigation            │
└─────────────────────────────────┘
```

The display is divided into 5 sections.

The **status bar** shows the title of the current menu position and the battery status.

The **statistics** area displays statistics for a series of measurements. If no memory batch is active, the List-Magnetik logo is displayed here.

In the center is the **measurement** display with the current measurement and additional information about it.

Depending on the current display, there are symbols in the **action** area that trigger appropriate processing and special functions.

NAVIGATION

At the bottom of the screen is the **navigation** area. Here it is possible to jump to different service areas.

	Status Bar
	Statistics
	Measurement
	Actions
	Navigation

Navigation

Icon	Description
(home icon)	Measurement "Home": Here you can always return to the measurement
(list icon)	Data Log The individual measurements of the currently active memory batch or, if the data logger is off, of the last active memory batch are displayed.
(gear icon)	Setup This section allows you to set the language, unit of measure, and other measurement and display parameters, as well as power management settings.
(info icon)	Info and System Turn off the unit, view hardware and software status, or perform a factory reset.

MEASUREMENT

	This icon in the navigation will take you directly to the measurement

The punctual measurement, without special functions such as scan measurement or continuous measurement, shows you a measured value on the MEGA-CHECK after placing the probe.

The measured value is confirmed by an acoustic signal.
One signal = a **ferromagnetic substrate** has been detected (iron, steel), or two signals = a **non-ferrous metal** has been detected, e.g. aluminum, brass or copper.


The measured value, the metal type (FE/NF) and the unit of measurement (µm or mils) are displayed in the center. The left side shows the currently active memory batch and its fill level.

The number of the active calibration profile (here: P1) is displayed below the memory batch (here: M1/7).

The color of the reading is black. If limits are set, the reading will be red if it is below the lower limit and blue if it is above the upper limit.

Below the reading is an analog bar graph. It represents the ratio of the reading to the maximum field strength of your probe. **If limits are set, the bar represents the range between the lower and upper limit.**
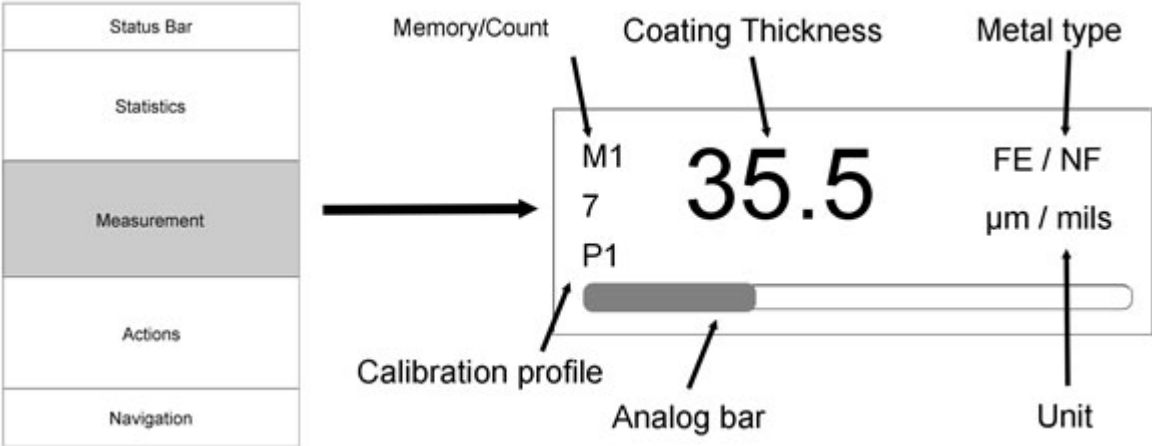

If you want to store a measurement, you can transfer the current measurement to the current memory batch by briefly touching the floppy disc icon. This is confirmed by a beep. The statistics of this memory batch are displayed in the area above the measurement display as in punctual measurement.

If you have activated a memory batch, the statistics for this memory batch will be displayed in the area above the reading instead of the logo.

Actions

Overview of the action area in the measurement display.
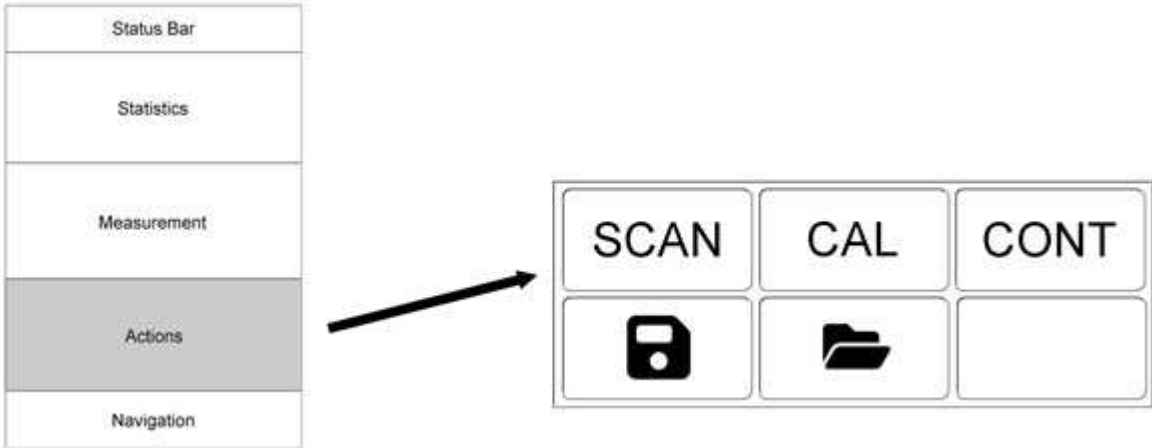
|	
[floppy disk icon]	When the floppy disk icon for saving measurements appears in a highlighted color, measurements are being saved automatically.
