COATING THICKNESS GAUGE

INTRODUCTION

The Metravi CTG-10 Coating Thickness Gauge is a high-performance instrument that can measure coating thickness on both ferrous and non-ferrous metals.

A high precision device for conductive coating measurement, stable and reliable performance and non-destructive measurement, etc. It is a necessary instrument for automobile manufacturing, sales, evaluation, metal processing, painting, inspection and other industries. It is widely used in manufacturing, metal processing, marine mechanics, bullet trains, quality supervision, and other fields.

The product is based on the principles of electromagnetic induction and eddy current measurement.

The principle of electromagnetic induction measurement is to measure the coating thickness according to the size of the magnetic flux flowing from the sensor through the non-ferrous magnetic coating into the ferromagnetic substrate. The symbol is Fe.

It can measure non-conductive or conductive coatings on magnetically permeable metals such as iron and steel (for example: galvanized steel sheet).

The principle of eddy current measurement is to measure the coating thickness according to the difference in the eddy current formed by an AC magnetic field on a non-magnetic metal substrate (such as aluminum). The symbol is NFe.

It can also measure non-conductive coatings on non-magnetic metal materials such as aluminum and copper, as in the substrate is metal, and the coating cannot conduct electricity.



FEATURES

- Two thickness measurement methods: Magnetic and Eddy Current.
- Automatic identification of the ferrous or non-ferrous substrates.
- High-precision, hard-wearing and stable sensor.
- Single and multi-point calibration methods are adopted to correct the sensor systematic error and ensure the measurement accuracy.
- Colour Light Alarms: indicates the current value attribute (green: qualified; red: below the limit; yellow: above the limit).
- Power on/off and measurement are accompanied by audio indication.
- Rotatable Screen: the content displayed on the screen can be rotated up and down, which is convenient for users to read the measured values from different angles.
- High-capacity memory chip: can store 199 groups of data.

*Technical Specifications & Appearance are subject to change without prior notice



COATING THICKNESS GAUGE

CTG-10

SPECIFICATIONS

Substrates: Ferrous (Fe) & Non-ferrous (NFe)

Min. Substrate Thickness: 0.5mm

Measurement Method: Single / Continuous

Sensor Type: Magnetic Induction & Eddy Current

Composite

Measuring Range: Upto 1750µm / 68.9mil

Resolution: 0.1µm / 0.01mil

Accuracy: $\pm (3\% + 1\mu m) / \pm (3\% + 0.04 mil)$

Refresh Rate: 0.5s

Display: EBTN Colour LCD, Rotatable

Alarms: LED & Audio
Limit Setting: Available
MAX/MIN/AVG: Available
Probe Modes: Auto/Fe/NFe

Data Logging: Up to 199 sets/groups

Calibration: User calibratable

Auto Power-off: After 5 mins. of non-operation

Low Battery indication: Flashing battery symbol

Power: 1.5V AAA*2=3V Alkaline Batteries

Impact Resistance: Can withstand 1m drop

Dimensions: 117×53×37mm

Weight: 111gms (including batteries)

Accessories: User Manual, Ferrous Substrate, Non-

ferrous Substrate, Protective Cover for Sensor, Standard Coating Thickness

Sheets

Operating Environment: 0 to 40° C, $\leq 80\%$ RH Storage Environment: -20 to 60° C, $\leq 75\%$ RH





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