

elcometer® **1120 Salt Spray Tester - BS1**

Can be used in accordance with:
ASTM B 117, ASTM B 287, ASTM B 368, ASTM G 85,
BS 5466, BS 3900 F4, BS 7479, DIN 50907, DIN 53167, DIN 50021,
ECCA T 8, EN 4.4.9 175,
ISO 1456, ISO 3768, ISO 7253, ISO 9227, JIS Z 2371,
NF DIN EN ISO 4623, NF X 41-002,
SIS 184190, Renault D17/1058

The quality and reproducibility of the salt spray tests depend directly on a stringent respect of testing parameters, prescribed particularly by ISO 9227 and other international standards.



The Elcometer 1120 BS1 Salt Spray Tester is designed to perform, with high reproducibility, a large number of standardised or conventional tests in order to determine the resistance to corrosion for a wide range of coatings. These include salt spray, copper acetic salt spray (CASS), prohesion, humidity and cyclic DIN.

The Elcometer 1120 can also be adapted to a humidity chamber.

The Elcometer 1120 is available in 3 capacities;

- 400 litres (105 US gallons)
- 1000 litres (264 US gallons)
- 2000 litres (528 US gallons)
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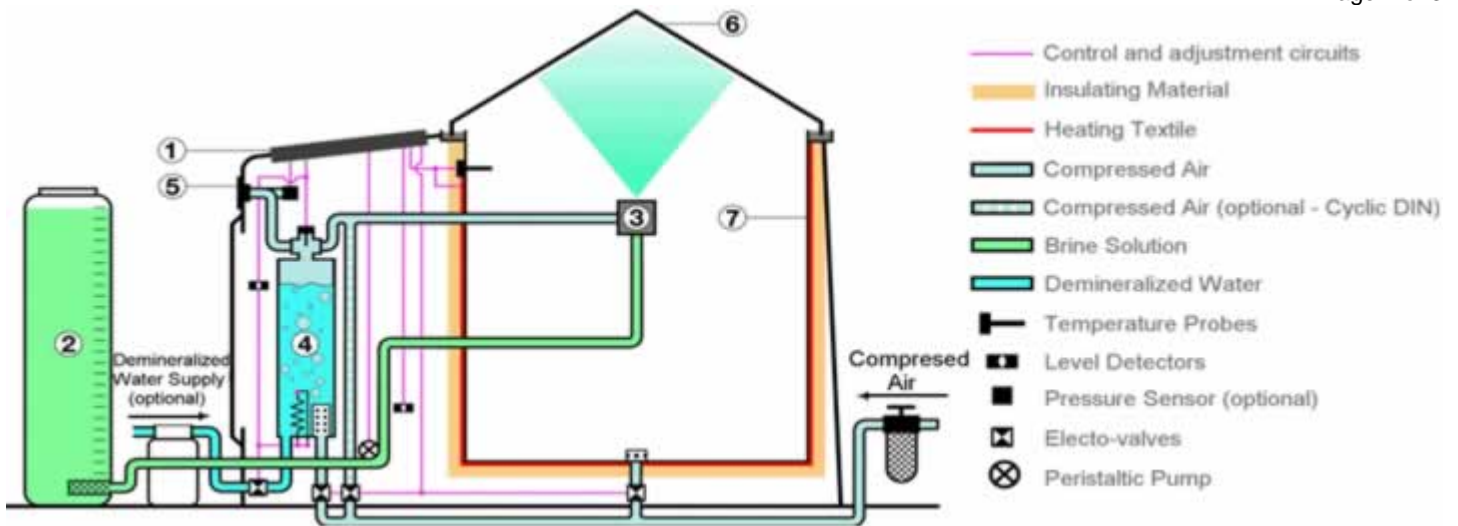
See also the Elcometer 1120/4 Cyclic Salt Spray Tester -BS2