	If the floppy disk icon for saving measurements appears in a normal color like the other buttons, no measurements are currently being saved automatically. There are two possibilities:
	If "Auto Save" is active (see Settings / Measurements), you can toggle between "Automatic Save" and "Save Off" by tapping the icon.
	If "Auto Save" is not active, you can save a measurement by tapping the icon.
	If the disk symbol is not visible, no memory batch is active.
CAL	Access to the calibration function.
	Here you can recalibrate the probe or select an existing calibration profile.
[folder icon]	To activate a memory batch, switch to data log management with this icon "Folder".
	From the moment of activation, measurements can be stored
CONT	Special function Continuous measurement.
	See separate chapter "Special Measurement Methods".
SCAN	Special function Scan measurement.
	See separate chapter "Special Measurement Methods".
	Cannot be activated when the measurement type is set to "Duplex".

Statistics display

Only when a memory batch is active, a statistical evaluation of the previous readings of this memory batch is created.

MEM:	M4 (4/7)	CNT:	12 (15)
MAX:	128.4	AVR:	97.2
MIN:	97.3	STD:	9.3
LST:	105.4	TYP:	FE
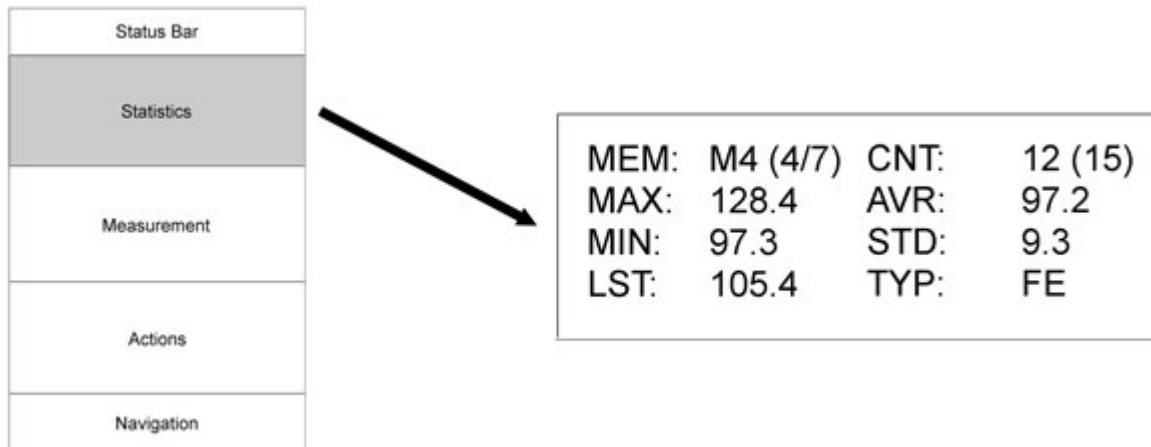
The statistics shown in the example state:

Memory batch number 4 is active (M4). There are 7 memory batches in total (4/7).

A total of 15 values are stored in this batch 4, 12 of which are FE values (NUM: 12(15) as well as TYP: FE). The other 3 values fill the NF batch. The statistics are always displayed separately for FE and NF and the view can be changed by tapping.

Maximum, minimum, average and standard deviation are calculated from these 12 values.

The last stored value was 105.4.

CALIBRATION

When using the instrument for the first time and when measuring small or curved parts, it is essential to perform a zero point calibration and a foil calibration using the supplied measuring foil (approx. 300 µm).

If the instrument has already been used and calibrated correctly, the last calibration value entered is automatically adjusted or corrected for any temperature fluctuations that may have occurred after the instrument was turned on. A new calibration is only necessary when measuring curved or small parts.

Actions

Overview of the Calibration Display Action Area.
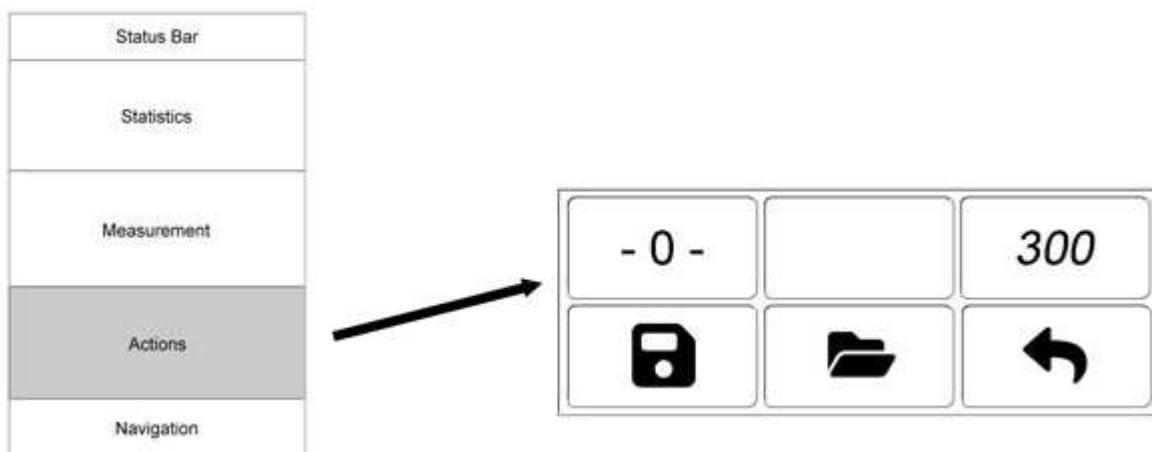
- 0 -	Zero Calibration on Uncoated Metal.
