

## Elcometer Marine Inspection Kits



Elcometer Standard Marine Inspection Kit 1

The International Maritime Organisation (IMO) regulation for the Performance Standard for Protective Coatings (PSPC) for Salt Water Ballast Tanks, resolutions MSC.215(82) and MSC.216(82), effective from 1st July 2008 for new ship builds, brings with it a number of challenges for the Marine Coatings Inspector.

The IMO regulation not only stipulates a rigorous dry film thickness verification regime, but also requires the inspection of surface profile and cleanliness, together with the recording of temperature, relative humidity and dewpoint at each stage of the build process.

Available in two versions, Standard and Top, the Elcometer Marine Inspection Kits have been specifically designed for this purpose and contain all the equipment required by the Marine Coatings Inspector to test and monitor all the parameters stipulated in the new IMO regulation.

An Elcometer 456<sup>3</sup> Digital Coating Thickness Gauge is supplied as standard with each kit. The Elcometer 456<sup>3</sup> is the world's first and only coating thickness gauge which can be used in accordance with the new PSPC 90/10 rule.

The rule states that 90% of all thickness measurements shall be greater than or equal to NDFT (Nominal Dry Film Thickness) and none of the remaining 10% measurements shall be below 0.9 x NDFT. This is one of the hardest standards to calculate and almost impossible without the aid of print outs, calculators or computers

The Elcometer 456<sup>3</sup> gives the user PSPC results for the 90/10 rule as a "Pass or Fail" as measurements are taken.

Each kit contains a combination of the following Elcometer instruments:

- **Elcometer 128 Swedish Standard (ISO 8501, SIS 055900):**  
For visual assessment of the surface, the Elcometer 128 shows the degree of cleanliness of four different levels of rusted steel cleaned by blasting, hand and power tools and flame.
- **Elcometer 144 Paint Safe Marker Pens:**  
These permanent, paint safe black marker pens can be used to identify surface defects on ballast tanks. Five pens are supplied as standard with each kit.
- **Elcometer 138 Bresle Conductivity Kit:**  
Comprising of a conductivity meter and Bresle Patches, this equipment is ideal for determining the salt levels on the surface prior to painting.
- **Elcometer 142 ISO 8502-3 Dust Tape Test Kit:**  
An illuminated magnifier, adhesive tape and test record sheets which are used to assess the quantity and size of dust particles on surfaces prepared for painting.

### Coating Inspection Kits

Site inspection requires a range of portable testing equipment. In order to make these products easily available and portable, Elcometer have developed a range of Coating Inspection Kits.

All the gauges are conveniently stored in one hard plastic protective carrying case and are supplied with full operating instructions.

### At a glance:

Supplied in a sturdy, plastic carry case for easy storage and portability.

Supplied complete with Elcometer 456<sup>3</sup> PSPC Ready Coating Thickness Gauge to meet IMO MSC.215 (82) & IMO MSC.216(82) Performance Standard for Protective Coatings in ballast tanks.

- **Elcometer 124 Thickness Gauge and Testex Tape:**

The Elcometer 124 Thickness Gauge is used to measure the peak-to-valley height of a surface profile formed in the Elcometer 122 Testex Tape.

- **Elcometer 224 Digital Surface Profile Gauge:**

A digital alternative to the Elcometer 124 and Testex Tape, ideal for quality checking the surface profile. The Elcometer 224 Model S supplied with the Standard Marine Inspection Kits, displays statistical values as readings are taken. The Top version of the kits contains the Elcometer 224 Model T which works in the same way as the Model S, but has the advantage of a large built-in memory to accurately record each measurement and offers Bluetooth® wireless technology for cable free data transfer. Data can be downloaded to a PC and, using ElcoMaster™ Software, detailed reports can be created in seconds.

- **Elcometer 319 Dewpoint Meter:**

The Elcometer 319 has been designed to incorporate all the features required for climate condition monitoring in a single gauge with memory and measurement options which make this one of the most versatile digital dewpoint meters available. The Top version of the kits contains the Elcometer 319 Top, which has a large inbuilt memory to accurately record each measurement, storing up to 25,000 sets of readings in 999 batches. It also offers USB data output and Bluetooth® wireless technology for cable free data transfer. Used in conjunction with ElcoMaster™ software readings can be stored and used to create professional reports.

- **Elcometer 3236 Hexagonal Wet Film Comb:**

Precision formed in stainless steel to be long-lasting and reusable, with a measuring range of 20 – 370µm, this hexagonal wet film combs provides a quick and easy method of measuring wet film thickness.

- **Elcometer 115 Wet Film Combs:**

Four precision formed, stainless steel wet film combs with measuring ranges starting from 25µm (1mils) up to 1270µm (50mils).

- **Elcometer 107 Cross Hatch Cutter:**

Provides an instant assessment of the quality of the bond to the substrate. Due to its rugged construction, this gauge is ideal for thin, thick or tough coatings on all surfaces.

