

Technical Specification



Sonacme Technology (Guangdong) Co., Ltd

-  Add: Building 7, No.310 Songbai Road, Liaobu Town, Dongguan City, Guangdong
-  TEL: +86+769-83234966
-  E-mail: info@sonacme.com
-  www.sonacme.com

Photo for reference only



Salt Spray Corrosion Chamber



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1. Chamber material

- 1: Thickness 5mm for models below 90, 8mm imported gray-white impact-resistant P.V.C board for models above 90, high temperature resistance up to 85 °C, corrosion resistance.
- 2: Support frame: $\varnothing$ 10MM glass fiber rod, corrosion-resistant. The plastic steel V-shaped frame and the fiber rod are placed at an angle to ensure that the test object is at an oblique angle of 15-30 degrees.
- 3: The pressure barrel is seamlessly welded with 2.0MMSUS304 stainless steel plate.
- 4: Titanium alloy electric heating tube is used for heating, with high corrosion resistance and long service life, which is 3-5 years longer than ordinary stainless steel heating tubes.
- 5: The cover is made of 5MM imported transparent (German YLIS) acrylic sheet. It has meticulous workmanship, beautiful appearance and high transparency.
- 6: The unique design structure of water and gas separation to guarantee the experimental temperature . Which is more effective to avoid the frequently adding water to the pressure tank caused brine concentration reduction, and the leakage of the pressure tank.

2. Technical Parameter:

Model		SCE-Y-60D	SCE-Y-90D	SCE-Y-120D	SCE-Y-160D	SCE-Y-200D
Internal Dimension	W	600	900	1200	1600	2000
	D	450	600	800	1000	1000
	H	400	500	600	600	600
External Dimension	W	1170	1490	2030	2600	2840
	D	660	840	1090	1450	1300
	H	940	1080	1330	1550	1440
Test chamber volume (L)		100	270	570	960	1200

Brine tank capacity	15	25	40		
Max current	5	12	15	18	22
Maximum power consumption	1.5	2.5	3.5	5	7
Power	AC220V、50HZ		AC380V、50HZ		
Ambient temperature and humidity	Below 35℃, <85%RH				
Test area Temperature	Salt water test method (NSS ACSS) 35℃±1℃/Corrosion resistance test method (CASS) 50℃±1℃				
Pressure barrel temperature	Salt water test method (NSS ACSS) 47 °C ± 1 °C / Corrosion resistance test method (CASS) 63 °C ± 1 °C				
Salt water solubility	Add 0.26g copper chloride (CuCl2 2H2O) per liter to 5% sodium chloride solution or 5% sodium chloride solution				
pH value	6.5~7.2 3.0~3.2				
Compressed air pressure	1.00±0.01kgf/cm2				
Spray volume	1.0~2.0ml/80cm2/h (collect for at least 16 hours and take the average value)				
Inner Chamber material	Imported corrosion-resistant, aging resistant, high-strength PVC board				
Heater	Corrosion resistant U-shaped titanium pipe				
Temperature controller	LED digital display temperature controller, touch screen controller				
Spray Method	Continuous and intermittent spray				
Demisting device	No	Equipped			
Safety Devices	Over temperature protection switch, leakage protection, status warning light				

3.Control system(Standard configuration)

1. The temperature controller in the laboratory is 0-99 °C, the liquid crystal double digital display has p.i.d automatic calculation, and the control error is ± 1 °C

2. Pressure air barrel temperature control 0-99 °C, LCD double digital display with p.i.d automatic calculation, control error ± 1 °C
3. High precision multi-function digital display timing controller 0.1s-9990hr (Zhejiang Julong)
4. Time integrator 0-99999 HR (camscohm-1, Taiwan)
5. Relay (Omron, Japan)
6. Spray solenoid valve (Japan KSD)
7. Air filter (AIRTAC, Taiwan)
8. Pressure regulating valve (AIRTAC, Taiwan)
9. Water filling system: automatic and manual water filling system is adopted, and it is automatically supplemented when the water level is too low
10. Timing system: high precision timer with power failure memory function is adopted, and the test time setting is multifunctional 0.001s-9999.9h can be set Until the required time for product completion.

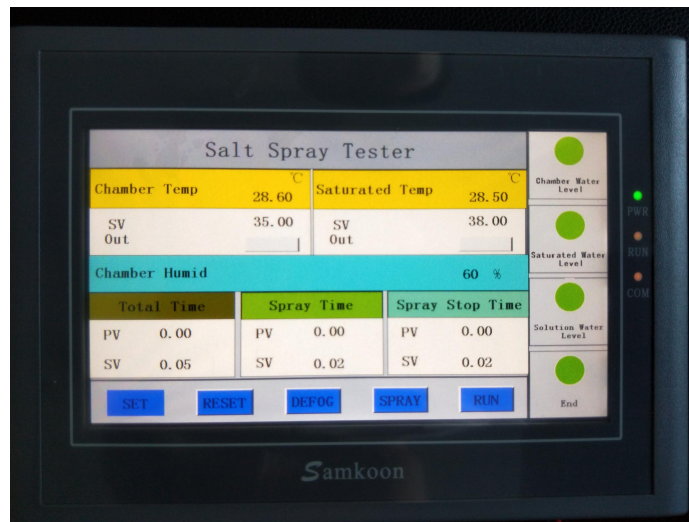
3.1 Touch screen control system (Optional)

Using a 7-inch touch controller, it can conduct constant value (i.e. continuous, or constant temperature) experiments or programmable (intermittent, cyclic) salt spray experiments. One of them can realize multiple functions and meet the different salt spray experiment requirements of customers High precision temperature control module, PID automatic calculation control temperature, high stability platinum temperature probe, error ± 0.3 °C.

