

SaltSmart™

Accurate Soluble Salt Contamination Measurements in a Portable Low Cost Device

Standards Compliant

Tested by an independent metallurgical lab to be compliant to NACE SP0508, IMO PSPC, ISO 8502-9, SSPC, US Navy 009-32 FY12 and many other evolving standards

Disposable Sensor

Everything is premeasured and comes in a sealed contamination free pouch. In the field, just place the sensor on the substrate, wait the time for the sensor to develop, and place in the meter for the reading. Readings are available in any one of three user selectable units.

Faster Test Times

Since no manual manipulation of the sensor is required during test, multiple tests can be run in parallel saving time and labor.



Salt ions are an invisible threat to surface coatings., and they are virtually everywhere and on every surface. There are many kinds of salts, and the ionic compounds formed may be comprised on chlorides, sulfates, nitrates and other chemical compositions. The basic nature of salt is hygroscopic, meaning that when salts are exposed on a substrate they attract moisture that can lead to flash rusting.

All coatings permeable and in immersion surface generally contain 1% to 3% water. The build up of water between the substrate and the coating combined with soluble ions may create an electrolytic cell—leading to corrosion. Osmotic blistering exposes the substrate, accelerating corrosion and leading to possible premature

- Supports electronic capture of 250 measurements in the meter for later USB download. File formats compatible with Microsoft Excel.
- One-time-use disposable device eliminates cross contamination, syringes, and measurements of liquids in the field
- Works on virtually all surface geometries including vertical, horizontal, curved, overhead, magnetic and non-magnetic surfaces.
- Faster testing of large surfaces, leaving no residue or contamination after testing

failure and possible structural failure.

SaltSmart™ was developed over a 5 year program with funding from the US Navy to find a better solution than those that existed on the market. The goals were to find a technology where measurement results would be less operator skill dependent, better accuracy, less chance of contamination, something that would work on all surface geometries including small parts such as vents or gratings, and technology that would support a paperless QA environment where all records could be kept electronically in an electronic archive.

SaltSmart™ is a patented breakthrough in the measurement of soluble surface salt contamination.



Louisville Solutions Incorporated

Accurate Substrate Contamination Measurements

SaltSmart™ Technology is designed to be a system. Since we are in complete control of all system components, we measure the background contamination of sensors in manufacturing and programmatically remove this source of error within the meter. The reading on the meter is a true substrate salt contamination measurements.

User Calibration Validation

Meter kits include a validation strip that can be used to validate proper meter calibration.

Material Safety Data

We use de-ionized water for our measurements, which is non-hazardous

For more information on any of our SaltSmart™ products or informational videos please visit us on the Web at:
www.LouisvilleSolutions.com

Features and Benefits



- The contact area of the sensor is approximately 1.5 cm by 2.0 cm and does not require sealing to the substrate. This allows for testing of curved or irregular surfaces, including very localized testing of objects such as gratings.
- The solvent (de-ionized water) is in pre-measured ampoules and requires no measuring or handling, and since a fresh one is used per test, virtually eliminates any chance of cross contamination.
- No residue is left on the surface after testing, no cleanup required
- Sensor requires no manual manipulation while developing, allowing multiple sensors to be affixed for testing enabling faster testing of large areas saving time and labor
- Measurements may be stored in the meter for later USB download. Allows archiving of accurate measurement data for maintenance or build history, and supports paperless QA systems
- Patented Continuous Flow Extraction Method supports high extraction efficiencies to remove salt samples from the test substrate

Specifications

Model:	SaltSmart Model 2000 Salt Contamination Meter
Measuring Method:	Conductivity
Range:	0-150us/cm (0-155 mg/m ²)
Resolution:	1 us (1.03 mg/m ²)
Accuracy:	1%
Operating Temperature:	0—50 °C (32—122 °F)
ATC	Reference temperature 25 °C (77 °F)
Temperature Coefficient:	2.0 %/ °C
Power Supply:	2 AA Batteries (3 VDC)
Number of Tests:	Greater than 100 tests before battery replacement (depends on use of backlight)
Sample Time:	8 minutes for strip development, 15 seconds for meter analysis
Sampling Contact Area:	20.6 mm x 15 mm (309 mm ²)
Meter Dimension:	160 mm x 80 mm x 30 mm
Memory Retention:	10 years with non-replaceable internal battery
Weight:	1.2 kg (2.5 lb) as sold in blue storage box with holster, USB cable, batteries and CD



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