	Zero calibration is the first part of two-point calibration.
	A detailed explanation follows this overview
300	300 µm or another value, depending on the instrument setup.
	The function starts the foil calibration on an uncoated metal plus a defined calibration foil in use, in this case a 300 µm foil.
	The foil calibration is the second part of the two-point calibration.
	You can adjust the foil thickness to your foil in the Setup menu (accessible via Navigation), but not if the button is highlighted after the calibration process has started. In this case, press the button again.
	A detailed explanation follows this overview.

	Back to measurement
	Save the calibration. The icon is not active until the calibration has been performed. This allows you to save the calibration curve generated in the probe during calibration. When saving, you can enter a comment text, for example, to describe the object.
	Access calibration profile management: Find, use, or delete an existing calibration profile

TWO-POINT CALIBRATION

Zeroing (Single Point Calibration)

When ZERO is selected, the button is highlighted. The instrument is now ready for zero calibration. Place the probe on the bare base plate (FE = iron, steel; NF = non-ferrous metals) or on an uncoated target. The display will show **0.0**, an audible signal will sound, and the probe can be removed.

Important: The DX30-F thick coatings probe must be zeroed on a steel plate at least 60 x 40 mm.

Foil Calibration (Two-Point Calibration)

After zeroing:

The foil calibration action button has a value, such as 300, or similar. Take your calibration foil. Does the value match? If not, you need to adjust the device to the foil you have.
To do this, use the navigation to go to ⚙ Setup / Calibration.

When 300 is selected, the button is highlighted. The instrument is now ready for foil calibration. Place the measuring foil or plate on the base plate or on the uncoated target. Then place the probe on the foil. A thickness reading appears on the display, the audible signal sounds, and the probe can be removed.

The instrument is now ready to measure. The calibration just created can be saved as a calibration profile (with the floppy disk icon).

CALIBRATION PROFILE

The currently executed calibration is permanently retained in the device, even if it is switched off.
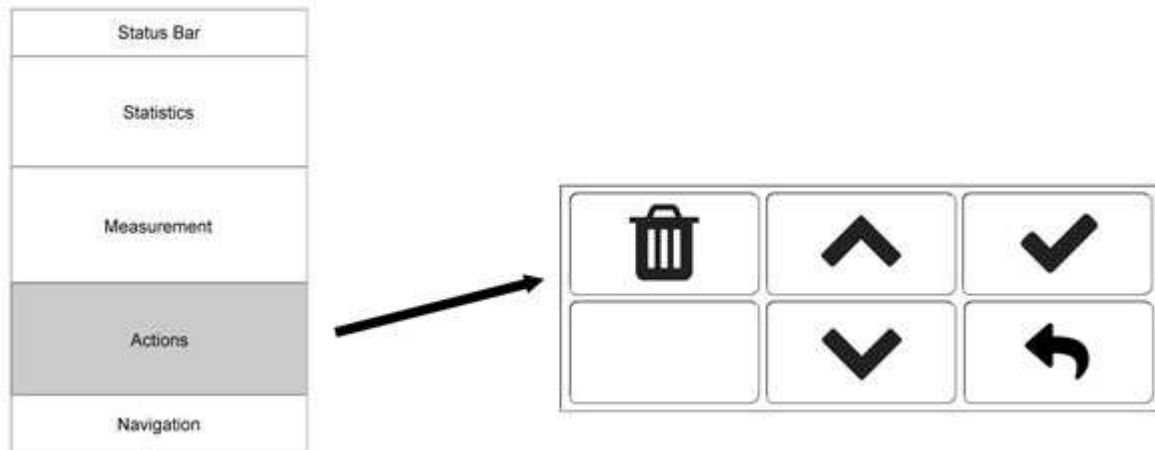
Save a calibration profile

If you want to switch between several object-related calibration profiles, it is useful to save the current calibration. You can do this by pressing the floppy disc icon after a successful calibration.

Use a calibration profile

A saved calibration profile can be loaded and used without having to perform a two-point calibration again. To do this, select the data stack icon.

Actions

Overview of the calibration profile management action area.

↰	Back to calibration
⋀ ⋁	Scroll through the calibration profiles. In addition to the entered text and the set foil thickness, the internal data of the calibration curve is also displayed.
✔	Selection of a calibration profile for use immediately
🗑	Deletion of the calibration profile currently displayed

MEMORY MANAGEMENT

The data loggers record both the automatically stored individual measurements and the values actively stored during continuous measurement. The scan memories are separately managed memories that are not considered here.
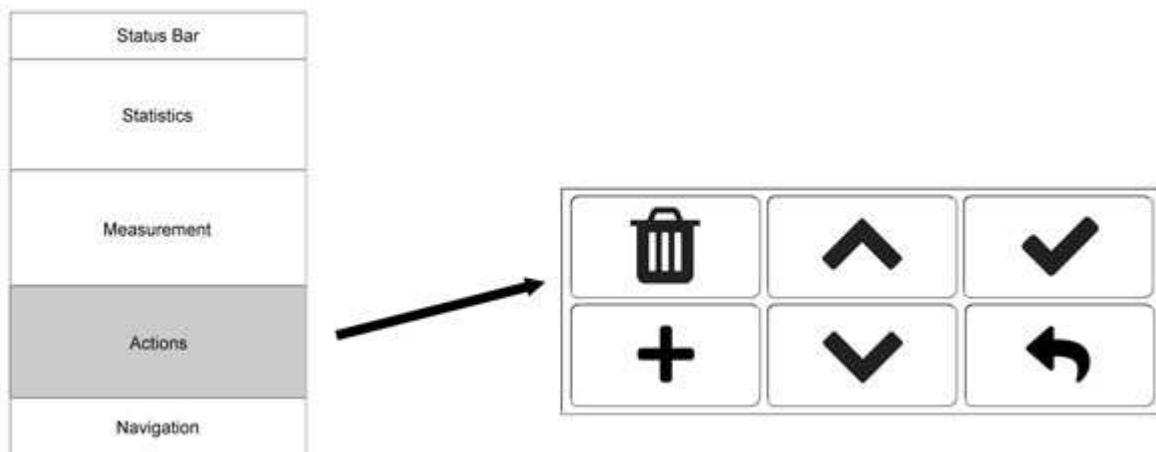
You can create as many sample memories as you like. The memories are assigned a unique free number and a leading "M". A maximum of 10,000 measurements can be stored in the M memories.

