

# Elcometer 130 SSP Soluble Salt Profiler

Can be used in accordance with:  
NSI 009-32, SSPC Guide 15, Bresle Equivalent ISO 8502-9 Test Method



The Elcometer 130 Soluble Salt Profiler provides fast and accurate measurement of the level and density of soluble salts - over 4 times faster than other Bresle equivalent methods.

The new Elcometer 130 Soluble Salt Profiler allows you to complete a Bresle equivalent test in just over two minutes.

The multi-point conductivity sensors enable the Elcometer 130 SSP to accurately display salt concentration, showing exactly where the contamination lies and generating full colour salt density maps in 2D or 3D.

**“Four Bresle equivalent readings in 2½ minutes”**

Each filter paper is the size of four Bresle patches - the Elcometer 130 Soluble Salt Profiler not only displays the individual reading, but also provides four Bresle equivalent readings in just over 2 minutes.



**“The new Elcometer 130 SSP doesn’t just measure the level of soluble salts”**

In addition to soluble salt levels (cleanliness) or conductivity, the Elcometer 130 SSP carries out a detailed analysis of the test area - providing an accurate salt density profile map, pinpointing areas of high contamination outside user defined limits.



**“Accurate in all environments”**

This new, easy to use, Elcometer 130 SSP has automatic temperature compensation ensuring accuracy in all climatic conditions. Impure water can be offset for accurate and repeatable readings.

**“Each gauge is designed to last”**

Robust, durable & water resistant, the new Elcometer 130 SSP is available with a 2 year manufacturer’s warranty; giving you peace of mind.

**“Generate instant reports on your PC, Android™ or iOS mobile devices”**

The Elcometer 130 SSP wirelessly transmits readings, statistics and batches via Bluetooth® or via USB straight into an inspection application or into ElcoMaster®, Elcometer’s Mobile App, for instant report generation at your desk or, using your mobile, in the field. (see below for further information on ElcoMaster)



What you do with the collected data is just as important as taking the readings themselves.

**“Calibration verification - peace of mind”**

A Calibration Verification Tile is available for verifying the accuracy of the gauge whilst out in the field and the verification date is recorded for use in reports.



## Key Features

- Range of measurement modes:
  - Cleanliness: two measurement options are available when measuring soluble salts – Bresle Method Equivalency or Elcometer 130 Equivalency mode
  - Conductivity: ideal for measuring ionic contaminants, sometimes referred to as total dissolved solids –TDS, within a solution
- Multi-point conductivity sensor allows the trend in conductivity to be displayed as a density map
- Automatic temperature compensation ensures accurate results
- Large colour LCD screen displays readings in  $\mu\text{g}/\text{cm}^2$ , ppm,  $\mu\text{S}/\text{cm}$ , mS/cm, % salinity or mg/m<sup>2</sup>
- Stores up to 3,500 sets of readings in 1,000 alpha numeric batches
- Non-oxidising gold plated contacts ensure lifetime performance
- Transfer data via USB or Bluetooth® to ElcoMaster® for instant report generation

## Display Modes



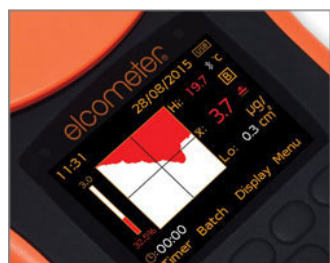
### Large Single Reading

The reading value is displayed for the whole sample.



### Four Bresle Patch Equivalent Readings

The measurement area is split into four Bresle Patch size quadrants and four Bresle Patch or Elcometer 130 equivalent readings are displayed simultaneously.



### Pass/Fail to User Defined Limits

Provides a visual indication of salt contamination. Areas where soluble salts levels are above the limit set are shaded red, areas below the limit are white. The measurement bar to the left of the pass/fail map displays the limit (above the bar) and the percentage test area above the defined limit (below the bar). The bar is also a visual indication of the pass/fail percentage. The highest (Hi), lowest (Lo) and average (X) reading for the current measurement are displayed to the right.



### 2D Salt Density Map with High/Low Readings

Levels of soluble salts are illustrated using a green and red contour system; green for very low salt concentration or uncontaminated areas; yellow for areas with mid salt concentration; and red for areas with levels of salt contamination exceeding the defined map scale range.



### 3D Salt Density Profile & Peak Salt Concentration (Hi)

Provides a visual indication of the density of salt contamination over the test area.

## How to use the Elcometer 130 Soluble Salt Profiler



1. Wearing clean disposable gloves (supplied), fill a syringe with precisely 1.6ml of deionised water.



2. Using tweezers, remove a filter paper from the pack and place it on the cleaned, non-labelled side of the magnetic disc supplied.



3. Disperse the water from the syringe, evenly across the whole of the filter paper and remove any bubbles from under the paper.



4. Place the magnetic disc, with wetted paper face down on to the area under test, pressing firmly into any contours or irregularities and start the 2-minute timer on the gauge.



5. After two minutes, carefully remove the filter paper and magnetic disc from the test surface and place on to the measurement electrodes.



6. As each filter paper remains on the surface for two minutes, multiple tests can be undertaken at the same time, reducing inspection times further.



