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Elcometer 115 Film Combs



Elcometer 115 Wet Film Combs

At a glance:

- Precision wet film combs used to determine the thickness of wet paint prior to curing.
- Manufactured from stainless steel, these combs are designed for re-use over many years.

Can be used in accordance with: AS/NZS 1580.107.3 ASTM D 4414-A BS 3900-C5-7B ISO 2808-1A ISO 2808-7B NF T30-125 US Navy NSI 009-32 US Navy PPI 63101-000 These reusable precision stainless steel combs are made to be long lasting.

Available as either metric or imperial combs with thickness ranges up to a maximum of $1270\mu m$ or 50mils, the Elcometer 115 is manufactured to an accuracy of 5% or $2.5\mu m$ (0.01mil), whichever is the greater.

Each comb has 10 measurement steps (teeth).

Using a Wet Film Comb

Place a comb perpendicular to and touching the substrate. Hold the comb in position and wait a few seconds until the teeth are wet. Remove the comb from the film.

The wet film thickness lies between the biggest value 'coated' or 'wet' tooth and the smallest value 'uncoated' or 'dry' tooth.

Wet Film & Powder Thickness
Whether you are applying a liquid
or powder coating, by measuring
the uncured film thickness, it is
possible to determine the eventual
dry film thickness.

Applying too much coating not only wastes time and materials, it can also affect the performance and finish of the product. Too much wet film can cause the coating to crack as it cures; too little coating increases the risk that the substrate will not be sufficiently protected, leading to rust spots.

In the powder coating industry, ensuring the end product has the correct levels of adhesion and appearance is dependent on the thickness of the powder prior to the curing process. Too much powder can lead to poor adhesion, too little can lead to a discolouration and loss in gloss of the coating

The three methods for measuring wet film thickness are:

- Wet Film Combs
- Pfund Thickness Gauges
- Wet Film Wheels

In each case, the thickness of the coating is measured and the dry film thickness can be estimated using the coating's solid: wet ratio.

TECHNICAL SPECIFICATION		
Measuring Range	Measurement Steps	Part Number
1 – 13mils	1, 1.5, 2, 3, 4, 5, 7, 9, 11, 13mils	B11529451E
20 – 325μm	20, 35, 50, 75, 100, 125, 175, 225, 275, 225, 275, 325μm	B11529455M
2 – 18mils [†]	2, 3, 4, 6, 8 10, 12, 14, 16, 18mils	B11529452
(51 – 457µm)	(51, 76, 102, 152, 203, 254, 305, 356, 406, 457μm)	
2 – 30mils [†]	2, 4, 6, 8, 10 [‡] , 10 [‡] , 15, 20, 25, 30mils	B11529453
(51 – 762µm)	(51, 102, 152, 203, 254, 254, 381, 508, 635, 762µm)	
5 – 50mils [†]	5, 10, 15, 20, 25, 30, 35, 40, 45, 50mils	B11529454
(127 – 1270µm)	(127, 254, 381, 508, 635, 762, 889, 1016, 1143, 1270µm)	

 $^{^{\}dagger}$ True imperial values on side 1, metric conversion on side 2

[‡] Two 10mil (254µm) values, one on each edge of the comb

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Related Products



Elcometer 3230

Elcometer 3230 Wet Film Wheels

The Elcometer 3230 Wet Film Wheel is a high precision, accurate and easy to use instrument which consists of a set of three wheels. The central wheel is of a smaller diameter and is eccentric relative to the two outer wheels. By rolling the gauge through a wet coating, the centre wheel eventually touches the film. This point on the scale indicates the thickness.



Elcometer 154

Elcometer 154 Plastic Wet Film Combs

The Elcometer 154 Wet Film Combs are made from ABS plastic and are designed to be used once and kept as a record of wet film thickness measurement for quality assurance or customer requirements.



Elcometer 3238

Elcometer 3238 Long Edge Wet Film Combs

These stainless steel combs are wire eroded to provide an accuracy of $\pm 2.5 \mu m$ (0.01mil) and are supplied with either Metric or Imperial measurements.



Elcometer 112 & 3236

Elcometer 112 & 3236 Hexagonal Wet Film Combs

These hexagonal precision formed stainless steel wet film combs are long lasting and reusable and are supplied in a range of thicknesses measuring up to 3000µm (120mils).



Elcometer 112AL

Elcometer 112AL Punched Aluminium Wet Film Combs

These punched aluminium combs offer the user a low cost method of measuring the wet film thickness. Supplied in a pack of 10 combs, they have Metric units (25 - $3000\mu m$) on one side and Imperial values (1 - 118mils) on the other.

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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

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