If you have not created or activated a memory batch, not all results will be stored. The floppy disk symbol is then not visible during continuous measurement.

Actions

Overview of the data log management action area.

↩	Back to measurement
+	Create a new memory batch. You can enter additional text to describe the new series of measurements. The new memory batch is active immediately. When you return to the measurement display, the floppy disk icon is highlighted and the next measurement is recorded in the memory batch.

∧ ∨	Scroll through the memory batches. The additional text entered will be displayed. You can view the individual values by clicking on the navigation icon of the data log. ▤
✓	Selection of a memory batch, for use immediately
🗑	Deletion of the currently displayed memory batch

SPECIAL MEASURING METHODS

CONTINUOUS

Continuous measurement takes 5-6 readings per second.
The display is constantly updated.

Detection of whether the base material is FE or NF is automatic.

If the probe is outside the measuring range of the probe, e.g. in air, the overflow display "---" appears.

If you wish to store a measurement, you can add the current value to the current memory batch by briefly touching the floppy disc icon. The transfer is confirmed by a beep. The statistics of this memory batch are displayed in the area above the measurement display as in a punctual measurement.

←	Return to punctual measurement
🖫	If the floppy disk symbol for storing measurements is displayed normally, you can store measurements by tapping it. If the floppy disk icon is not visible, no memory batch is active.

Duplex cannot be selected while using the continuous measurement method.

SCAN

The scan measurement function is suitable for accurately determining the average value of the coating thickness on rough surfaces or rough coatings.

To scan, the measurement type must not be set to "Duplex".

After the probe is placed, the scan measurement begins automatically. Move the probe slowly along the coating to be measured. Approximately **5-6 measurements per second** are performed automatically.

The measurement is shown graphically on the display. In the statistics display, the count, minimum, maximum and average values are calculated and displayed.

Since the probe passes through peaks and valleys with each movement - due to the roughness - and the measuring rate is very fast, an accurate average measurement is possible.

To stop scanning, either press the **STOP** button or remove the probe from the coating. The measurement ends automatically.

Depending on the roughness of the surface, the probe rod may wear quickly. The **DX5-F / DX5-FP** or **DX52-D / DX52-DP** probes offer a hard ruby probe tip that is more suitable for particularly rough surfaces. All probes can be used for smooth coating on uneven surfaces (e.g. cast iron).

STOP	End of a scan
↰	Back to punctual measurement.
💾	Save the scan. You can enter a short text that will be displayed later when scrolling below the statistics. You can create as many scan memories as you like. The memories get a unique free number and a prefixed "S".
⋀⋁	Browse through previously saved scans. Statistics, short text and graphical progress curve are displayed.
🗑	Delete the currently displayed scan

Duplex cannot be selected while you are in the scan measurement mode.

MODE DUPLEX

The duplex method allows two values to be recorded simultaneously with one measurement. This measurement function is ideal for measuring double coatings, such as the thickness of insulating coatings on galvanized steel.

With the duplex function, the total coating thickness is measured by the magnetic induction method and the insulating layer measured by eddy current is subtracted from it.

When the probe is placed on the coating, the thickness of the **insulating layer over the zinc (= NF)** and the **thickness of the pure zinc layer (= FE)** are simultaneously displayed on the measuring screen.
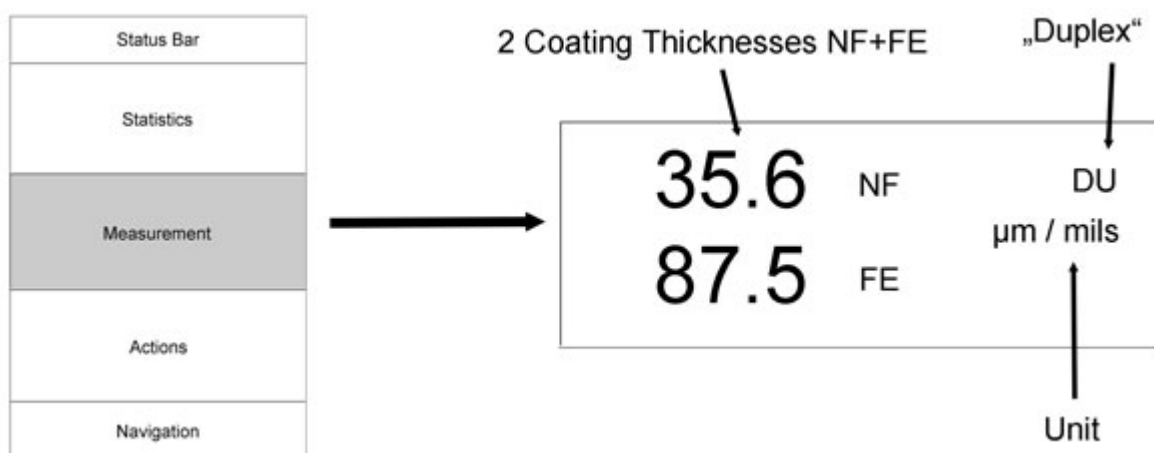
The two values are always managed in pairs in the memory batch. There are independent duplex NF and duplex FE statistics.

