REED

Model CM-8822

Coating Thickness Gauge

Instruction Manual

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Features

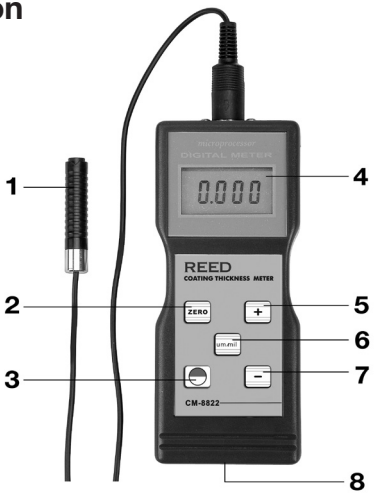
- Measure the thickness of non-magnetic coatings on magnetic or non-magnetic metal substrates
- Choice of remote probe; F probe measures the thickness of non-magnetic coatings on magnetic metal substrates; N probe measures the thickness of non-magnetic coatings on non-magnetic metal substrates
- Automatic probe recognition
- Automatic calibration
- Large, easy-to-read LCD provides exact readings without guessing or errors
- µm/mil conversion switch
- Meets ISO2178 and ISO-2361 standards

Specifications

Measuring Range:	0 to 1000 µm, 0 to 40 mil
Resolution:	0.1µm (0-99.9µm), 1µm (<100µm)
Accuracy:	±1 to 3% or 2 µm, whichever is greater
Sampling Time:	1 second
Power Supply:	4 x 1.5V “AA” batteries
Dimensions:	6.3 x 2.7 x 1.25” (161 x 69 x 32mm)
Weight:	9 oz (260g)
Includes:	Ferrous probe, non-ferrous probe, calibration foils, iron substrate, aluminum substrate, hard carrying case, and batteries
Optional Accessories:	Replacement ferrous probe (CM-8822FPROBE) Replacement non-ferrous probe (CM-8822NFPROBE)

Instrument Description

1. Sensor
2. Zero button
3. Power button
4. LCD screen
5. Plus button
6. µm/mil button
7. Minus button
8. Battery compartment



F Probe Description

Measures the thickness of non-magnetic materials (example: paint, plastic, porcelain enamel, copper, zinc, aluminum, chrome, ect.) on magnetic materials (example: iron, nickel, ect.). Common uses include measuring thickness of galvanizing layer, lacquer layer, porcelain layer, phosphide layer, copper tile, aluminum tile, some alloy tile, and paper.

N Probe Description

Measures the thickness of non-magnetic coatings on non-magnetic metals. Common uses include measuring the layer of varnish, paint, enamel, plastic coatings, or powder applied to aluminum, brass, non-magnetic stainless steel.

Operating Instructions

Measuring Procedure

1. Plug in the F-probe or NF-probe and place it away from any substrate or other metal materials
2. Press the power button to turn on the meter and to perform the auto calibration, which takes 3 seconds
3. The meter will recognize the probe and display F or NF on the LCD screen
4. Select the measurement unit by pressing µm/mil button, which will appear on the LCD screen
5. Place the probe on a coating layer to be measured
6. The LCD screen will display the thickness of the coating layer
7. The reading can be corrected by removing the probe from the layer and by pressing the plus or minus button
8. To take another measurement, lift the probe to more than 1 centimeter and then repeat steps 5-7
9. Turn the meter off by pressing the Power button. The meter will also turn off after 2 minutes of inactivity.

Zero adjustment

1. Plug in the F-probe or NF-probe and place it away from any substrate or other metal materials
2. Press the power button to turn on the meter and to perform the auto calibration, which will last 3 seconds
3. Place the probe on a substrate
4. Press the Zero button and ‘0’ will appear on the display
5. Do not press the Zero button if the probe is not placed on a substrate
6. Select an appropriate calibration foil according to your measurement range
7. Place the standard foil onto the substrate

8. Place the sensor gently onto the standard foil and lift
9. The reading on the LCD screen is the value measured
10. The reading can be corrected by removing the probe from the layer and by pressing the plus or minus button
11. Repeat step 7-10 until the result is correct

Calibration Foils

This meter includes different foil sets for different ranges.
Please see the following table for reference.

Range (µm)	CM25	CM50	CM100	CM200	CM500	CM1000
0-200	•	•	•	•		
0-500		•	•	•	•	
0-1000		•	•	•	•	•
0-2000		•	•	•	•	•

Battery Replacement

1. When the low battery symbol appears in the display, it is time to replace the batteries
2. Turn the meter off, open the battery compartment, and remove the batteries
3. Install 4 new AA batteries verifying you are following the correct polarity

For service (repairs or calibration) on this or any other REED product or information on other REED products, contact REED Instruments at info@reedinstruments.com.

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