

# 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 non-destructive 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 multi-coat procedures and non-metallic substrates.

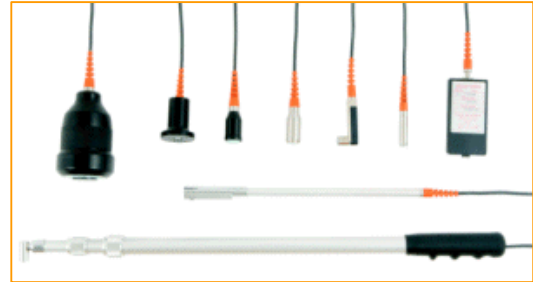
TECHNICAL SPECIFICATION	
Operating Temperature	0°C to 50°C (32°F to 120°F)
Storage Temperature	-10°C to 60°C (14°F to 140°F)
Reading Speed	40 readings per minute
Data Output	RS232C Serial or Parallel Output via D25 Type Connector (Female)
Memory	Standard: 5,000 reading memory in 25 pre-set batches Top: 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	A355----S Elcometer 355 Standard Coating Thickness Gauge A355----T 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

## 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		0-1500 $\mu$ m (0-60mils)	$\pm 1\%$ or $\pm 1\mu$ m ( $\pm 0.04$ mil)	0-200 $\mu$ m (0-8mils) 200-500 $\mu$ m (8-20mils) 500-1500 $\mu$ m (20-60mils)	0.1 $\mu$ m (0.005mil) 0.5 $\mu$ m (0.02mil) 1.0 $\mu$ m (0.05mil)
T35511953	F1 Right Angle					
T35511959	F1 Telescopic					
T35512400	F1A (Automotive)					
T35511954	F2 Standard		0-5mm (0-200mils)	$\pm 1\%$ or $\pm 5\mu$ m ( $\pm 0.2$ mil)	0-500 $\mu$ m (0-20mils) 500-5000 $\mu$ m (20-200mils)	2 $\mu$ m (0.1mil) 5 $\mu$ m (0.2mil)
T35511955	F2 Right Angle					
T35511960	F2 Telescopic					
T35511956	F3 Standard		0-13mm (0-500mils)	$\pm 2\%$ or $\pm 30\mu$ m ( $\pm 1$ mil)	0-1000 $\mu$ m (0-40mils) 1-13000 $\mu$ m (40-1500mils)	5 $\mu$ m (0.2mil) 10 $\mu$ m (0.5mil)
T35511950	F4 Standard		0-250 $\mu$ m (0-10mils)	$\pm 1\%$ or $\pm 1\mu$ m ( $\pm 0.04$ mil)	0-250 $\mu$ m (0-10mils)	0.1 $\mu$ m (0.005mil)
T35511951	F4 Right Angle (long)					
T35513511	F4 Right Angle (short)					
T35511962	F5 (Rebar)		0-800 $\mu$ m (0-32mils)	$\pm 1\%$ or $\pm 2\mu$ m ( $\pm 0.08$ mil)	0-800 $\mu$ m (0-32mils)	1 $\mu$ m (0.1mil)
T35511964	F6 Standard		0-25mm (0-1000mil)	$\pm 2\%$ or $\pm 100\mu$ m ( $\pm 4$ mils)	0-500 $\mu$ m (0-200mils) 5000-25000 $\mu$ m (200-1000mils)	10 $\mu$ m (0.5mil) 50 $\mu$ m (2mil)
T35511982	N1 Standard		0-1500 $\mu$ m (0-60mils)	$\pm 1\%$ or $\pm 1\mu$ m ( $\pm 0.04$ mil)	0-200 $\mu$ m (0-8mils) 200-500 $\mu$ m (8-20mils) 500-1500 $\mu$ m (20-60mils)	0.1 $\mu$ m (0.005mil) 0.5 $\mu$ m (0.02mil) 1.0 $\mu$ m (0.05mil)
T35511983	N1 Right Angle					
T35511984	N2 Standard		0-5mm (0-200mils)	$\pm 1\%$ or $\pm 15\mu$ m ( $\pm 0.6$ mil)	0-500 $\mu$ m (0-20mils) 500-5000 $\mu$ m (0-200mils)	2 $\mu$ m (0.1mil) 5 $\mu$ m (0.2mil)
T35511980	N4 Standard		0-250 $\mu$ m (0-10mils)	$\pm 1\%$ or $\pm 1\mu$ m ( $\pm 0.04$ mil)	0-250 $\mu$ m (0-10mils)	0.1 $\mu$ m (0.005mil)

Can be used in accordance with:





AS 2331.1.4  
 AS 3894.3-B  
 AS/NZS 1580.108.1  
 ASTM B 244  
 ASTM B 499  
 ASTM D 1186-B  
 ASTM D 1400  
 ASTM D 7091  
 ASTM E 376

ASTM G 12  
 BS 3900-C5-6A  
 BS 3900-C5-6B  
 BS 5411-3  
 BS 5411-11  
 BS 5599  
 DIN 50981  
 DIN 50984  
 ECCA T1

EN 13523-1  
 IMO MSC.215(82)  
 IMO MSC.244(83)  
 ISO 1461  
 ISO 19840  
 ISO 2063  
 ISO 2360  
 ISO 2808-6A  
 ISO 2808-6B

ISO 2808-7C  
 ISO 2808-7D  
 ISO 2808-12  
 NF A49-211  
 NF T30-124  
 SS 184159  
 SSPC PA 2  
 US Navy PPI 63101-000  
 US Navy NSI 009-32

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

<b>ELCOMETER 355 PROBE ACCESSORIES</b>	
	<p><b>JUMBO HAND GRIP</b></p> <p>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.</p> <p><b>T9997766-</b> Jumbo Hand Grip - F and N Probes</p> <p>Use with the following Elcometer 355 probes:  <i>F1 Standard, F2 Standard, F4 Standard, F5 Rebar, N1 Standard</i></p>
	<p><b>V-PROBE ADAPTOR</b></p> <p>Ideal for precision placement for the most accurate results on medium and large diameter curved surfaces such as pipes and cylinders.</p> <p><b>T9997381-</b> V-Probe Adaptor - F and N Probes</p> <p>Use with the following Elcometer 355 probes:  <i>F1 Standard, F2 Standard, F4 Standard, F5 Rebar, N1 Standard</i></p>
	<p><b>SOFT MATERIAL/BLANKET PROBE</b></p> <p>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.</p> <p><b>T35511963</b> Soft Material/Blanket Probe for Elcometer 355</p>
	<p><b>PROBE PLACEMENT JIG</b></p> <p>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.</p> <p><b>T95012880</b> Probe Placement Jig  <b>T95013028</b> Component Hand Vice - a simple vice to hold small components  <b>T95012888</b> Cable Release Assembly - ideal for remote measurements  <b>T95015589</b> N4 Probe Adaptor - must be purchased for use with N4 Probes</p> <p>Use with the following Elcometer 355 probes:  <i>F1 Standard, F2 Standard, F4 Standard, F5 Rebar, N1 Standard and N4 Standard</i></p>

## Related Products



Elcometer 456

### Elcometer 456 Digital Coating Thickness Gauge with Bluetooth®

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.



Coated Thickness Standards

### 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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