

Introducing the Elcometer 130 Range

Surface contamination from soluble salts; such as chloride, sulphate, or nitrate ions; can cause premature failure of the coating system - particularly on structural steel.

By measuring and monitoring the concentration of soluble salts, we can ensure the surface is clean enough for a coating to be applied.

But how clean is clean?

That depends on your coating, the standard you are working to, or a combination of the two. For example, the IMO PSPC Standard for ballast tanks allows up to 5 micrograms/cm² of soluble salts, while other standards allow as little as 3 micrograms/cm².

The Elcometer 130 range of salt contamination metres are designed to accurately, reliably and quickly measure the level of soluble salts on surfaces up to 5 times faster than other Bresle equivalent test methods - without the need for needles.

In addition to the Elcometer 130 standard and top models - which accurately measure, store, and transfer the level of salt contamination to your PC, or Android or Apple mobile device - the new Elcometer 130 Soluble Salt Profiler - the Elcometer 130 SSP - not only provides a Bresle equivalent reading, but also graphically displays and records the soluble salt profile of the substrate - either in the laboratory or on the construction site.

So how does it work?

1.6 millilitres of deionised or distilled water is applied to a sterile filter paper on a magnetic positioning disc, then placed onto the test substrate for two minutes. The magnetic positioning disc minimises water evaporation, maximises accuracy, and holds the filter paper in place on flat or curved, horizontal or vertical surfaces.

If you don't have access to deionised water, the Elcometer 130 has a zero offset feature allowing mildly contaminated water, such as tap water up to 119 Parts Per Million, to be used.

After two minutes, the filter paper is removed from the substrate and placed on the Elcometer 130's test plate. Simply close the lid and the gauge will automatically take and record the measurement.

As each filter paper is similar in size to a standard CD - or four Bresle patches - the new Elcometer 130 SSP not only displays the individual reading, but also provides 4 Bresle equivalent readings - all in just two minutes.

When you consider that ISO recommends that a Bresle test should take 10 minutes, the Elcometer 130 SSP significantly reduces the inspection time required; increasing productivity and saving you money.

Furthermore, as each filter paper remains on the surface for two minutes, you can prepare multiple tests which can run at the same time - reducing inspection times further, especially on large surface areas.

As each test takes around 200 conductivity measurements across the whole test area, and 50 conductivity measurements for each of the 4 Bresle test areas, the new Elcometer 130 SSP is the only soluble salt meter which measures both the concentration and density profile of soluble salts on the surface, allowing the user to identify both the average and actual concentration of salt at any given point under the filter paper, in either 2D or 3D.

So why is this important?

Traditional test methods measure the average salt concentration over the test area. However, in reality salts are not uniformly distributed over the substrate - typically there are high and low areas of concentration. This means that whilst the average salt concentration may be below the specified levels, some areas may be significantly higher. It is these higher areas that can lead to corrosion and rust spots.

Unlike other gauges the Elcometer 130 SSP carries out a detailed analysis of the surface's soluble salt profile - providing an accurate salt density profile map displaying in detail the concentration levels across the test area. By setting a maximum concentration limit the, Elcometer 130 SSP also produces an accurate pass/fail map, together with distribution and bar graphs, run charts, and full statistical information including average, standard deviation, the highest and lowest reading, together with the range.

Internal temperature compensation within the new Elcometer 130 SSP ensures accurate measurements in both hot and cold environments.

All readings and profiles can be recorded into the gauge's memory. The readings can then be transferred to your PC, via USB or Bluetooth, for digital reporting using our free, easy to use software application - ElcoMaster. Alternatively transfer the gauge's readings directly into your Android or Apple mobile device, for instant reporting wherever you are.

So there you have it – the new Elcometer 130 SSP with Bresle equivalency from a test that's up to five times faster, giving you the ability to complete more tests in the same time-frame.

For more information and training on the whole Elcometer 130 range, or any other Elcometer products, visit Elcometer.com.