

Intelligent Multifunctional Salt Spray Tester





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Introduction:

BEVS 3310 intelligent multifunctional salt spray tester is used to artificially simulate the salt spray corrosion environment. The sample is exposed to a series of different environments with repeated cycles. The test environment includes salt spray, humidity, dry air, and high temperature, one or more arbitrary combinations of humidity and constant temperature and humidity cycle. Compared with the natural environment, the salt spray environment in the chamber is several times or even dozens of times that under natural conditions. Therefore, the result can be obtained much more quickly, which can be within a few days or within a few weeks. The chamber is suitable for the test of parts, electronic components, coatings of metal materials and industrial products.



Working principle:

The tester use PLC programmable controller to control the cyclic test of salt spray, humidity, drying, high temperature and high humidity, constant temperature and humidity in a test box. It is convenient to set complex cyclic test procedures for testing or to run preset procedures for testing. Cyclic test is to expose the sample to different test environment and repeat the test. The simple test generally includes two different test conditions: salt spray and drying. Complex test, such as vehicle testing, require multiple cycles.

Function:

- (1) Humidity control function
- (2) Temperature control function
- (3) Salt spray function
- (4) Temperature and humidity control at the same time
- (5) Dynamic display
- (6) Customized programming
- (7) Diagnosis function for easy maintenance
- (8) Remind of incomplete items
- (9) Cover automatic open with anti-pinch function
- (10) Salt solution level monitoring
- (11) Automatic water change remind
- (12) Data output



Standards:

- (1) Continuous salt spray
- a. Neutral Salt Spray Test (NSS)
- b. Acetic acid salt spray test (AASS)
- c. Copper accelerated acetic acid salt spray test (CASS)

(2) CCT cyclic corrosion test

ASTM G85-2011	ISO 6270	GB/T 31588.1-2015	GB/T 10593.2-2012
ASTM B117-2019	ISO 11997-1:2005	GB/T 1771-2007	GB/T2423.18-2000
IEC6008-2-78-2012	ISO 9227-2017	GB/T 2423.17-2008	GB/T 5170.8-2008
QBT3826-1999	ISO 14993:2018	GB/T 10125-2021	GB/T 2423.18-2000
QBT3827-1999	ISO 16701:2003	GB/T 10587-2006	GB/T 12000-2003
QBT3828-1999	ISO16151:2005	GB/T 10586-2006	/

(3) Other tests

a. PSA D17 1058 (Renault Auto) Salt Spray Test and Rating

b. CVTC54042-2014 (SAIC) neutral salt spray test of metal parts

Tester structure:

1. Box and cover: made of high-grade glass fiber reinforced plastic, corrosion resistant, durable, and has strong adaptability to the temperature and humidity of the use environment.

- 2. Chamber: made of high-grade fiberglass
- 3. Chamber temperature control system: titanium tube heater
- 4. Spray system: precision and durable Teflon material
- 5. Fresh air heating system: heating blower
- 6. Humidity generating device: ultrasonic generator

7. Saturation tower device: made of transparent high-grade PVC material, with water level sensing and heating device

8. Control system: programmable controller, touch screen

Control:

1. Controlled by a touch screen, with human-computer interaction interface, which is easy to use. The parameters can be set flexibly, storing multiple groups of test standards and parameters, and recording the operation mode and test conditions in groups.

2. Edit the test procedure: salt spray, drying, humidity, damp heat and other separate or cyclic tests.



Technical info:

Tester info

Chamber capacity	800L	
Heating via	Titanium tube heater	
Humidity range	20%~95%, accuracy ± 5%	
Temperature range	Ambient to 65 ± 2 ° C	
Test panel bracket	Two layers, 12 positions in total	
Bay slot	16/bracket	
Total number of test panel	192 pieces (size: 150 × 70mm)	
Maximum panel size	690 x 50 x 500mm	
Hanging rod	Two layers, 12 positions in total	
Bracket bearing	Maximum 60kg	
Hanging rod bearing	Maximum 50kg	
Dry hot air generated by	Heater blower	
Humidity generated by	Ultrasonic	
Salt water temperature control by	Saturation tower	
Filling of deionized water	Automatic filling	
Salt water spray pressure	0.1~0.2Mpa, automatic adjustment	
Salt spray dispersion rate (salt water spray volume)	0.5~4.0ml/h/80cm2, automatic adjustment	
Salt collector	4	
Chamber size	1100 x 800 x 730mm (excluding top cover)	
External dimension of the tester	2050 x 950 x 1500mm	
External salt water tank capacity	120L	
Size of external salt water tank	300 x 400 1200mm	
Tester gross weight	400KG (without salt water tank)	

Technical parameters of water, electricity and gas

Power: 7.5KW (full power)

Power supply: three-phase AC 380V+N+PE, 50HZ, single-phase maximum current 18A Pressure of gas supply: 0.7Mpa, flow not less than 45L/min Water supply: deionized water

Requirements for use environment

Ambient temperature: +5 to +35°C (no icing) Ambient humidity: max. 85% RH (non condensing)

Order info:

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