Important for Duplex Measurements

To avoid incorrect measurements, the following requirements must be met:

- The zinc layer must be **at least 60 µm** thick. **If the zinc layer is underneath, zero point calibration should be performed on a galvanized part without a coating.**
- Calibration with duplex mode enabled must always be performed on an NP plate. If possible, zero and foil calibration should be performed on the same uncoated galvanized part.
- The duplex measurement function only works with the **DX52-D and DX52-DP** dual function probes.
- If you are measuring on a steel plate that has no zinc coating at all, the duplex function is the wrong choice. The measurement results will be meaningless.

The data log of duplex readings always shows pairs. The two values have the same ID number, the first of type DNF (Duplex-NF) and the second of type DFE (Duplex-FE). They can only be cleared in pairs.

DATA LOG

	This icon in the navigation takes you directly to the data log.

When you navigate to the data log, the measurements of the current M memory batch are displayed. The current M batch is the same as the one shown in the reading display on the left, whose statistics are displayed above the reading.

For each entry, the current number, date and time of the measurement are displayed in the format MM-DD hh:mm (month, day, hour, minute), the DC/AC field type, and the measured value.

The color of the reading is black. If limit values are set, the measured value is displayed in red if it is below the lower limit value and in blue if it is above the upper limit value.

The data log of duplex readings always shows pairs. The two values have the same ID number, the first of type DNF (Duplex-NF) and the second of type DFE (Duplex-FE). They can only be cleared in pairs.

Tapping a line inactivates the reading and marks it for deletion; it changes color and is crossed out. Tap again to reactivate the reading.

	8 readings are displayed per page. You can use the scroll buttons to view the next/last 8 values.
	The trash can icon deletes the entire series of measurements. The memory batch remains active, however, so that further measurements will be written to this memory batch.
	If an individual reading is inactive, it can be permanently deleted by clicking the scissors icon.

SETUP

	This icon in the navigation takes you directly to the setup.

INTERFACE

Language, backlight and volume can be adjusted in the interface area.

LANGUAGE

The available languages are English, German, Italian, French and Spanish.

After changing the language, the unit will shut down and must be restarted.

BACKLIGHT

You can use the slider to make the display brighter or darker. Higher brightness uses more power.

VOLUME

Use the slider to adjust the volume of the beep.

POWER

You can set the automatic shutdown time: 5 minutes, 10 minutes, 30 minutes or "never off" if you do not want the device to turn off automatically.

The power save mode switches the brightness back to 10% after 1 minute.

PROBE SETTINGS

MODE (AUTOMATIC / NF ONLY / DUPLEX)

This function is only active if you use a **DX52-D or DX52-DP** dual function probe.

FE only
To increase the measurement speed when measuring steel/iron with the dual probe, the **FE only** selection can be made. Measurements on non-ferrous metals are not possible in this mode.

NF only
When measuring coatings on slightly magnetic stainless steel substrates, the probe will automatically switch to **FE** base material and the reading will be incorrect.
In this case, change the measurement type to **NF only** so that only the eddy current method is activated.

Duplex
Detailed information about duplex measurement can be found in the "Special measurement methods" chapter.
The duplex mode is not selectable during continuous and scan measurements.

UNITS (µM - MIL / METRIC - IMPERIAL SWITCH)

Supported units of measure are µm (metric) and mil (imperial).
Conversion: 1 mil = 25.4 µm.

Switching from µm to mm (above 1000 µm) is automatic.

Internally, the unit always works metric; if imperial is selected, the display values are converted.

AUTO SAVE

When Auto Save is turned on, each measurement is saved immediately during punctual measurement if 1) a memory is active and 2) the disk button is highlighted.

If Auto Save is turned off, the measurement can be saved one at a time in the punctual measurement by pressing the floppy disk button.

CALIBRATION

FOIL ADJUST

The foil value is factory preset to the supplied calibration foil. The thickness is approximately 300 µm. The delivered foil can vary +/- 5 µm, the exact value is printed on the foil.

If you use a different foil or a calibration plate, you can set the correct value here. Make a note of the selected unit of measurement and enter the foil thickness.

The calibration display will now show the value you have just set on the action button for the foil calibration.

This function is locked when the foil calibration has started (button with foil thickness highlighted). In this case, press the button again.

A note about the input dialog:

The previous value is displayed lighter. You must either enter a new value and confirm it with the check mark, or cancel the entry with the keyboard icon.
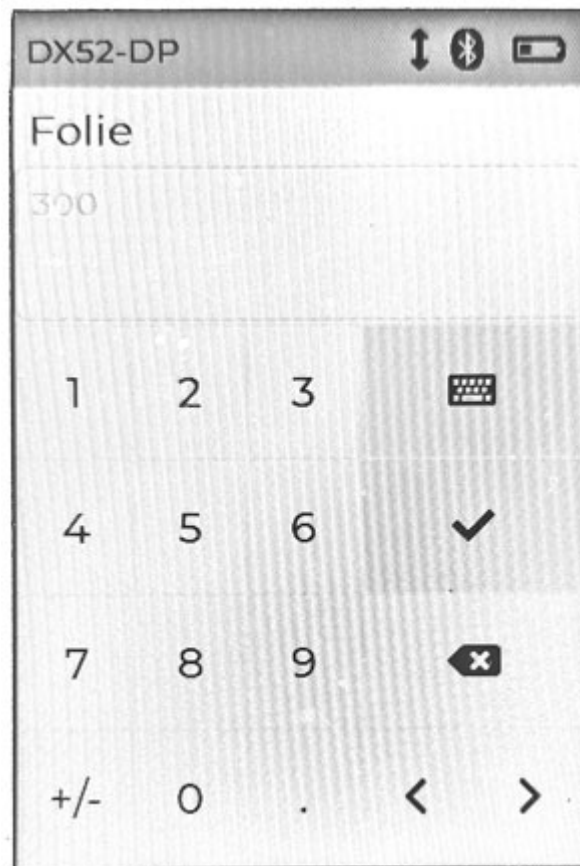
LIMITS

Setting an upper and lower limit influences the display of the measured values. The values must always be entered in the selected unit of measurement.

