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Elcometer 355 Coating Thickness Gauge



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The Elcometer 355's watchwords are accuracy, simplicity, versatility and durability making this a true state of the art hand held measuring system packed with time-saving and cost-cutting features.

Available as a standard and top model, the unit's large memory stores up to 10,000 readings in batches and data can be output to PC, datalogger or printer as required.

With a comprehensive range of Probe Modules available, simply select the most appropriate for the application. All modules are supplied with calibration foils.

Each gauge is supplied without a probe allowing the choice of the correct probe for the relevant applications.

- ±1% or 1µm, whichever is the greater, accuracy
- Rugged aluminium case designed for the toughest environments
- ElcoMaster[™] software supplied
- Full statistical analysis mean standard deviation, number of readings, highest and lowest value
- RS232 output
- Date and time stamp

Dry Film Thickness

Dry Film Thickness is probably the most critical measurement in the coatings industry. It provides vital information as to the expected life of the substrate, the product's fitness for purpose, its appearance and ensures compliance with a host of International Standards.

In 1947, before the introduction of consumer electronics, Elcometer launched one of the world's first nondestructive coating thickness gauges, the Elcometer 101.

For more than 6 decades, the design and production qualities of this rugged and reliable instrument have been the watchwords of all our products and these philosophies are still held today.

Dry Film Coating Thickness is a critical measurement in all industry sectors and can be categorised as follows:

Digital: The most widely used as it is generally the most accurate and can be used to measure the coating on almost any substrate, whether ferrous or non-ferrous.

Mechanical: Still widely used, particularly in areas where no electrical instruments are permitted or high temperatures prevail.

Destructive: Used primarily in multicoat procedures and non-metallic substrates.

| TECHNICAL SPECIFICATION | | | | | |
|-------------------------|--|--|--|--|--|
| Operating Temperature | 0°C to 50°C (32°F to 120°F) | | | | |
| Storage Temperature | -10°C to 60°C (14°F to 140°F) | | | | |
| Reading Speed | 40 readings per minute | | | | |
| Data Output | RS232C Serial or Parallel Output via D25 Type Connector (Female) | | | | |
| Memory | Standard: 5,000 reading memory in 25 pre-set batches | | | | |
| | Top: 10,000 reading memory in up to 200 batches (individually calibrated) | | | | |
| Battery Type | 3 x 1.5V AA Cells (Alkaline) or 3 x 1.5V Nickel Metal Hydride rechargeable cells | | | | |
| Battery Life | Minimum: 40 hours with alkaline batteries, 20 hours with rechargeable batteries | | | | |
| Dimensions | 175 x 83 x 42mm (6.9 x 3.3 x 1.6") | | | | |
| Weight | 650g (1.43lb) | | | | |
| Part Number | A355S Elcometer 355 Standard Coating Thickness Gauge | | | | |
| | A355T Elcometer 355 Top Coating Thickness Gauge | | | | |
| Packing List | Elcometer 355 Top or Standard Gauge, leather carry case, 3 x AA batteries, ElcoMaster™ software, PC cable and operating instructions | | | | |

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Elcometer 355 Ferrous and Non-Ferrous Probes

Unique probe modules allow the Elcometer 355 Coating Thickness Gauges to be versatile and flexible for any measurement application.

Probe modules can be freely interchanged as required for both ferrous (F) and non-ferrous (N) metal substrates.

Most probe modules are capable of an accuracy of $\pm 1\%$ of the reading on a variety of coatings and surfaces.



Telescopic probes extend from 410mm (16") to 1100mm (43").

