

Operating Instructions current state of 03/216

Coating Thickness Gauge ET 12 with combination probe



The coating thickness gauge ET-12 is a mobile instrument for measuring the thickness of coatings on ferrous and non-ferrous metals..

The coating thickness gauge ET-12 is characterized by its high measuring precision as well as its absolutely simple and safe handling. It measures all non-magnetic coatings such as paint, enamel, chrome, copper, zinc, etc. on steel and iron, as well as all insulating coatings such as paints, plastics, enamel, etc. on non-magnetic metal substrates (eg aluminum, copper, brass). The switching of the combined probe for different substrates occurs automatically.

Declaration of Conformity

The product meets the Low Voltage Directive 2006/95/EC and the EMC Directive 2004/108/EC.

Safety instructions

We accept no responsibility for any damage to property or injury to any misuse of the product or damage caused by improper handling or disregard of the operating line. In this case, the warranty is void.

Read complete instructions carefully before using the device.

- The product is not a toy. Keep it out of the reach of children!
- The unauthorized modification and / or making changes to the product are not allowed by the grounds of safety and the approval of the device (CE).
- The manufacturer and supplier can not accept any responsibility for any incorrect readings or the consequences that may arise from such incorrect readings.
- Avoid placing the unit in heavy mechanical loads, high temperatures, direct sunlight, heavy vibration or steam.
- Avoid to use or store the device in the near of influence of strong electromagnetic radiation or in the vicinity of electrostatic sources or stored, since this could lead to errors in the measurement.

- Maintenance and repair work should be performed only by specialists or in a specialist workshop.
- If you have any questions that are not answered in the operating instructions, please contact our Technical Advisory Service or other experts.

The device is not intended for inspection of the paint layer in mass production in factories. For consequential damages, we do not assume any liability!

Specifications

Display:	3 digit LCD
Measuring range:	0 – 1250 µm / 0 – 49,4 mils
Accuracy	± 2 µm (+3%), ± 0,1 mil (+ 3 %)
Smallest measured surface	Ø 7 mm
Smallest curvature radius	Fe: konvex 1,5 mm NFe: 3 mm
Lowest thickness of base material	Fe: 0,5 mm NFe: 0,3 mm
Operating temperature	0 °C bis + 40 °C
Power supply	1x 1,5 V AAA
Dimensions	94 x 48 x 24,2 mm
Weight	72 g

Scope of Delivery

- 1 x Coating Thickness Gauge ET 12
- 1 x Operating Instructions
- 1 x Battery 1,5 V AAA Mignon
- 4 x Calibration foils + 2 x zero standard
- 1 x Case

Application

For measurements on all metallic substrates. The letters "Fe" (ferrous) or "Nfe" (non-ferrous) are displayed automatically on the display with each measurement, depending on the substrate.

The instrument automatically turns on when probe is pressed. When not in use, the device switches off after 30 seconds.

Switching from "Fe" to "NFe" is not necessary, this is done automatically.

Place probe of the device straight on the surface and hold still.

After recording the data you will hear a beep.

Function keys:

„Plus (+)“-Key:

Briefly press the "plus" key to switch between the units "mils" and "microns".

During calibration, you can set the value with the "plus" key.

„Minus (-)“-Key:

Briefly press the "minus" key to turn the display 180 degrees. This feature was designed for differently-directed surfaces.

During calibration, you can set the value with the „minus“ key.

„M“-Key:

The instrument automatically stores the last 10 readings. After pressing the "M" button, you can display with "+" and "-" the last 10 readings.

Calibration using the zero standard and the calibration foils.

always calibrate with the foil that corresponds to the measured layer thickness most likely.

Pull off protection film from the zero standard before first use to avoid incorret measurements.

To perform the calibration properly:

1. Switch on device by pressing the sensor.
2. Press the "+" button for 3-4 seconds. The machine starts beeping and "000" will flash on the display. Measure directly on the zero standard. The zero point is calibrated.
3. Place the foil on the zero standard and measure again.
4. Press the „M“ button **until** the display starts flashing. Now you can set the foils value with pressing „+“ and "-“ on the device.
5. If you have set the value correctly, press the "M" button and the calibration is completed.

(Repeat the above mentioned calibration process with the other zero standard.)

Reset - Restore factory settings:

1. Press the sensing tip to turn on the device.
2. Press “-” button until LCD-Display will show “000.” The Reset function restores the factory setting.

MAINTENANCE

Inserting and Replacing Batteries

Keep batteries out of the reach of children or pets, to avoid swallowing! Pay attention to the correct polarity while inserting the battery. Remove the batterie if the meter is not used for a long period to prevent damage from leaking batteries. Leaking or damaged batteries can cause burns on contact with skin. Therefore use suitable protective gloves. Never open batteries. Make certain that the batteries are not shorted, recharged or thrown into the fire. There is danger of explosion!

1. Open the screw.
1. Remove the battery cover.
2. Remove the empty battery.
3. Insert the new battery.
4. Replace battery cover and fix with the screw.

Disposal of used batteries

Batteries are special waste and will not be disposed of with household waste. The user is obliged to the law (Battery ordinance) to return used batteries. Used batteries / rechargeable batteries can be returned, at the collection of local communitiess and in any store that sells batteries / rechargeable batteries! Please adhere to the statutory provisions and do your bit for the environment!

Cleaning

Clean the appliance with a damp and anti-static cloth. Do not use harsh or abrasive cleaners!

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