# Elcometer 345 “SSG” Coating Thickness Gauge


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## At a glance

- *Simple, easy-to-use gauge for quick, accurate measurements.*
- *Designed specifically for measuring coating thickness on structural steel.*

| Can be used in accordance with: | |
|---|---|
| ASTM B 499 | BS 5411-11 |
| BS 3900-C5-6Aa | BS EN ISO 1461 |
| DIN 50981 | EN ISO 19840 |
| ISO 2178 | ISO 2808-6Aa |

**Elcometer 345 “SSG” Coating Thickness Gauge**
The Elcometer 345 Gauge has been specifically designed for the Steel Structures Industry for measuring the coating thickness on structural steel. It can be used to test the wide variety of coatings and coating systems used on bridges, ships, buildings, etc.

The Elcometer 345 SSG comes complete with a one year warranty and has two operating modes:

- Standard Mode - The total coating thickness over the steel substrate is displayed
- "Offset" Mode* - The User can enter an "offset" value, for example, equivalent to the surface roughness (profile), which is then automatically subtracted from the reading before it is displayed.

** Zero Offset, USA Patent Number 6243661*

**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.

| | Metric | Imperial |
|---|---|---|
| **Range** | 0 –1500µm | 0 – 60mils |
| **Resolution** | 0.1µm up to 20µm<br><br>1µm above 20µm | 0.01mils up to 1.0mils<br><br>0.1mils above 1.0mils |
| **Accuracy** | ±1-3% or ±2.5µm | ±1-3% or ±0.1mils |
| | 1% When calibrated close to the required thickness, 3% across full range | |
| **Minimum Substrate Thickness** | 300µm | 12mils |
| **Maximum Sample Temperature** | Intermittent measurements: 200°C | Intermittent measurements: 400°F |
| **Ambient Operating Temperature** | 0 - 50°C | 32 - 122°F |
| **Instrument Dimensions** | 120 x 56 x 25.4mm | 4¾ x 2¼ x 1" |
| **Measuring Rate** | Greater than 40 readings per minute | |
| **Battery Type** | 2 x AAA (LR03) Supplied with gauge | |
| **Weight (including Batteries)** | 115g | 4oz |
| **Part Number** | A345SSG-1M | A345SSG-1E |

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 (90º) and Telescopic options
- *Miniature Probes:* Including Straight, Right Angle (90º), 45º 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

## Related products

*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 (NF) or both Ferrous and Non Ferrous (FNF) Substrates, the Elcometer 345 will have a gauge for your requirements.

*Elcometer 456*

With it's 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 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 ±1% of the reading on a variety of coatings and substrates.

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