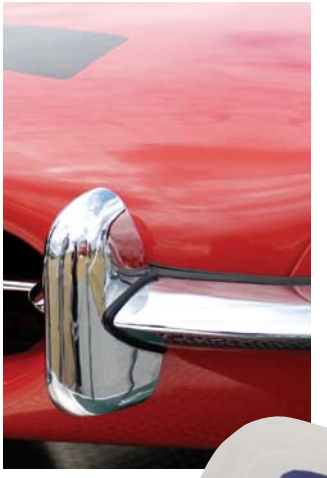
CMI153®

Coating Thickness on Ferrous and Non-ferrous Substrates and Structures

Dual Technology Features Automatic Selection of Magnetic Induction or Eddy Current Measurement Techniques



Built upon our highly successful CMI150 architecture the CMI153 delivers an improved measurement probe with enhanced performance and superior substrate sensitivity.

Useful in a wide variety of settings, the **CMI**153 measures non-conductive coatings over non-ferrous substrates and non-magnetic coatings over ferrous substrates.

Ideal Metrology Solution for:

- Paint & Powder Coaters
- Coating Inspectors
- Electroplating Plants
- Painting Contractors
- Automotive & Aerospace Finishers
- Automatically detects Ferrous or Non-ferrous substrates and auto-selects correct test method, Eddy Current or Magnetic Induction

Eddy Current Technology for non-conductive 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

OXFORD INSTRUMENTS

The Business of Science®

Automatically selects Eddy Current or Magnetic Induction measurements to suit the substrate

This small but rugged, versatile, single-handed gauge equipped with a belt clip for portability is durably designed allowing its use in the harshest of conditions. No operator training is required as the **CMI**153 features one-button operation and requires neither calibration nor resetting between measurements.

The unit is factory calibrated and only requires a swift base re-zero correction when measuring on different metallic substrates.

The **CMI**153 is a high-quality yet economically designed complete Coating Thickness measurement package.

Specifications:

- Automatic Substrate Recognition
- No User Calibration Required
- Magnetic Induction: Conforms to methods 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
- Factory calibrated, only requires a swift base re-zero correction when measuring on different metallic substrates

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 ± (0.1mils + 3% of reading)

Precision:

- Ferrous Substrates, Magnetic Induction: σ = 0.8µm (0.03mils) for a 75µm (2.95mils) plastic standard on Steel
- Non-Ferrous Substrates, Eddy Current: σ = 0.5µm (0.02mils) for a 75µm (2.95mils) plastic standards on Al

Dimensions:

- 3.75"x2"x1", 9.53cm x5.08cm x2.52cm

Weight:

- 2.5 oz (71 g)

Units:

- Automatic conversion between imperial and metric units with a keystroke

Battery:

- 2xAA
- Auto ON/OFF to extend Battery Life

Oxford Instruments
Industrial Analysis

For more information please email:
industrial@oxinst.com

North America
Scotts Valley, CA
Tel: +1 831 439 9729

UK
High Wycombe
Tel: +44 (0) 1494 442255

China
Shanghai
Tel: +86 21 6132 9688

Finland
Espoo
Tel: +358 9 329 411

Germany
Uedem
Tel: +49 (0) 2825 93 83 -0

Latin America
Concord MA
Tel: +1 978 369 9933 Ext. 220

Singapore
Tel: +65 6337 6848

visit **www.oxford-instruments.com** for more information

www.oxford-instruments.com

This publication is the copyright of Oxford Instruments plc and provides outline information only, which (unless agreed by the company in writing) may not be used, applied or reproduced for any purpose or form part of any order or contract or regarded as the representation relating to the products or services concerned. Oxford Instruments' policy is one of continued improvement. The company reserves the right to alter, without notice the specification, design or conditions of supply of any product or service. Oxford Instruments acknowledges all trademarks and registrations. © Oxford Instruments plc, 2010. All rights reserved. Part no: OIIA/073/A/0210

OXFORD INSTRUMENTS
The Business of Science®