Upper limit value exceeded: measured value red
Falling below the lower limit: measured value blue

The color change occurs both in the measurement display and in the data logger.

INFO AND SYSTEM

This icon in the navigation takes you directly to the info and system functions.

STATUS BAR
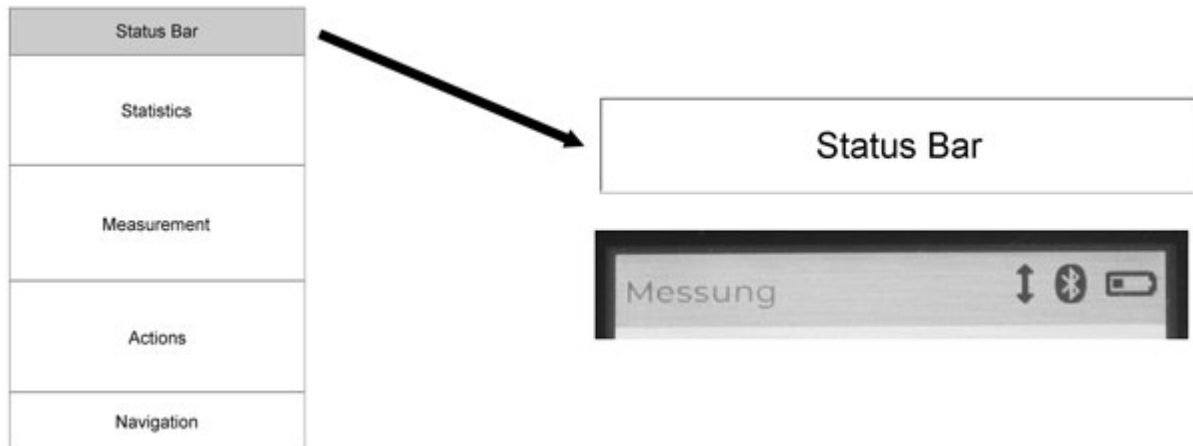
The system display includes the contents of the status line. The status line shows the connected probe on the left, and there are three symbols on the right for probe, Bluetooth and power supply.

The symbol for the probe and for Bluetooth is highlighted when an action takes place: for the probe a measurement, for Bluetooth a data transfer.

The power supply is either an external power supply via USB or a battery with an approximate remaining capacity.

POWER OFF

There are two ways to turn off the unit: press and hold the red on/off button until you hear the beep, or use the System Menu to turn off the unit.

DATE & TIME

Date and time can be set manually or via the PC application **Lima Connect**.

When setting manually, please note the notation xxxx-xx-xx (with hyphens) for the date and xx:xx:xx (with colons) for the time.

DELETE MEMORY

All memory batches from individual measurements or scan are cleared.
Settings and calibration profiles will not be cleared.

FACTORY RESET

The factory reset restores all pre-installed settings of the instrument. All memories (data logger and calibration profiles) are erased. This function should be used when settings have been changed and the instrument does not work properly or the calibration of the probe does not work properly.

SYSTEM

The device data shows, for example, the serial number, the firmware version, the current battery voltage and the MAC address for the Bluetooth connection. This data helps in the event of support.

Battery voltage must be above 2.8V. Below 2.8V, the unit will automatically shut down.

PROBE

Probe and device are independently configured. The probe can be plugged into another MP-4000. The probe data includes the serial number and firmware version of the probe and the configuration.

TECHNICAL DATA

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.
Standards:	ISO 2178, ISO 2360, BS 5411, ASTM
Measuring probe:	Measuring range depending on probe on steel and iron up to 30 mm (30,000 µm), on NFE metals up to 2 mm (2000 µm), Minimum area, minimum radius of curvature and calibration value are also depending on probe
Accuracy:	below 100 µm ± 1 µm, 100-1000 µm: ± 1 %, 1000-2000 µm: ± 3 %, > 2000 µm: ± 5 %
Resolution:	1-100 µm: 0.1 µm, 100-1000 µm: 1 µm, > 1000 µm: 10 µm
Measuring units:	µm and mils
Ambient temperature:	0 - 50° C
Display:	LCD touch panel color 320x480 pixel
Multilingual menu:	German, English, Italian, French, Spanish
Scan function:	for accurate measurement on rough or blasted surfaces
Duplex function:	for exact determination of single layer thickness when measuring insulating layers on galvanized steel parts (zinc layer must be > 60 µm)
Data logger:	10,000 measurements, flexibly divisible
Statistics:	Count / Maximum / Minimum / Average / Standard deviation
Calibration profiles:	flexible number of calibration configurations storable
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 website
Power supply:	3x 1.5 V AA Mignon. External power supply can be connected via USB-C
Operating time:	approx. 25 hours with battery, unlimited with external power supply
Dimensions:	150 x 85 x 35 mm
Weight:	320 g with batteries

MEASURING PROBES

Special characteristic curves and calibration data

Several probes can be connected to the instrument, differing in their measuring method (magnetic induction and/or eddy current) and measuring range and/or application (see table below).