- **Elcometer 456<sup>3</sup> Top Coating Thickness Gauge with Standard Probe:**

The only PSPC ready coating thickness gauge which can be used in accordance with the new IMO regulations IMO MSC.215 (82) & IMO MSC.216(82) Performance Standard for Protective Coatings in ballast tanks. With Bluetooth® wireless technology for cable free data transfer, ideal for measuring and recording the coating thickness on ballast tanks.

- **Elcometer 147 Weld Gauge:**

A simple, easy to use gauge which measures many aspects of welds in both metric and imperial units.

Part Number	Description	Part Number	Description
YKITMARINE-1S	Kit 1, Standard Version	YKITMARINE-1T	Kit 1, Top Version
YKITMARINE-2S	Kit 2, Standard Version	YKITMARINE-2T	Kit 2, Top Version
Packing List:	<b>Equipment common to all Kits</b>		
	<ul style="list-style-type: none"> <li>▪ <b>Elcometer 128 Swedish Standard (ISO 8501, SIS 055900)</b></li> <li>▪ <b>Elcometer 144 Paint Safe Marker Pens</b></li> <li>▪ <b>Elcometer 138 Conductivity Kit comprising of:</b> B-173 Conductivity Meter and Sensor, Bresle Patches (x25) Pure Water (250ml / 8.45 fl. oz.), 5ml Syringe (x3), Dispensing Needle (x3), 30ml / 1 fl. oz. Beaker, Standard Solution 1.41mS/cm (x2), Moistening Solution, Purified Water (deionised water), Pipette &amp; CR2032 Lithium Batteries (x2)</li> <li>▪ <b>Elcometer 142 ISO 8502-3 Dust Tape Test Kit comprising of:</b> Illuminated Magnifier (x10 Magnification), ISO 2409 Adhesive Tape (1 roll), Dust Assessment Plate, Test Record Sheet Pad (25 sheets), Display Board &amp; LR14 Batteries (x2)</li> <li>▪ <b>Elcometer 147 Weld Gauge</b></li> </ul>		
	<b>Additional equipment in Kit 1, Standard Version</b>		
	<ul style="list-style-type: none"> <li>▪ <b>Elcometer 124 Thickness Gauge with one roll of Coarse, X-Coarse and X-Coarse Plus Testex Tape</b></li> <li>▪ <b>Elcometer 224 Model S Digital Surface Profile Gauge complete with:</b> Glass Zero Plate &amp; AAA Batteries (x2)</li> <li>▪ <b>Elcometer 319 Standard Dewpoint Meter complete with:</b> Wrist Strap &amp; AA Batteries (x2)</li> <li>▪ <b>Elcometer 3236 Hexagonal Wet Film Comb</b></li> <li>▪ <b>Elcometer 456<sup>3</sup> Ferrous Top Coating Thickness Gauge &amp; Ferrous Scale 1 2 Standard Probe complete with:</b> Wrist Strap, ElcoMaster™ Software CD, Scale 1 Foil Set - 50, 125, 500 &amp; 1000µm, Scale 2 Foil Set - 0.5, 1 &amp; 2mm (x2) &amp; AAA Batteries (x2)</li> </ul>		
	<b>Additional equipment in Kit 1, Top Version</b>		
	<ul style="list-style-type: none"> <li>▪ <b>Elcometer 124 Thickness Gauge with one roll of Coarse, X-Coarse and X-Coarse Plus Testex Tape</b></li> <li>▪ <b>Elcometer 224 Model T Digital Surface Profile Gauge with Bluetooth® complete with:</b> Glass Zero Plate &amp; AAA Batteries (x2)</li> <li>▪ <b>Elcometer 319 Top Dewpoint Meter with Bluetooth® complete with:</b> Wrist Strap, AA Batteries (x2), Magnetic Surface Probe &amp; USB Cable</li> <li>▪ <b>Elcometer 3236 Hexagonal Wet Film Comb</b></li> <li>▪ <b>Elcometer 456<sup>3</sup> Ferrous Top Coating Thickness Gauge &amp; Ferrous Scale 1 2 Standard Probe complete with:</b> Wrist Strap, ElcoMaster™ Software CD, Scale 1 Foil Set - 50, 125, 500 &amp; 1000µm, Scale 2 Foil Set - 0.5, 1 &amp; 2mm (x2) &amp; AAA Batteries (x2)</li> </ul>		
	<b>Additional equipment in Kit 2, Standard Version</b>		
	<ul style="list-style-type: none"> <li>▪ <b>Elcometer 224 Model S Digital Surface Profile Gauge complete with:</b> Glass Zero Plate &amp; AAA Batteries (x2)</li> <li>▪ <b>Elcometer 319 Standard Dewpoint Meter complete with:</b> Wrist Strap &amp; AA Batteries (x2)</li> <li>▪ <b>Elcometer 115 Wet Film Combs; one of each of the following:</b> Scale 1: 25-300µm (1-13mils), Scale 2: 51-457µm (2-18mils), Scale 3: 51-762µm (2-30mils), Scale 4: 127-1270µm (5-50mils)</li> <li>▪ <b>Elcometer 107 Cross Hatch Cutter with 6 x 2mm cutter</b></li> <li>▪ <b>Elcometer 456<sup>3</sup> Dual FNF Top Coating Thickness Gauge &amp; FNF Scale 1 Standard Probe complete with:</b> Wrist Strap, ElcoMaster™ Software CD, Scale 1 Foil Set - 50, 125, 500 &amp; 1000µm &amp; AAA Batteries (x2)</li> </ul>		
	<b>Additional equipment in Kit 2, Top Version</b>		
	<ul style="list-style-type: none"> <li>▪ <b>Elcometer 224 Model T Digital Surface Profile Gauge with Bluetooth® complete with:</b> Glass Zero Plate, AAA Batteries (x2) &amp; Operating Instructions</li> <li>▪ <b>Elcometer 319 Top Dewpoint Meter with Bluetooth® complete with:</b> Wrist Strap, AA Batteries (x2), Magnetic Surface Probe &amp; USB Cable</li> <li>▪ <b>Elcometer 115 Wet Film Combs; one of each of the following:</b> Scale 1: 25-300µm (1-13mils), Scale 2: 51-457µm (2-18mils), Scale 3: 51-762µm (2-30mils), Scale 4: 127-1270µm (5-50mils)</li> <li>▪ <b>Elcometer 107 Cross Hatch Cutter with 6 x 2mm cutter</b></li> <li>▪ <b>Elcometer 456<sup>3</sup> Dual FNF Top Coating Thickness Gauge &amp; FNF Scale 1 Standard Probe complete with:</b> Wrist Strap, ElcoMaster™ Software CD, Scale 1 Foil Set - 50, 125, 500 &amp; 1000µm &amp; AAA Batteries (x2)</li> </ul>		

