

CMI 250 Coating Thickness Gauge

Professional

Description

F/NF Coating thickness gauge that measures non-conductive coatings over non-ferrous substrates and non-magnetic coatings over ferrous substrates. Unit features automatic temperature compensation, base corrections, measurement storage options, date & time stamping and USB PC connectivity.

Features

- Store measurements, date and time stamp results, statistic analysis of the coating thickness, deliver measurement results direct to your PC.
- Eddy Current Technology for non-conductive coatings over non-ferrous metals like aluminum, brass or copper : Teflon, Enamel, Epoxy, Anodize, Paint & Powder Coats.
- Magnetic Induction Technology for non-magnetic coatings over steel or ferrous substrates: Zinc, Cadmium, Paint & Powder Coats.

Specification

Automatic Substrate Recognition. No User Calibration Required
Factory calibrated, only requires a swift base re-zero correction when measuring on different metallic substrates.
Statistical analysis reporting included(data recording, mean, standard deviation, high-low reporting).
USB 2.0 data transfer to MS Excel. Backlit visual display unit.
Optional continuous mode measurement.
Storage Capacity: 9690 measurements with optional date and time stamp.
Temperature compensation calibrated over 4°C-60°C
Magnetic Induction
Conforms to method ASTM B499 & B530, DIN 50981, ISO 2178 and BS 5411 Parts 9 & 11.
Eddy Current
Conforms to methods ASTM B244 & B529, DIN 50984, ISO 2360 and BS 5411 Part 3.
Measurement Ranges
Ferrous Substrates, Magnetic Induction: 0.001-2.04mm(0.1-80mils)
Non-ferrous substrates, Eddy Current: 0.001-1.52mm(0.1-60mils)
Minimum ferrous and non ferrous substrate thickness:305µm, 12mils
Accuracy: +/- (2µm+3% of reading) or +/- (0.1 mils+3% of reading) relative to calibration with certified reference material.
Precision
Ferrous Substrates, Magnetic Induction, $\sigma = 0.6\mu\text{m}$ (0.02 mils) for a 75µm(2.95 mils) plastic standard on steel. $\sigma = 0.9$ (0.04 mils) for a 12.2µm(0.48 mils) plastic standard on steel.
Non-Ferrous Substrates, Eddy Current: $\sigma = 0.15\mu\text{m}$ (0.01mils) for a 75µm (2.95mils) plastic standards on Cu. $\sigma = 0.2\mu\text{m}$ (0.01mils) for a 12.2µm (0.48mils) plastic standards on Cu.
Size: 95.3 x 50.8 x 25.2mm
Units: Automatic conversion between Imperial & metric units with a keystroke.
Battery: 2 x AA (4500 measurements)



Ideal Metrology Solution for:

- Industrial Coating & Painters.
- Appliance Coaters & Surface Finishers.
- Paint & Powder Coaters.
- Coating Inspectors.
- Automotive & Aerospace Finishers.
- Electroplating Plants.
- Painting Contractors.
- Ship Building.

Item Code : ST-CMI250

Product Supply Includes: Includes CMI250 Gauge, Protective Case, Steel Base Plate and 1 mil & 10 mil NIST Certified Shim Standards.