The specific characteristics and calibration data are stored in the probe, and the last calibration is automatically activated when the probe is reconnected. There is no need to recalibrate when the probe is changed.

When changing the probe, the instrument must first be turned off. Then connect the probe and turn the instrument back on.

Table of available measuring probes

Measurement method:
FE = magnetic induction on steel
NF = eddy current on non-ferrous metals

| Model	Technique	Description	Range	Smallest area	Smallest curvature radius	Calibration value
DX52-D	FE + NF combined	Dual probe with sliding sleeve and prism	FE 0-5000 µm, NF 0-2000 µm	FE ø 4 mm NF ø 8 mm	convex: FE 4 mm, NF 6 mm, concave: 38 mm	300 µm
DX52-DP	FE + NF combined	Dual probe with sliding sleeve and prism, pivotable	FE 0-5000 µm, NF 0-2000 µm	FE ø 4 mm NF ø 8 mm	convex: FE 4 mm, NF 6 mm, concave: 38 mm	300 µm
DX5-F	FE	with sliding sleeve and prism	0-5000 µm	ø 4 mm	convex: 4 mm, concave: 38 mm	300 µm
DX5-FP	FE	with sliding sleeve and prism, pivotable	0-5000 µm	ø 4 mm	convex: 4 mm, concave: 38 mm	300 µm
DX1-F	FE	Spring-loaded probe for small parts and complex surfaces	0-1000 µm	ø 2 mm	convex: 1 mm, concave: 6 mm	300 µm
DX30-F	FE	Two-point probe for very thick layers	0-30.000 µm	ø 40 mm	convex: 15 mm, concave: 60 mm	5 mm
DX1-FT	FE	Transverse rod probe for small interiors and tubes	0-1000 µm	ø 2 mm	convex: 2 mm, concave: 16 mm	300 µm
DX3-FT	FE	Transverse rod probe for small interiors and tubes	0-3000 µm	ø 3 mm	convex: 2 mm, concave: 8 mm	300 µm

APPLICATIONS FOR WINDOWS, ANDROID, iOS

LIMA CONNECT FOR WINDOWS

The free Lima Connect application for data transfer to the PC can be downloaded from the Applications section at www.list-magnetik.com.

With Lima Connect you can connect to a Windows PC using Bluetooth Low Energy (BLE) technology, take online measurements or read out the device's memory, statistically evaluate the data and display it as a graph. You can print the results or transfer them to subsequent applications such as Microsoft Word and Microsoft Excel.
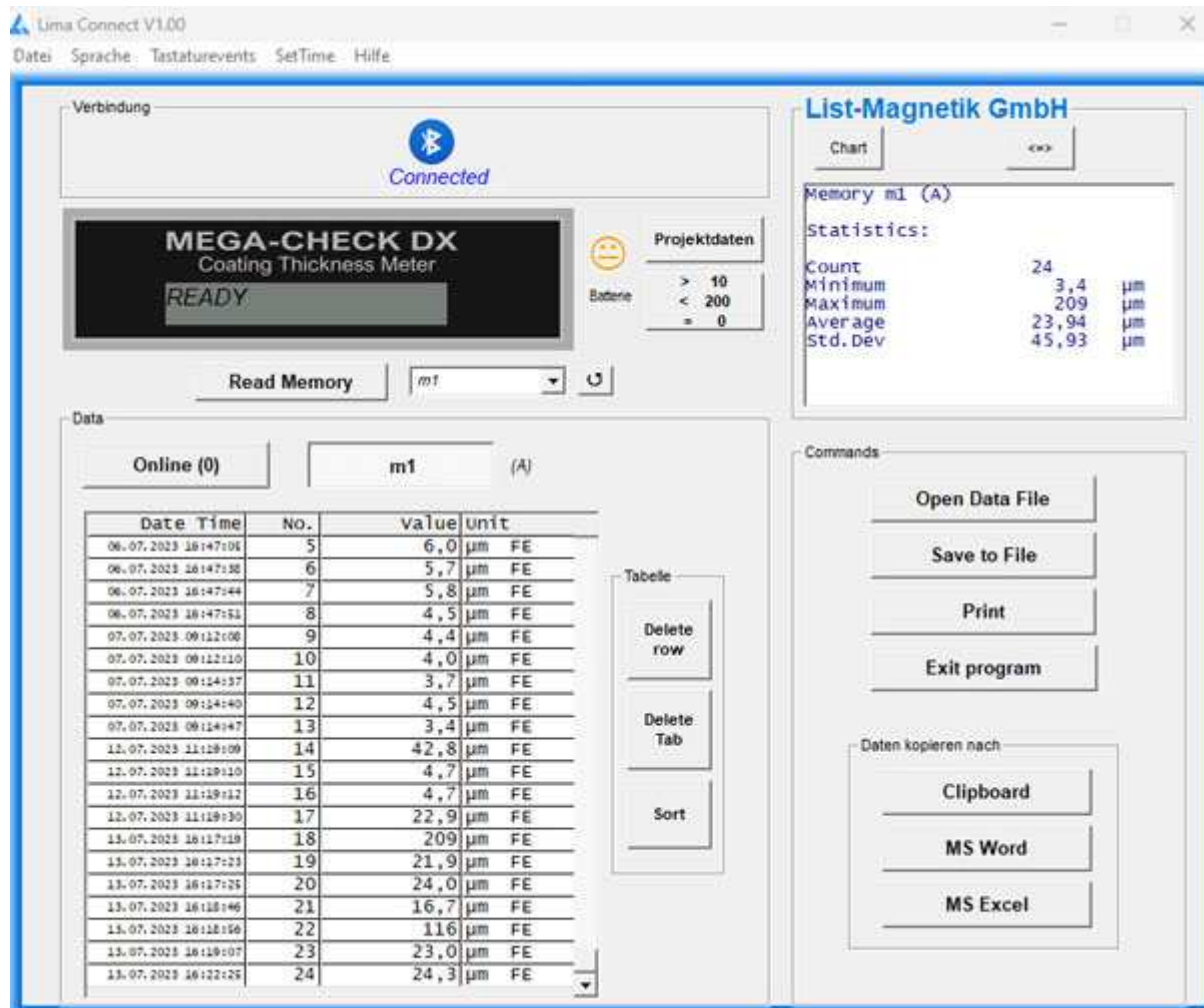
LIMA CONNECT FOR ANDROID AND iOS

To further process your measurement data, you can also pair your device with mobile Android and iOS devices. You can measure online or read the device memory with Lima Connect for Android and iOS. Exclusively in these two mobile versions you can manage projects and assign the measuring points on a photo. The measurement results can be statistically evaluated and displayed graphically. The app for Android and iOS is also free.

