

## Elcometer 365 SPC Coatings Analyser



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### At a glance

- Coating thickness analyser using SPC principles.
- Wide range of probe modules available for various applications.

### Elcometer 365 SPC Coatings Analyser

Over the past few years the increased demand on coating performance has resulted in a need for greater control throughout the coating process.

The Elcometer 365 has been designed to provide a controlled method of coating inspection - thereby allowing the user to monitor the coating process, statistically (SPC).

The data generated by the Elcometer 365 can alert the operator to alter the process before the coating parameters have been exceeded - avoiding costly re-work.

- 1% accuracy over a wide range of probe modules
- On screen charting: Histogram, Xbar and Range charts
- Real SPC Data Collection in a Coating Thickness Gauge
- Links directly into Datastat® SPC Software and EDTS+ Excel Link
- Process capability Cp, Cpk
- User definable batch names (Alpha-numerical)
- FORD, ISO, AT&T Warnings
- High and Low Reasonable Limits
- RS232 Printer/PC Output - Serial & Parallel
- Traceable Thickness Standards
- Average and Counted Average Mode
- Date and Time
- Password Protection
- Fully networkable

### Coating Thickness Gauges- Digital

Simple to interpret, small and portable gauges for the measurement of coatings on all metal surfaces. Digital coating thickness gauges are more accurate, more repeatable and more reproducible than any other type of coating thickness gauge on the market today.

Elcometer offers the world's most comprehensive range of portable digital coating thickness gauges - for measurements on either Ferrous substrates (F), Non-Ferrous substrates (NF), or on both Ferrous and Non-Ferrous (FNF), Elcometer can provide you with a gauge to meet your need.

With a wide choice of gauges to choose from, the User needs to understand the terminology of Coating Thickness Gauges or, 'The Language of CTGs'.

### THE LANGUAGE OF CTGs

In selecting the most appropriate gauge for your application, you need to answer specific questions.

1. What is the substrate (the surface metal) you are coating/inspecting?

Is the metal a Ferrous Substrate (F) or a Non-Ferrous (NF)? Sometimes this is difficult to answer – the substrate may have already been coated. The easiest way to identify this is to see if a magnet will stick to the surface. If it does, then the substrate will be Ferrous, if it does not, then the substrate is Non-Ferrous.

2. Do you measure only on this substrate?

If you only inspect one type of product, then the answer is yes. If you have a range of products that you inspect, then you need to consider whether they are all of the same type of substrate. You should also consider if you have a future possibility of inspecting other substrates. If so, you should consider an FNF gauge.

Control of a coating process requires analysis of large amounts of data. The Elcometer 365 is a simple, efficient and convenient portable instrument for both data storage and analysis requirements. The Elcometer 365 uses the Elcometer Probe Modules to collect your coating thickness data from a variety of applications whilst providing full statistical analysis in a number of formats which include:

- Control & Range Charts, Histogram, Pareto Chart

The User can quickly define the method of data collection and select the appropriate data presentation allowing the user to determine whether the coating process is capable of meeting the required specification. The Elcometer 365 will even give advanced warning that the process may be going out of control.

### Attributes Analysis

The Elcometer 365 is not just a coating thickness gauge. By switching the gauge to Attributes Mode, the inspector can log all coating defects and provide attributes analysis i.e. scratch, chip, orange peel etc. All can be generated on a Pareto Chart.

3. What is your Coating / Substrate Combination?

Ensure compatibility of the coating and substrate; whether a coating thickness gauge will provide an accurate reading.

4. Typically what sort of coating thickness do you need to measure?

This will help you select the correct probe scale range - e.g. Scale 1 measures coatings up to 1500µm (60mils).

5. What type of probe do you need?

Depending on your application you can select from:

- Integral Probe (the probe is built into the gauge for accurate single handed measurements on large surface areas, pipes, etc.)
- Separate Probe (the probe is connected to the gauge by a cable for all applications).
- PINIP™ (the separate probe is directly attached to the base of the instrument – providing, in your separate gauge, all the benefits of an integral unit).

Separate Probes can be selected from our wide range to meet your application requirements. These include:

- *Regular Probes:* Including Straight, Right Angle (90°) and Telescopic options
- *Miniature Probes:* Including Straight, Right Angle (90°), 45° Angle all in either long or short versions.

6. Do you need to save your readings for your ISO records, or as proof of inspection to your customer?

Elcometer gauges are available in three options:

- *Basic Gauge* -with simple statistics but no memory or data output
- *Standard Gauge* -with statistics, limited memory and data output
- *Top Gauge* -with statistics, enhanced memory, batching capability and data output

Can be used in accordance with:		
FERROUS (F)	NON-FERROUS (NF)	DUAL FERROUS and NON-FERROUS (FNF)
ASTM B 499 BS 5411-11 BS 3900-C5-6Aa BS EN ISO 1461 DIN 50981 ISO 2178 ISO 2808-6Aa prEN ISO 19840	ASTM D 1400 ASTM B 244 BS 5411-3 BS 3900-C5-6Ba BS 5599 DIN 50984 ISO 2360 ISO 2808-6Ba	All of the Ferrous and Non-Ferrous List plus; ASTM E 376

	Metric	Imperial
Dimensions	208 x 95 x 47mm	11 x 3.75 x 1.85"
Display	Liquid Crystal Super Twist Graphic 256 dots wide x 64 dots high	
Memory	Approximately 183K, Maximum 48 Parts, 255 Features, Up to 20,000 readings	
Approx. Weight	1kg	2.2lb
Operating Temperature	0 to 50°C	32 to 120°F
Storage Temperature	-10 to 60°C	14 to 140°F
Battery Type	6 x AA Alkaline	
Part Number	A365----0	

ELCOMETER 365 PROBE	The Elcometer 365 SPC Coating Thickness Data Analyser has been designed to use the Elcometer 355 Probe Modules – giving the User a complete range of thickness and substrate choices, to be available with the true ±1% accuracy available with the Elcometer Probe Modules.
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# Elcometer 365 Probes



Elcometer 365 Probes

### Elcometer 365 Probes

Elcometer's unique Probe Modules allow versatile application of the Elcometer 355 and 365 Coating Thickness Gauges.