## Consumable Items

Part Number	Description
T99911344	Elcometer 138 Pure Water, 250ml / 8.45 fl. oz.
T13818517	Elcometer 138 5ml Syringe (without needles), Pack of 3
T13818518	Elcometer 138 Dispensing Needle (blunt), Pack of 3
E135----B <sup>†</sup>	Elcometer 135 Bresle Patches, Box of 25
T14219451	Elcometer 142 Test Record Sheet Pad, 25 Sheets
T9999358-	ISO 2409 Adhesive Tape, 2 Rolls
K0001539M002	ISO 2409 Adhesive Tape, 1 Roll
E122----B <sup>†</sup>	Testex Tape: Coarse, 1 Roll
E122----C <sup>†</sup>	Testex Tape: X-Coarse, 1 Roll
E122----F <sup>†</sup>	Testex Tape: X-Coarse Plus, 1 Roll
T22420053	Elcometer 224 Replacement Tip, Pack of 2 with Fixing Tool
T22420054	Elcometer 224 Replacement Tip, Pack of 2
T22420095	Elcometer 224 Replacement Tip, Pack of 5
H144----1	Elcometer 144 Paint Safe Marker Pen, Black, Pack of 5
<sup>†</sup> Quantity discounts available. Contact Elcometer for further information.	

## Spares / Accessories

Part Number	Description
T13818519	Elcometer 138 30ml / 1 fl. oz. Plastic Beaker
T13818515	B-173 Conductivity Meter
T14219454	Elcometer 142 Display Board
T14219525	Elcometer 142 Dust Assessment Plate
T22419793	Elcometer 224 Tip Protection Cap
T22420072	Elcometer 224 Glass Zero Plate with Wallet
T31920162	Elcometer 319 Magnetic Surface Probe
T9996390-	Elcometer 319 Liquid Temperature Probe
T31921325	Elcometer 319 USB Cable
T99916063	Elcometer 319 Wrist Strap
T99913700-1	Elcometer 107 Cutter, 6 x 1mm
T99913700-2	Elcometer 107 Cutter, 11 x 1mm
T99913700-3	Elcometer 107 Cutter, 11 x 1.5mm
T99913700-4	Elcometer 107 Cutter, 6 x 2mm
T99913700-5	Elcometer 107 Cutter, 6 x 3mm
T456FNF1S	Elcometer 456 Dual FNF Standard Scale 1 Probe
T456F12S	Elcometer 456 Ferrous Standard Scale 1 2 Probe
T456F12SW	Elcometer 456 Ferrous Standard Scale 1 2 Waterproof Probe
T456F12SW-5	Elcometer 456 Ferrous Standard Scale 1 2 Waterproof Probe with 5m Probe Cable
T456F12SW-15	Elcometer 456 Ferrous Standard Scale 1 2 Waterproof Probe with 15m Probe Cable
T9904199S	2% Nominal Foil Set, 4 Foils - 50, 125, 500 & 1000µm
T9904199J	2% Nominal Foil Set, 4 Foils - 0.5, 1 & 2mm (x2)
TCAL-990	Calibration Certificate for Foils ( <i>Maximum of 8 foils per certificate</i> )
T99920130	USB <i>Bluetooth</i> <sup>®</sup> Transmitter / Receiver

### 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