Rational and Robust Construction

- 1) Control Panel – all operations (instructions, adjustments, checks and safeguards) are brought together and displayed on this microprocessor controlled digital panel. As a result the user can instantly check the status of the chamber.
- 2) Solution Tank – with a capacity of 200 litres (53 US Gallons), the unit can operate continuously for over 500 hours (400 litre/ 105 US Gallon model), without attention. An electronic sensor warns when the solution has reached the minimum level. An optional air mixer can be incorporated into the unit if required
- 3) Central Dispersion – The filtered solution is carried to a spray nozzle by an adjustable flow peristaltic pump. Central, orientable dispersion ensures that the spray is of optimal homogeneity.
- 4) Saturator – After filtering, the compressed air is humidified and heated to the preset temperature by the saturator, which is topped up automatically with demineralized water. The level is constantly adjusted, should there be a major drop in the level, or an accidental loss in water, a safety device cuts off the resistance, preventing overheating.
- 5) Manometer – The pressure of the compressed air in the saturator is permanently indicated on the gauge. An electronic gauge – with built in alarm – is an optional accessory, and the pressure is displayed on the control panel.
- 6) Cover – All models are supplied with a translucent cover.
- 7) Exposure Chamber – Made of smoothly finished reinforced glass fibre polyester, the chamber does not corrode and can withstand repeated thermal and hygrometric variations. It is heated directly from the outside by a sleeve of thermal textile. A thick layer of insulating material prevents heat loss and thus increases energy efficiency. The cover fits into grooves moulded into the upper edge of the chamber, which are then filled with water in order to create a perfect hydraulic seal.

Internal lateral partitions are provided so that bars for fastening large pieces into position and sample racks can easily be installed.





Standard Equipment

Exposure Chamber

Reinforced glass fibre polyester – cover in translucent plexiglass

Brine Tank

Contents 200 litre (53 US Gallons) – integrated filter – level indicator in the cabinet

Saturator

insulated, with safety valve and level indicator. Demineralized water supply

Supply Systems

Brine: Adjustable flow peristaltic pump, low level control with alarm. Automatic Stop after 72 hours without refilling

Saturator: Electronic level regulator and electromagnetic valve.

Control Panel

Microprocessor control. Automatic control of all essential functions and run of the tests

Heating Systems

Chamber: Heating textile fixed to the exterior. PID temperature control from ambient to 50° C. Safety device and alarm. Independent thermal switch.

Saturator: Resistance heater in stainless steel. PID temperature control from ambient to 70° C. Safety device and alarm, refilling-dependent.

Pneumatic System

Compressed air distribution cock with filter, pressure regulator and manometer. Pressure supplied to the spray nozzle by electromagnetic valve.

Operating Pressures

Saturator demineralised water supply - Min: 2 bar (29 PSI); Max: 5 bar (72.5 PSI)

Compressed air supply – Min: 2 bar (29 PSI); Max: 8 bar (116 PSI)



Dimensions

Capacity	Chamber			Dimensions			Overall	Sample Capacity Sample Size 10 x 15cm
	Length	Width	Height	Length	Width	Height		
400 litre	75cm	75cm	75cm	150cm	110cm	140cm	120	
1,000 litre	120cm	120cm	75cm	200cm	160cm	140cm	240	
2,000 litre	193cm	105cm	100cm	275cm	135cm	165cm	440	

Part Numbers

Model	Description	Part Number
Elcometer 1120/1	Elcometer 1120 Salt Spray Tester – 400 Litre	K0001120M001
Elcometer 1120/2	Elcometer 1120 Salt Spray Tester – 1000 Litre	K0001120M002
Elcometer 1120/3	Elcometer 1120 Salt Spray Tester – 2000 Litre	K0001120M003

Options – please specify when ordering

Programmer for automatic operation	KT001150P015
Cyclic Test – DIN 50907 and DEF 1053 Method 36	KT001120N005
Adaptation for ASTM B 368 and ISO 9227 CASS Test	KT001120N001
Cyclic Device for Prohesion Test	KT001120N007
Adaptation for ASTM G 85 SWAAT	KT001120N011
Adaptation for VALEO SWAAT	KT001120N012
Condensed water accessory for DIN 50 017 (manual programming)	KT001120P165
Automatic Stop when compressed air cuts off	KT001120N010
Traceability Kit - RS232 Output, printer, connecting cable and electronic pressure sensor	KT001120N013
Compressed Air Mixer – for stirring Brine Salt Solution	KT001120N017

Accessories

PVC Test Panel Support Rack	KT001150P012
Support can place up to 22 test panels (100 x 200mm), 5 supports can be placed in the Elcometer 1120/1, more can be placed in the Elcometer 1120/2 and Elcometer 1120/3	
Assembly of 10 PVC Test Panel Support Rack with central holder for spray nozzle. Each rack can place up to 20 test panels (100 x 200mm), between 15° and 20°	KT001150P158
P6 Demineralizer for tap water, plus 2 resin cartridges	KT001120N014
100ml Rain Gauge	KT001120N002
Sodium Chloride Refractometer – for condensate analysis.	KT001120N006