| TECHNICAL SPECIFICATION | | | | | | | |
|-------------------------|---------------------------|--------|--|---------------------------|---|--|--|
| Part Number | Description | | Measuring Range | Accuracy | Range Steps | Resolution | |
| T35511952 | F1 Standard | | | | | | |
| T35511953 | F1 Right Angle | - | 0-1500µm ±1% or ±1µ (0-60mils) (±0.04mil) | | 0-200µm (0-8mils) 200-500µm (8-20mils) | 0.1µm (0.005mil) 0.5µm (0.02mil) | |
| T35511959 | F1 Telescopic | | (0-0011113) | (±0.041111) | 500-1500µm (20-60mils) | 1.0µm (0.05mil) | |
| T35512400 | F1A (Automotive) | | | | | | |
| T35511954 | F2 Standard | | | ±1% or ±5µm (±0.2mil) | 0-500μm (0-20mils) 500-5000μm (20-200mils) | 2μm (0.1mil) 5μm (0.2mil) | |
| T35511955 | F2 Right Angle | | 0-5mm (0-200mils) | | | | |
| T35511960 | F2 Telescopic | 2* 0 E | | | | | |
| T35511956 | F3 Standard | | 0-13mm (0-500mils) | ±2% or ±30µm (±1mil) | 0-1000µm (0-40mils) 1-13000µm (40-1500mils) | 5µm (0.2mil) 10µm (0.5mil) | |
| T35511950 | F4 Standard | | | | | | |
| T35511951 | F4 Right Angle | | 0-250µm (0-10mils) | ±1% or ±1µm (±0.04mil) | 0-250µm (0-10mils) | 0.1µm (0.005mil) | |
| T35513511 | F4 Right Angle (short) | - | | | | | |
| T35511962 | F5 (Rebar) | | 0-800µm (0-32mils) | ±1% or ±2µm (±0.08mil) | 0-800µm (0-32mils) | 1µm (0.1mil) | |
| T35511964 | F6 Standard | | 0-25mm (0-1000mil) | ±2% or ±100µm (±4mils) | 0-500µm (0-200mils) 5000-25000µm (200-1000mils) | 10µm (0.5mil) 50µm (2mil) | |
| T35511982 | N1 Standard | | 0-1500µm (0-60mils) | ±1% or ±1µm (±0.04mil) | 0-200μm (0-8mils) 200-500μm (8-20mils) 500-1500μm (20-60mils) | 0.1µm (0.005mil) 0.5µm (0.02mil) 1.0µm (0.05mil) | |
| T35511983 | N1 Right Angle | | (0 0011110) | | | | |
| T35511984 | N2 Standard | | 0-5mm (0-200mils) | ±1% or ±15µm (±0.6mil) | 0-500μm (0-20mils) 500-5000μm (0-200mils) | 2µm (0.1mil) 5µm (0.2mil) | |
| T35511980 | N4 Standard | | 0-250µm (0-10mils) | ±1% or ±1µm (±0.04mil) | 0-250µm (0-10mils) | 0.1µm (0.005mil) | |

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Can be used in accordance with:

| AS 2331.1.4 | ASTM G 12 | EN 13523-1 | ISO 2808-7C |
|-------------------|---------------|-----------------|-----------------------|
| AS 3894.3-B | BS 3900-C5-6A | IMO MSC.215(82) | ISO 2808-7D |
| AS/NZS 1580.108.1 | BS 3900-C5-6B | IMO MSC.244(83) | ISO 2808-12 |
| ASTM B 244 | BS 5411-3 | ISO 1461 | NF A49-211 |
| ASTM B 499 | BS 5411-11 | ISO 19840 | NF T30-124 |
| ASTM D 1186-B | BS 5599 | ISO 2063 | SS 184159 |
| ASTM D 1400 | DIN 50981 | ISO 2360 | SSPC PA 2 |
| ASTM D 7091 | DIN 50984 | ISO 2808-6A | US Navy PPI 63101-000 |
| ASTM E 376 | ECCA T1 | ISO 2808-6B | US Navy NSI 009-32 |
| | | | |

Standards in grey have been superceded but are still recognised in some industries.