Android	iOS
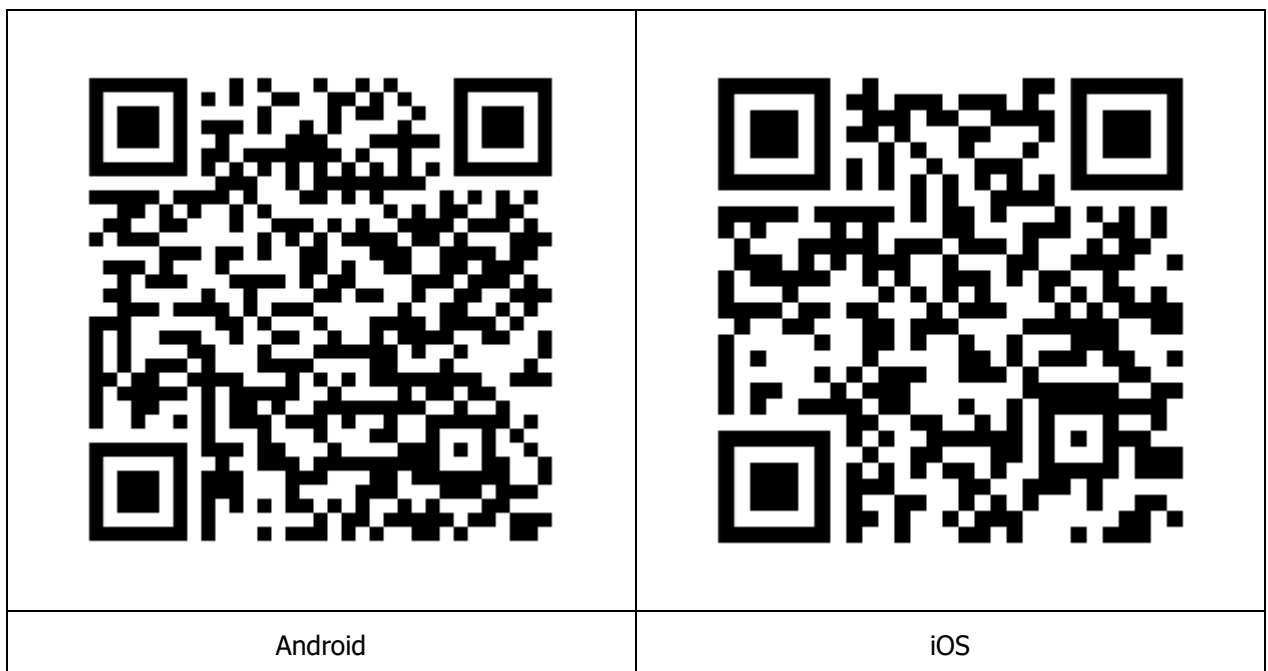
IMPORTANT INFORMATION

USING THE PROBE

Do not run the probe along a measurement object. Always measure point by point. This means that after each measurement the probe should be lifted off for approx. 1 second. The calibration set will then automatically be checked and corrected if applicable.

Please make sure that the pole tip of the measurement probe and the calibration plates are clean and free of dust.

COATING THICKNESS OF 2000 µM AND UP

When measuring in higher range (more than 2 mm / 2000 µm) you will obtain a better accuracy, when you calibrate the device with a 1 mm calibration plate, which is available as option.

MEASUREMENT ON SMALL OR CURVED PARTS

With measurements on small or curved parts both, the zero adjustment and the foil calibration, should be carried out on a non-coated object with the same geometry.

The same applies to base material the structure of which differs strongly from the included base plate (cast, special steels, etc.)

For measuring small parts on steel as a base material the probes PF-1000, PF-1S and PF-3T are especially suitable.

When using the device for the first time its calibration should be checked by means of the included measurement foils.

RECOMMENDED THICKNESS OF THE BASE MATERIAL

Base material: iron / Steel (FE):   at least 300 µm / 0,3 mm
Base material: non-ferrous metals (NF):   at least 200 µm / 0,2 mm

MAINTENANCE OF STORED VALUES WHEN CHANGING BATTERY

The stored measurement values and calibrations will be maintained even after the device has been switched off or when the device is stored without batteries.

CHANGE OF THE PROBE

To change the probe, switch off the device first. Then connect the desired probe to the probe cable and switch on the device again.

We supply:

- Coating Thickness Meters

- Magnetic Field Meters

- Devices for Materials Testing
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Fast calibration and repair service

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