Timing mode; Hour mode,

The controllers are all on the same panel, which is easy to operate and clear at a glance.

The temperature data in the experimental process is stored accurately and intuitively, and the accuracy of analysis is high.



4. Water filling system

Automatic / manual water filling system is adopted, with automatic / manual water filling function when the water level is insufficient. The experiment is uninterrupted and meets the diversified environmental requirements of guests. (automatic water replenishment only needs to be connected to the tap water pipe)

5. Heating Method

In the salt spray experiment, the method of direct steam heating is adopted, which has the advantages of fast heating speed, uniform temperature distribution and short standby time.

6. Control method

Rocker type standard operation. With full detection fault early warning system. When the fault occurs, it can be alerted.

Built in manual demist function The product can be placed or viewed during the experiment to remove the salt mist accumulated in the experiment.

Spray mode: continuous.

7. Protection devices

With double over-temperature protection (Italy EGO), the heating power can be automatically cut off when the temperature control meter fails or the heating system fails. Avoid high temperature damage to

the instrument.

Double low water level protection to prevent dry burning and damage to the heating pipes of the laboratory and pressure barrels.

With overload short circuit protection. To prevent damage to the instrument and the electronic control accessories inside the instrument in the event of an abnormality. (A reminder of the low salt level of the real brine bucket in the experiment is attached to avoid abnormality in the experiment after the brine is completed)

8.Measuring cylinder

A built-in fog collection tube is used. Compared with the traditional external type, it is less likely to be damaged.

9.Spay nozzle

Precision quartz glass nozzle Ensure no crystallization after 4000 hours of use The spray tower is equipped with a conical disperser, which has the function of guiding fog

Adjust the fog saving amount, and evenly drop fog and other functions.

10.Sealing method

The inner and outer chamber are connected with sealing grooves and sealed with water Prevent salt mist from leaking out.

11.Control panel main parts

Name	Qty
Temperature controller (Huibang)	2pcs
Timing controller (Zhejiang Julong)	1pc
Timer	1pc
Platinum resistance (Baoguang, Hong Kong)	2pc

Spray solenoid valve (Japan KSD)	1pc
Solid state relay (Schneider, Germany)	2pc
Intermediate relay (Japan ormon)	3 sets
Heating tube (customized titanium tube)	1pc
Pressure regulating valve (AIRTAC, Taiwan)	1pc
Air filter (AIRTAC, Taiwan)	1pc

12. Appendix:

Prats name	Qty	Parts name	Qty
V-shape sample holder	1 group	O shape sample holder	1 group
Sodium chloride	2 bottles	5000measuring bucket	1pc
Hydrometer	1pc	Operation manual	1pc

13. Temperature range

1: Laboratory temperature: 35℃--50℃ (can be set arbitrarily)

2: Pressure barrel temperature: 47℃--63℃ (can be set arbitrarily)

14. Heating rate

1: Laboratory, normal temperature -- → 35 °C, about 35 minutes

2: Pressure barrel, normal temperature -- → 47 °C, about 15 minutes

15. Temperature control accuracy: ± 0.3 °C

Distribution uniformity: ≤ 2 °C (in line with relevant domestic and international standards)

16. Brine concentration 5% PH value requirements:

Neutral test 6.0~7.0 Acid test 3.0~3.1

PH value of spray solution: neutral 6.5~7.2 acid 3.1~3.3

Note: The loss of carbon dioxide in the solution during spraying may cause a change in pH value. The content of carbon dioxide in the solution can be reduced by the following methods, such as heating the solution to above 35°C before placing it in the test equipment, or using fresh boiling water to prepare the solution. , can avoid the change of pH value, acid test or copper accelerated salt spray test to ensure the pH value of spray solution, can adjust the pH value of the prepared liquid medicine to 2.8 ~ 3.0 and check whether the solution and/or solute meet the requirements

17. Test to meet and product implementation standards

GB/T2423.17-2008/IEC 60068-2-11-1981	Salt spray test method
ASTM.B117-2009	Salt spray test
JIS H8502	Salt spray test method
GB/T10125-2012/ISO 9227-2006	Salt spray test method
GB-T5170.8-2008	Test method for environmental test equipment for electrical and electronic products-Salt spray test equipment
GB-T5170.11-2008	Test method for corrosive gas test equipment
ISO9227	Salt spray test
GB-T10587-2006	Technical conditions of salt spray test chamber

18. Power supply requirements

AC220V single-phase two-wire + protective grounding or AC380V three-phase five wire system;

Allowable voltage fluctuation range $\pm 10\%$ v;

The allowable frequency fluctuation range is $50 \pm 0.5\text{Hz}$;

The user is required to configure the air or power switch with corresponding capacity for the equipment at the installation site, and this switch must independently control the use of the equipment.

19. Air source requirements

Air compressor: Power 2.5P (or above) Air storage tank capacity 60L (or above)



样品架
Specimen Holder



控制面板
Control Panel



调压阀
Pressure Regulator



水平调节轮
Horizontal
regulating wheel