

## **Verifying the Accuracy of Elcometer 130 Salt Contamination Meters using Elcometer Calibration Tiles**

Whether you are using an Elcometer 130 Salt Contamination Meter, or the Elcometer 130 Soluble Salt Profiler, each Elcometer 130 gauge is factory calibrated and ready to use, straight out of the box.

In order to accurately measure the level and density of salt contamination of a sample, each Elcometer 130 gauge measures the conductivity or the flow of electricity through a liquid. The higher the conductivity, the higher the concentration of soluble salts within the sample.

Whilst best practice states each gauge should be verified before starting an inspection, the frequency of gauge verification is often dependant on your internal inspection policies, or the test method or standard you are working to.

By using the Elcometer 130's Calibration Verification Tiles, you can quickly verify the accuracy of your Elcometer 130 anytime and anywhere.

The Elcometer Calibration Verification Tiles are used to check each gauge's measurement electrodes by accurately simulating known salt concentrations. So, by comparing the results on the gauge with the values on the tile, you can quickly and accurately confirm that your Elcometer 130 is working within specification.

### *Verifying the Elcometer 130 Salt Contamination Meters*

As the Elcometer 130 and Elcometer 130 SSP have different measurement plates, there are two different versions of the Calibration Verification Tiles. The Elcometer 130 requires three different Calibration Verification Tiles of different values, and it is recommended that all three tile values are used to confirm the Elcometer 130's accuracy. However, unlike the Elcometer 130, the Elcometer 130 SSP has a single tile, which allows the user to verify each gauge's accuracy across its measurement range.

Before you begin any verification procedure, you must first remove any test paper, magnetic disks, or calibration tiles from the test plate, and then carefully clean and dry the sensors using the deionised water and the sensor wipes provided.

### *Verifying the Elcometer 130*

To verify the Elcometer 130 gauge, simply press the Menu softkey, go to Calibration using the up and down keys, and select Calibration Verification. The Elcometer 130 will then guide you through the verification process step-by-step.

Place the first tile onto the test plate, and press down firmly.

Press OK, and the gauge will take a measurement. Compare the reading to the value on the tile, and if the gauge reading is within the gauge's specified accuracy, your salt contamination meter's calibration, has been verified.

Simply repeat these steps with the other two Calibration Verification Tiles, and your Elcometer 130's calibration has been successfully verified.

If the gauge reading is unacceptable, contact Elcometer or your local distributor for further information.

### *Verifying the Elcometer 130 SSP*

The Elcometer 130 SSP has a single Calibration Verification Tile, which will test the gauge across its full range.

Again, once you have selected Calibration Verification from the Calibration Menu, the Elcometer 130 SSP will guide you through the verification process step-by-step.

Once the test plate is clean, press OK, and the gauge will perform a sensor check.

Once passed, press the Calibration Verification Tile firmly onto the test plate, and press OK to begin.

The gauge will automatically check if the Calibration Verification Tile is aligned properly. If the squares on-screen are all white, the test will begin. If any of the squares are red, it means the tile is either misaligned or not being pressed down firmly enough – simply adjust its position and when all the squares turn white, the test will begin automatically.

The Calibration Verification Tile will test the Elcometer 130 SSP four times, at four different range values, allowing you to verify your gauge's calibration across its entire range.

The Elcometer 130 SSP will test the lowest range first. If the gauge reading is within the range stated on the tile, press "Pass", and the gauge will continue the verification process. Simply repeat the process for the other three ranges.

Once the Elcometer 130 SSP passes all four verification tests, your gauge's calibration has been successfully verified.

If the reading is outside of the stated range, press "Fail", and you will be asked to retest. In the unlikely event the gauge fails a test three times; you will be advised to contact Elcometer, or your local distributor.

For more information on the Elcometer 130 range of salt contamination meters, click the pop-out in the top right of the screen, or simply visit [Elcometer.com](http://Elcometer.com).

And don't forget to Subscribe to the Elcometer Channel, to be notified of any new videos.