7. Close the lid, ensuring that the magnetic catch is fully engaged, the gauge will begin measuring.



8. The reading will be displayed on screen in the chosen display mode.



9. Place the filter paper in a resealable bag (supplied), if required for further analysis.

## Technical Specification

### Product Features

- Repeatable & reproducible measurements
- Easy to use menu structure; in 30+ languages
- Tough, impact, waterproof & dust resistant; equivalent to IP64
- Bright colour screen; with permanent back light
- Scratch & solvent resistant display; 6cm TFT
- 2 year Gauge Warranty<sup>1</sup>
- USB power supply; via PC

### Model SSP

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Calibration certificate	■
Calibration verification mode (with optional certified calibration tile)	■
Ambient light sensor; with adjustable auto brightness	■
Emergency light mode	■
Magnetic & tripod mounting points	■
Data output, USB to PC & Bluetooth to PC, Android™ & iOS2 devices	■
<b>On screen statistics</b>	
Number of readings (n); Mean / Average, (x); Standard deviation ( $\sigma$ ); Highest reading/ Peak Salt Concentration (Hi); Lowest reading (Lo); Coefficient of variation (CV%); Number of readings above high limit	■
<b>Gauge memory</b>	
Number of individual reading sets; including salt density, pass/fail map & distribution graph	3.500
<b>Number of batches</b>	1.000
<b>Measurement units &amp; range</b>	
Surface Cleanliness - Elcometer 130 Mode	0-50 $\mu$ g/cm <sup>2</sup> (0-500mg/m <sup>2</sup> )
Surface Cleanliness - Bresle Equivalent Method Mode	0-15 $\mu$ g/cm <sup>2</sup> (0-150mg/m <sup>2</sup> )
Conductivity	0-6000 $\mu$ S/cm (0-6mS/cm) 0-3000ppm (0-0.3% Salinity)
<b>Resolution</b>	
Surface Cleanliness	0.1 $\mu$ g/cm <sup>2</sup> (1mg/m <sup>2</sup> )
Conductivity	1 $\mu$ S/cm (0.001mS/cm) 1ppm (0.0001% Salinity)
<b>Gauge Accuracy</b>	±1% of reading
<b>Measurement mode</b>	
Surface Cleanliness	■
Conductivity	■
Calibration offset mode	■
Automatic temperature compensation	■
ElcoMaster® Software & USB cable	■
Individual reading and profile map stored with time and date	■
Plastic transit case	■
Alpha-numeric batch names; user definable on the gauge	■
Fixed batch size mode; with batch linking	■
Delete last reading	■
Limits; (gauge & batch specific)	■
Review, copy, clear & delete batches & calibration settings	■
Trend graph; last 20 readings	■
Batch review graph	■
Analogue bar graph	■

Model	Description	Certificate
E130-SP	Elcometer 130 Soluble Salt Profiler3	
E130-SPC	Elcometer 130 Certified Soluble Salt Profiler3	●
Operating Range	5°C - 40°C	
Power Supply	4 x AA batteries or via USB (rechargeable batteries can also be used)	
Battery Life	Alkaline: Approximately 30 hours Lithium: Approximately 45 hours	
Sample Time	2 minutes	
Sampling Size	110mm circle	
Dimensions	250 x 145 x 50mm	
Weight	780g	



1 The Elcometer 130 SSP is supplied with a one year warranty against manufacturing defects.

Gauge warranty can be extended to two years

3 Applicable Patents: GB 2527766

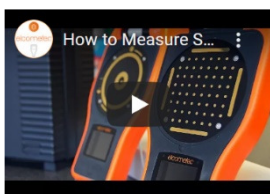
• Calibration certificate supplied as standard

## Packing List

Elcometer 130 Soluble Salt Profiler
3 x Magnetic discs
100 x high purity test papers
250ml Pure distilled water
20 x PVC storage bags
Disposable gloves
Sensor wipes
3 x 3.0ml Syringes
2 x Plastic tweezers
4 x AA batteries
Shoulder strap
Plastic transit case
Test certificate
Operating instructions
USB cable
ElcoMaster® Software



## Video



### YouTube Video - Introduction the Elcometer 130 Salt Contamination Meters (Click on the image to the left to view the video)

Explore key features and benefits of the new Elcometer 130 Soluble Salt Profiler. See the Elcometer 130 produce Bresle equivalent readings in just over two minutes. View a wide range of display modes including 2D and 3D salt density profile maps.

## Accessories



T13027115 - Calibration Verification Tile



T13025964 - Magnetic Discs (x3)



T13024091 - 3.0ml Syringe (x3)



T13024093 - Self Seal Polythene Bags (x20)



T99911344 - Pure Distilled Water - 250ml Bottle with 3ml syringe



T13027596 - Pure Distilled Water - 1000ml Bottle with 3ml syringe



T13024094 - High Purity Test Papers (x100)



T13024092 - Disposable Vinyl Gloves (x20)



T13024098 - Plastic Tweezers (x2)



T13024087 - Box of 72 Sensor Wipes



T99920130 - USB Bluetooth® Adaptor V2.1+

## Elcometer ElcoMaster® Data Management Software

(see separate Datasheet for more info)

### Create instant reports with ElcoMaster®

What you do with the collected data is just as important as taking the readings themselves.



ElcoMaster® is a fast, easy to use software solution for all your data management and quality assurance needs, preparing professional inspection reports at the click of a button.

Data transferred to ElcoMaster® includes:

- Date and time stamped readings
- Statistical values
- Limit values
- Readings above high limit
- Run charts & histograms
- Salt profile maps
- Batch and gauge information
- Calibration information



Whether you are in the field or on the factory floor, using the ElcoMaster® Mobile App users can:

- Store live readings directly on to a mobile device and save them into batches
- View graphs in real-time whilst carrying out the inspection
- Add notes to individual batch reading
- Add photographs of the test surface to each individual batch reading at the click of a button
- Plot individual readings on to a location map, photograph or diagram via the mobile device's internal GPS
- Inspection data can be transferred from mobile to PC for further analysis and reporting
- Generate instant .pdf report for submission (incl IOS)