| | ELCOMETER 355 PROBE ACCESSORIES | | | | |
|--|--|--|--|--|--|
| | JUMBO HAND GRIP | | | | |
| | Ideal for precision placement for the most accurate results on flat and curved surfaces. Place the probe inside the Jumbo Hand Grip and take measurements - ideal when wearing gloves. | | | | |
| | T9997766- Jumbo Hand Grip - F and N Probes | | | | |
| | Use with the following Elcometer 355 probes: | | | | |
| | F1 Standard, F2 Standard, F4 Standard, F5 Rebar, N1 Standard | | | | |
| | V-PROBE ADAPTOR | | | | |
| | Ideal for precision placement for the most accurate results on medium and large diameter curved surfaces such as pipes and cylinders. | | | | |
| | T9997381- V-Probe Adaptor - F and N Probes | | | | |
| | Use with the following Elcometer 355 probes: | | | | |
| | F1 Standard, F2 Standard, F4 Standard, F5 Rebar, N1 Standard | | | | |
| | SOFT MATERIAL/BLANKET PROBE | | | | |
| | Ideal for taking precision readings on soft coatings or printing blankets. The wide, flat base design acts as a load spreader, reducing the total force at a single point. | | | | |
| | T35511963 Soft Material/Blanket Probe for Elcometer 355 | | | | |
| | PROBE PLACEMENT JIG | | | | |
| | For the most reliable and repeatable coating thickness measurements, making the gauge score highly in repeatability and reproducibility studies. Ideal for small and large components alike. The probe placement jig is supplied with a probe housing to suit standard F1, F2, F4, F5 and N1 probes. Housings to suit other probes are available as optional accessories. | | | | |
| | T95012880 Probe Placement Jig | | | | |
| | T95013028 Component Hand Vice - a simple vice to hold small components | | | | |
| | T95012888 Cable Release Assembly - ideal for remote measurements | | | | |
| | T95015589 N4 Probe Adaptor - must be purchased for use with N4 Probes | | | | |
| | Use with the following Elcometer 355 probes: | | | | |
| | F1 Standard, F2 Standard, F4 Standard, F5 Rebar, N1 Standard and N4 Standard | | | | |

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Related Products



Elcometer 456

Coated Thickness Standards

Elcometer 456 Digital Coating Thickness Gauge with $\mathsf{Bluetooth}^{\texttt{®}}$

The new version of the Elcometer 456 now benefits from a larger display for easy data viewing and a simple calibration feature to make testing even quicker. The Elcometer 456 also features Bluetooth[®] wireless technology for fast data transfer to ElcoMaster[™] Software, ideal for easy report generation and archiving of readings.

Calibration Foils & Standards

Formal quality systems, such as those described in ISO 9000, ISO 17025 and Guide 25, require that gauges be properly controlled, logged and in calibration. Increasingly, users are specifying that the readings taken by gauges are traceable to National Standards. There are three types of coating thickness standards available from Elcometer: coated standards, calibration foils and zero test plates.

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ENGLAND Elcometer Limited Edge Lane Manchester M43 6BU

Tel: +44 (0)161 371 6000 Fax: +44 (0)161 371 6010 e-mail: sales@elcometer.com www.elcometer.com

USA

Elcometer Inc 1893 Rochester Industrial Drive Rochester Hills Michigan 48309

Tel: +1 248 650 0500 Toll Free: 800 521 0635 Fax: +1 248 650 0501 e-mail: inc@elcometer.com www.elcometer.com

ASIA & THE FAR EAST

Elcometer (Asia) Pte Ltd 896 Dunearn Rd Sime Darby Centre #3-09 Singapore 589472, Republic of Singapore

Tel: +65 6462 2822 Fax: +65 6462 2860 e-mail: asia@elcometer.com www.elcometer.com

BELGIUM

Elcometer SA Rue Vallée 13 B-4681 Hermalle /s Argenteau

Tel: +32 (0)4 379 96 10 Fax: +32 (0)4 374 06 03 e-mail: be_info@elcometer.be www.elcometer.be

NETHERLANDS

Elcometer NL Newtonlaan 115 3584 BH Utrecht

Tel: +31 (0)30 210 7005 Fax: +31 (0)30 210 6666 e-mail: nl_info@elcometer.com www.elcometer.com

FRANCE

Elcometer Sarl 97 Route de Chécy 45430 BOU

Tel: +33 (0)2 38 86 33 44 Fax: +33 (0)2 38 91 37 66 e-mail: fr_info@elcometer.fr www.elcometer.fr

GERMANY

Elcometer Instruments GmbH Ulmer Strasse 68 D-73431 Aalen

Tel: +49 (0)7361 52806 0 Fax: +49 (0)7361 52806 77 e-mail: de_info@elcometer.de www.elcometer.de