

# **Surface Salinity Meter**

PSPC Compliant in Accordance with NACE SP0508-2010, ISO 8502-9 Equivalent









At Last a Simple Method for Checking Surface Salinity Prior to Painting

## **Surface Salinity Meter**

### Model SSM-21P

Steel structures require careful preparation prior to painting. Checking the salinity of the steel surface is essential in order to judge whether the structure is ready for painting. The Model SSM-21P eliminates old fashioned, time consuming and cumbersome methods and allows the surface salinity to be measured simply and directly in real time. The use of this instrument will improve the reliability of test results and increase the overall efficiency of the preparation and painting processes.

#### **Features**

- Surface salinity (mg/m²) can be directly read in four formats:-
  - Soluble salt concentration (PSPC Mode)
  - Soluble salt concentration (Normal Mode)
  - Sodium Chloride concentration
  - Conductivity of solution
- Measurement is performed in-situ. No sample collection or removal is required. The measurement cell is placed on the steel surface and is held in place by a magnetic base. Pure water is injected into the measurement cell using a disposable syringe and the measurement result obtained. No more cumbersome washing and collection activities.
- No need for adhesive patches as used in other methods. The measurement cell features a magnetic base that provides easy attachment to the steel surface to be checked. No more sticky residues left on the steel surface as with other, old fashioned procedures such as the Bresle method.
- Lightweight and compact size provides excellent portability allowing the meter to be easily carried around and used wherever it is required.
- The meter includes an interface for connection to external peripheral equipment such as printers, personal computers, etc. (peripheral equipment available separately for additional cost).







Equivalent to Bresle Patch method (ISO 8502-9) as tested and confirmed by independent test laboratory in accordance with NACE SP0508-2010 Item No. 21134.

\* IMO Performance Standard for Protective Coatings for dedicated sea water ballast tanks on all new ships and double-sided skin spaces of bulk carriers.

#### Stirrer Button

#### Measurement Cell

With magnetic base for easy attachment to surface to be checked. Can even be mounted upside down with no effect on measurement.

#### Method

The measurement cell is fixed onto the steel surface and held in pace by the magnetic base. A fixed volume of pure water is injected into the measurement cell. Any salts present on the steel surface are dissolved into the pure water and the conductivity of the resulting solution is measured. The conductivity measurement value is automatically converted into a salinity value by software in the meter.

#### **Procedure**

- Attach the measurement cell onto the steel surface.
- Inject 10ml of pure water using the plastic syringe and press the start key on the meter.
- Press the solution stirrer button.
- Measurement result is displayed on the meter and also stored in the meter's internal data logger.
- Release the stirrer button.





## **Specifications**

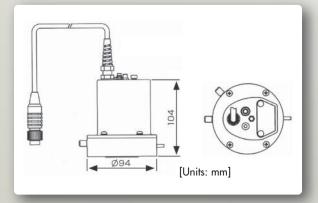
#### Meter

Model		SSM-21P
Measurement method		Conductivity of solution
Measurement mode		<ol> <li>Soluble salt concentration (PSPC Mode)</li> <li>Soluble salt concentration (Normal Mode)</li> <li>Sodium Chloride concentration</li> <li>Conductivity of solution</li> </ol>
3	Soluble salt concentration	0~199.9 mg/m², 0~1999 mg/m²(Auto ranging)
Measurement range	Sodium Chloride concentration	
asurem range	Conductivity of solution	0~199.9 μS/cm, 0~1.999 mS/cm (Auto ranging)
ent	Temperature	0~50 degC (Display range 0~99.9 degC)
Temp. compensation		ATC (Auto Temp. Comp.) : 0~50 degC, Reference temp. : 25 degC
Temp. coefficient		2.0 % per degC
Data storage		300 data points (time, measurement value, temperature)
Measurement time setting		1 min, 3 min, 0 min (continuous)
Cell constant		Auto setting from measuring cell (manual input available)
Measurement temp. range		0~40 degC
Power source		2 x AA type (LR6) batteries
Main body dimensions (excluding protrusions)		187.5 (l) X 37.5 (h) X 75 (w) mm
Weight (Main Body)		Approx 310g (including batteries)

#### **Measurement Cell**

Model	ELC-006
Measurement cell material	316 Stainless steel
Measurement surface area	1250 mm <sup>2</sup>
Pure water volume	10 ml
Stirring function	Direct motor drive
Cable length	1m
Stirrer power source	1 x 9v battery (6F22, 006P)
Weight	Approx. 680g (including battery)

### **Measurement Cell Dimensions**



## **DKK-TOA CORPORATION**



**CAUTION** Do not operate products before consulting instruction manual.

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Information and specifications are for a typical system and are subject to change without notice.