

HedoN Soluble Salt Meter (SSM) Salt Contamination Meter

Can be used in accordance with:
ISO 8502-6 & ISO 8502-9



The Soluble Salt Meter (SSM) Salt Contamination Meter is developed specifically to address problems with US Navy and IMO test protocols using the Bresle Patch. The SSM exactly duplicates the Bresle Patch process but with a higher accuracy and reproducibility. Measurements are automated and there are no consumables. The complete test sequence requires less than a minute.

In comparison to the Bresle Patch the Soluble Salt Meter (SSM) Salt Contamination Meter:

- Cuts sampling and inspection time
- Low costs per sample. No consumables
- Extracts surface salts more reliably for more accurate readings
- Minimizes operator error through automatic metered water injection and electronic recording of measurements
- Improves safety by eliminating the need for syringe with needles
- Does not leave sticky residue on the substrate

The Soluble Salt Meter (SSM) is a patented design that provides a hand held, automated method for detection of soluble salts on flat surfaces. The SSM has been independently tested both in laboratory and US Navy shipyard facilities and is approved by NAVSEA for use as a replacement to the Bresle patch method in NAVSEA Standard Item 009-32 (FY-10).

The Soluble Salt Meter (SSM) combines surface salt extraction and conductivity measurement in one tool, allowing convenient and ergonomic operation. It is developed as a direct replacement for the Bresle patch inspection method (ISO 8502-6). The hand held design provides a self-contained, easily transportable, unit for soluble salt measurements. The SSM and supplied fluid dispenser allow for quick and accurate injection of deionized water, automatic extraction of surface salts and conductivity measurement. The Soluble Salt Meter (SSM) is complete with a backlit LCD display and easy to follow on screen instructions.

Up to a 1000 measurements can be stored in the internal memory. This data can be downloaded to any PC and exported in Microsoft® Excel file format for use in any Coating Technical File (CTF) using the supplied software.



Soluble Salt Meter (SSM) Salt Contamination Meter – Test Method

The Soluble Salts Meter (SSM) performs a measurement cycle in five easy steps:

1. Attach SSM to surface
2. Inject de-ionized water into SSM with one press of the dose bottle
3. Press “Start”: SSM automatically
 - a. Agitates solution
 - b. Takes a measurement
 - c. Displays the result on the LCD screen
 - d. Stores the data in memory
4. Remove SSM and wipe remaining water from surface
5. Clean meter by flushing with deionized water

Technical Specifications

| Part Number | Description |
|------------------------------|--|
| Standards E | Equivalent to ISO Standard 8502-6 Extraction of soluble contaminants for analysis The Bresle method; meets the requirements of ISO Standard 8502-9 Field method for the conductometric determination of water-soluble salts. |
| Measurement Area | 1250 mm ² (circular) fixed footprint |
| Attachment Method | Magnetic with silicone seal (no effect on surface quality proven to seal over deep pits) |
| Water Injection Method | Automated, with simple press of fixed volume dispenser |
| Dose | 3 ± 0.05 ml |
| Measurement Process Steps | 5 |
| Total Process Time | 60 seconds |
| Probe Range | 0-300 µS/cm |
| Resolution | 1 µS/cm |
| Measurement Accuracy | ± 3 µS/cm |
| Surface Temperature Range | 5 – 50°C |
| Temperature probe accuracy | ± 0,3°C |
| Minimum radius of curvature | 550mm |
| Memory | Holds up to 1000 measurements (10 batches of up to 100 measurements each) |
| Connectivity | via USB with PC or laptop |
| Power Supply | Lithium-ion rechargeable battery |
| IP Rating | IP54 |
| Dimensions (Instrument only) | 21 x 10 x 8 cm |
| Weight (Instrument only) | 780 g |

Packing List

HedoN Soluble Salt Meter type HED7263901

Additional Adaptor Pieces (Optional)

Bottle for deionized water

4 sachets of 84 µS/cm validation fluid

3ml Fixed Volume Fluid Dispenser.

Extra Seals

Flexible plastic tubing to connect to SSM and Dispenser

Syringe for injection of validation solution

Universal AC adapter

USB Connection Cable

CD with Manuals