Probe Modules can be freely interchanged as required on both ferrous (F) and non-ferrous (NF) metal substrates.

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

Probe Type	Part Number	Measuring Range <sup>1</sup>		Accuracy		Resolution		Range Steps	
		$\mu\text{m}$	mils	$\mu\text{m}$	mils	$\mu\text{m}$	mils	$\mu\text{m}$	mils
F1 Standard	T35511952	0-1500	0-60	$\pm 1\%$ or $\pm 1\mu\text{m}$	$\pm 1\%$ or $\pm 0.04\text{mil}$	0.1 0.05 1.0	0.005 0.02 0.05	0-200 200-500 500-1500	0-8 8-20 20-60
F1 Right Angle	T35511953								
F1 Telescopic	T35511959								
F1 A (Automotive)	T35512400								
F2 Standard	T35511954	0-5mm	0-200	$\pm 1\%$ or $\pm 5\mu\text{m}$	$\pm 1\%$ or $\pm 0.2\text{mil}$	2 5	0.1 0.2	0-0.5mm 0.5-5mm	0-20 20-200
F2 Right Angle	T35511955								
F2 Telescopic	T35511960								
F3 Standard	T35511956	0-13mm	0-500	$\pm 2\%$ or $\pm 30\mu\text{m}$	$\pm 1\%$ or $\pm 1\text{mils}$	5 10	0.2 0.5	0.1mm 1-13mm	0-40 40-500
F4 Standard	T35511950	0-250	0-10	$\pm 1\%$ or $\pm 1\mu\text{m}$	$\pm 1\%$ or $\pm 0.04\text{mil}$	0.1	0.005	0-250	0-10
F4 Right Angle	T35511951								
F5 (Rebar)	T35511962	0-800	0-32	$\pm 1\%$ or $\pm 2\mu\text{m}$	$\pm 1\%$ or $\pm 0.08\text{mil}$	1	0.1	0-800	0-32
F6 Standard	T35511964	0-25mm	0-1000	$\pm 2\%$ or $\pm 100\mu\text{m}$	$\pm 1\%$ or $\pm 4\text{mils}$	10 50	0.5 2	0-5mm 0-25mm	0-200 200-1000
N1 Standard	T35511982	0-1500	0-60	$\pm 1\%$ or $\pm 1\mu\text{m}$	$\pm 1\%$ or $\pm 0.04\text{mil}$	0.1 0.5	0.005 0.02 0.05	0-200 200-500 500-1500	0-8 8-20 20-60
N1 Right Angle	T35511983								
N2 Standard	T35511984	0-5mm	0-200	$\pm 1\%$ or $\pm 15\mu\text{m}$	$\pm 1\%$ or $\pm 0.6\text{mil}$	2 5	0.1 0.2	0-0.5mm 0.5-5mm	0-20 20-200
N4 (Anodisers)	T35511980	0-250	0-10	$\pm 1\%$ or $\pm 1\mu\text{m}$	$\pm 1\%$ or $0.04\text{mil}$	0.1	0.005	0-250	0-10

<sup>1</sup> all measurements are displayed in either  $\mu\text{m}$  or mils unless otherwise stated

## Related products



Elcometer 355

Accuracy, simplicity, versatility and flexibility are the watchwords of the Elcometer 355, a truly state of the art hand-held measuring system packed with time-saving and cost cutting features. The key to the superiority of the Elcometer 355 is its measuring system which features a range of interchangeable Probe Modules capable of an accuracy of  $\pm 1\%$  of the reading on a variety of coatings and substrates.



Elcometer 456

With its recently enhanced and simplified menu screen options, the Elcometer 456 remains the most advanced hand held coating thickness gauge on the market today. This flagship product is available in any combination of Basic, Standard and Top functionality; together with Integral (built in) and an extensive range of separate plug in probes. With such an extensive range of gauge options, there is an Elcometer 456 to meet your specific application needs.



Elcometer 345

The Elcometer 345 Coating Thickness Gauge is an incredibly versatile gauge. With a range of probes in both Integral or Separate probe versions for coating thickness measurements on Ferrous (F), Non Ferrous (N) or both Ferrous and Non Ferrous (FNF) Substrates, the Elcometer 345 will have a gauge for your requirements.



Elcometer digital coating thickness gauge accessories

Elcometer has a wide range of accessories for their coating thickness gauges, from larger handgrips for greater reading repeatability, to probe placement fixtures, portable printers to soft coatings adapters, Elcometer can help you achieve the maximum from your paint gauge.



Elcometer coating thickness standards and calibration foils

Formal quality systems such as those described in ISO 9000 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, foils and zero test plates.

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