

# WET AND DRY COMBINED SALT SPRAY TESTER

MODEL ITK-B008

900×600×500(W×D×H)mm  
other sizes can be customized



Meet the standards:

GB/T5170.8, GB/T10587, GJB150.11, GB/T10125, GB/T2423.17, etc.

DIN50021 DIN50017 DIN50907 ISO 11977 ISO 9227 ASTM B117

ASTM G85 automobile and other industrial specifications.

1. Experimental space:  
900×600×500(W×D×H)mm other  
sizes can be customized

2. Outer space: according to the  
actual size

3. Power supply: 380V 6KW  
50HZ MAX 30A

4. Materials:

(A) imported PVC board is adopted in the laboratory, which is acid and alkali resistant.

(B) imported PVC board in the outer box, resistant to acid and alkali.

(C) the test replenishment tank is equipped with a hidden water table, which is easy to clean and not easy to break.



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5, according to customer test requirements,  
can be set the salt dry and wet composite test

Salt spray test - moisture/Wet test

(A) brine spray laboratory: NSS, CASS

(1) laboratory:  $10\% \sim 50\%$

(2) saturated air bucket:  $47\% \pm 1\%$

(B) moisture test:

(1) temperature:  $40\% \pm 2\%$

(2) humidity: more than 93%~100%

(2) saturated air bucket:  $47\% \pm 1\%$

(C) drying test:

(1) temperature:  $15\% \sim 50\% \pm 1\%$

(2) humidity: over 30%

### 6. Air supply system

The air pressure is  $1\text{kg}/\text{cm}^2$ , which can be adjusted in two stages. The first is the imported pressure regulating filter with the function of filtering water.

Adjust to  $2\text{--}2.5\text{kg}/\text{cm}^2$  roughly, the second is the imported precision pressure regulating valve, adjust to the pressure gauge  $1\text{kg}/\text{cm}^2$ .

### 7. Spray method:

1. Apply bernoulli principle to take and absorb salt water and atomize it, the atomization degree is even, without blocking crystallization, to ensure the standard of continuous test.

2. Nozzle: made of special glass nozzle, the size and Angle of spray can be adjusted.

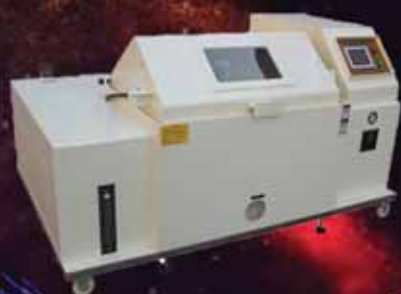
3. Spray volume: adjustable  $1.5 \pm 0.5\text{ml}$   
 $80\text{cm}^2/\text{Hr}$  (16-hour average volume).

4. large brine storage tank, 48HR continuous spray.

### 8. Heating system:

External hot air heating method is adopted to reduce standby time and component damage rate.

S.S.R control heating power, accurate temperature, low power consumption. (titanium alloy corrosion prevention tube for electric heat pipe)





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## 9. Circuit control system

1. The main controller adopts 7-inch LCD human-machine interface, and the main screen can plan the test program.
2. The fixed time can be set 0-999 H 59 MIN.
3. The program mode can set salt spray and moisture test at the same time
4. With power off memory device, the remaining program can be continued when power back.
5. The rise and drop of temperature can be used for speed control and self-calibration of temperature and humidity reference points.
6. Temperature and humidity sensor the DIN PT - 100  $\Omega$  (platinum).

## 10. Inlet and drainage system:

The water inlet adopts the automatic water replenishment system. When the water level is too low, it will be replenished automatically, and manual water replenishment can be used. Drainage water pump with acid, alkali and corrosion resistance, increase the service life, reduce the waiting time for drainage. All pipeline accessories are imported acid-alkali corrosion resistant components, long life.



## 11.. Humidification system:

1. Electronic bit mode P.I.D micro humidification system is adopted.
2. Attached overheat and overflow double protection device.
3. The humidification and dehumidification systems are completely independent.
4. Water level control mining height molecular floating ball water valve.
5. Automatic humidifying water replenishment device.(the machine should be connected to the water source)

## 12. Dehumidification system

The evaporator condenses and dehumidifies, and the humidity is stable.

Bubble acceleration humidifier, humidity stability rate is fast.

Adopt high speed return air extraction system.

## 13. Safety protection device:

1. With leakage power off type no fuse protection switch.
2. Low water level protection switch.
3. Low-salt protection switch
4. Double overtemperature protection device can prevent mechanical or electronic movement from losing control.
5. Failure point Chinese indication screen.





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## 14. Contents:

1. 6 shelves
2. Two standard measuring tubes
3. 2 glass filters
4. Collector 80cm<sup>2</sup> 2
5. 2 glass nozzles



**15. Attachment:** 500g of test drug sodium chloride (NaCl), 2 bottles of operation manual, 1 copy

**16. Operating environment:** performance guarantee environment temperature range :+5℃ ~ +30℃ (but the lowest available temperature, the highest thermal load energy Force and cooling time excepted)

**17. Power supply:** 380V three-phase 50HZ MAX 30A



## Function Introduction

Salt fog environment

Continuous salt spray exposure is widely used to test the corrosion resistance of components and coatings. Applications include industrial, maintenance, construction and Marine coatings; Plating and paint layers; Aviation and military coatings, surfaces and components, electrical and electronic systems and components.

Most of these tests, according to special specifications, are widely used in related corrosion tests and generally operate at higher temperatures, excluding the drying cycle. The required jet air should be heated before entering the nozzle. During the salt spray function, this test chamber ACTS as a typical conventional salt spray operation.

- the air jet solenoid valve opens and the compressed air is humidified through the saturator (humidity helps keep the PH concentration stable) to the nozzle.
  - the corrosive solvent from the brine tank is sucked to the nozzle where it is mixed with compressed air.
  - the nozzle will spray the brine solvent and air into a corrosive mist.
  - the box heater maintains the programmed box temperature.
- This function is also used for pure water mist exposure.





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### Dry environment

During the drying function, the dehumidification system is turned on to discharge the moisture from the box out of the box, while the fan works so that the indoor air goes to the air heater and then into the box, thus creating low humidity conditions in the box. The temperature of the cabinet is controlled by the cabinet heater and the air heater. The air heater is shut down for 5 seconds before the end of the drying process so that the heater channel and the vicinity of the components do not overheat due to the closing of the blower.

### Humidity environment

During the humidity function, hot water in the humidification tank boiler is evaporated into the tank to keep the set humidity of the tank.



### Condensate environment

During the condensation process, the water in the tank is heated through a heating tube in the tank bottom to keep the tank body at about 100% relative humidity.

### A resting (storage) environment

During the static function, the temperature of the cabinet is automatically maintained by the cabinet heater. No spray, drying, air washing, or humidity is produced.

