Metal finishing

HITACHI
Inspire the Next

CMI255 & CMI257

Advanced coating thickness on ferrous and non-ferrous metal substrates

Find out more

These gauges are a great complement to our XRF coatings analysers. To place your order contact **contact@hitachi-hightech-as.com**

MORE INFORMATION

To find out more about the CMI255 and CMI257 or our range of metal finishing gauges, visit

www.hitachi-hightech.com/hha

QUALITY ASSURANCE FOR THICKNESS OF PAINT, LACQUER, ZINC AND OTHER PROTECTIVE COATINGS ON METAL SUBSTRATES

Two probe configurations designed to fit your measurement needs

The CMI255 and CMI257 coating thickness gauges offer dual technology along with high reliability testing of protective and decorative coatings applied to steel, iron, aluminium and other metals. With on-board statistics to review a series of measurements and the ability to account for variations in substrate materials, our CMI255 and CMI257 are superior quality assurance and inspection tools for:

- Paint & powder coaters.
- Electroplaters.
- Galvanizers.
- Coating inspectors.
- Automotive and aerospace finishers.

These compact, handheld gauges are factory calibrated and automatically select the best measurement technique for the base material. The gauges are durably designed, include a rubberized cover and meet IP52 environmental protection standards to withstand use in harsh conditions.

The CMI255 features an integrated probe for single-handed operation. The CMI257 features a tethered probe for taking measurements on locations that are more difficult to reach.

KEY FEATURES

- On-board statistics.
- Base re-zero function.
- Factory calibrated.
- Automatic substrate detection.
- Integrated or external probe configuration.
- IP52 protection against dust and water.

RELIABLE NON-DESTRUCTIVE ANALYSIS

We have been providing coating thickness products for the metal finishing industry for over 40 years.

CMI250 SERIES DUAL TECHNOLOGY

Magnetic induction technology for non-magnetic coatings (paint, powder coat, zinc, cadmium) over ferrous and magnetic steel. Measurements taken conform to the following specifications:

- ASTM D7091.
- B499.
- B530.
- DIN EN ISO 2178.

Eddy current technology for non-conductive coatings (paint, powder coat, epoxy, lacquer) over non-ferrous metals like aluminium, magnesium or copper. Measurements taken conform to the following specifications:

- ASTM B244.
- B529.
- DIN EN ISO 2360.

SPECIFICATIONS

- **Body dimensions:** mm: 110 (L) x 50 (W) x 25 (D)
  in: 4.3 (L) x 2 (W) x 1 (D).
- **Probe dimension:** mm: 24 x 47
  in: 1 x 1.8.
- **Weight:** CMI255 - 90 g (3.2 oz) 140 g CMI257 - (5.0 oz).
- **Battery:** 2 x AAA.
- **Protection:** IP52 (dust and dripping water).

MINIMUM SAMPLE DIMENSIONS

- **Convex radius:** 5 mm / 0.2”.
- **Concave radius:** 50 mm / 2”.
- **Clearance:** CMI255 - 125 mm / 5” CMI257 - 50 mm / 2”.
- **Measurement area:** 10 mm x 10 mm / 0.4” x 0.4”.

PAINT GAUGE COMPARISON CHART

	CMI155	CMI157	CMI255	CMI257	CMI233M	CMI233E	CMI233D
Gauge	Ferrous/ Non-Ferrous	Ferrous/ Non-Ferrous	Ferrous/ Non-Ferrous	Ferrous/ Non-Ferrous	Ferrous	Non-Ferrous	Ferrous/ Non-Ferrous
Measures on magnetic steel	●	●	●	●	●		●
Measures on Aluminum	●	●	●	●		●	●
Technique	Magnetic induction/ Eddy current	Magnetic induction/ Eddy current	Magnetic induction/ Eddy current	Magnetic induction/ Eddy current	Magnetic induction	Eddy current	Magnetic induction/ Eddy current
Probe	Integrated	Integrated	Integrated	Tethered	Tethered	Tethered	Tethered
Probe Replacement	Service	Service	Service	Service	User replaceable	User replaceable	User replaceable
Unit Selection	mil or µm	mil or µm	mil or µm	mil or µm	mil or µm	mil or µm	mil or µm
Thickness Range							
mil	F: 0-80 NF: 0-80	F: 0-120 NF: 0-120	F: 0-140 NF: 0-120	F: 0-140 NF: 0-120	F: 0-140	NF: 0-60	F: 0-120 NF: 0-60
µm	F: 0-2,000 NF: 0-2,000	F: 0-3,000 NF: 0-3,000	F: 0-3,500 NF: 0-3,000	F: 0-3,500 NF: 0-3,000	F: 0-3,048	NF: 0-1,524	F: 0-3,048 NF: 0-1,524
Accuracy							
mil	±5% + 0.12	±5% + 0.12	±2% or ±0.08*	±2% or ±0.08*	±0.05 + 1%	±0.05 + 1%	±0.05 + 1%
µm	±5% + 3	±5% + 3	2*	2*	±0.1 + 1%	±0.05 + 1%	±0.05 + 1%
Resolution							
mil	0.1@0-80	0.1@0-100 0.2@100-120	0.1@0-100 0.2@100-140	0.1@0-100 0.2@100-140	0.01	0.01	0.01
µm	1@0-1,000 2@1,000-2,000	1@0-1,000 2@1,000-2,500 5@2,500-3,000	1@0-1,000 2@1,000-2,500 5@2,500-3,500	1@0-1,000 2@1,000-2,500 5@2,500-3,500	0.25	0.25	0.25
Base Re-zero			●	●	●	●	●
User Calibration					●	●	●
Measurement Statistics			●	●	●	●	●

*Whichever is greater.

If you’d like to learn more about the CMI255 & CMI257 gauges visit www.hitachi-hightech.com/hha or email one of our experts at contact@hitachi-hightech-as.com to book a demo.

Hitachi High-Tech Analytical Science

Part number: 51-CMI255/51-CMI257

Science for a better tomorrow