

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 analyzers. To place your order contact contact@hitachi-hightech.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**

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.

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% or ±2* | ±2% or ±2* | ±0.1 + 1% | ±0.05 + 1% | ±0.1 + 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.

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".

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.com to book a demo.

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