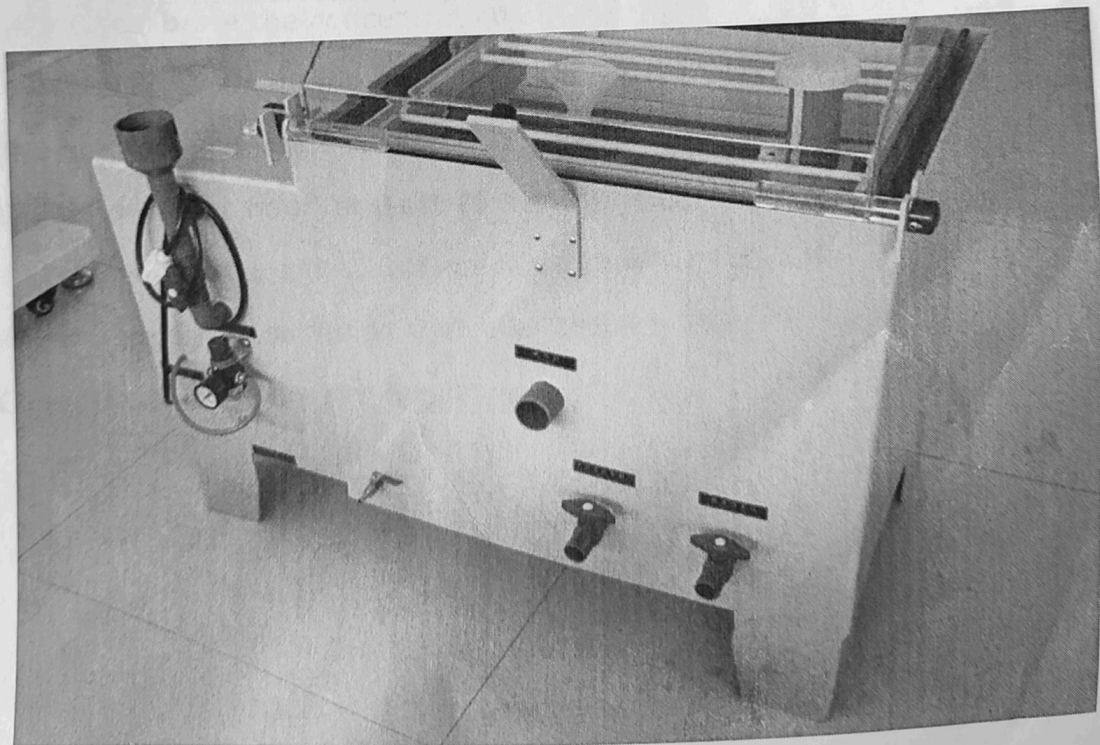
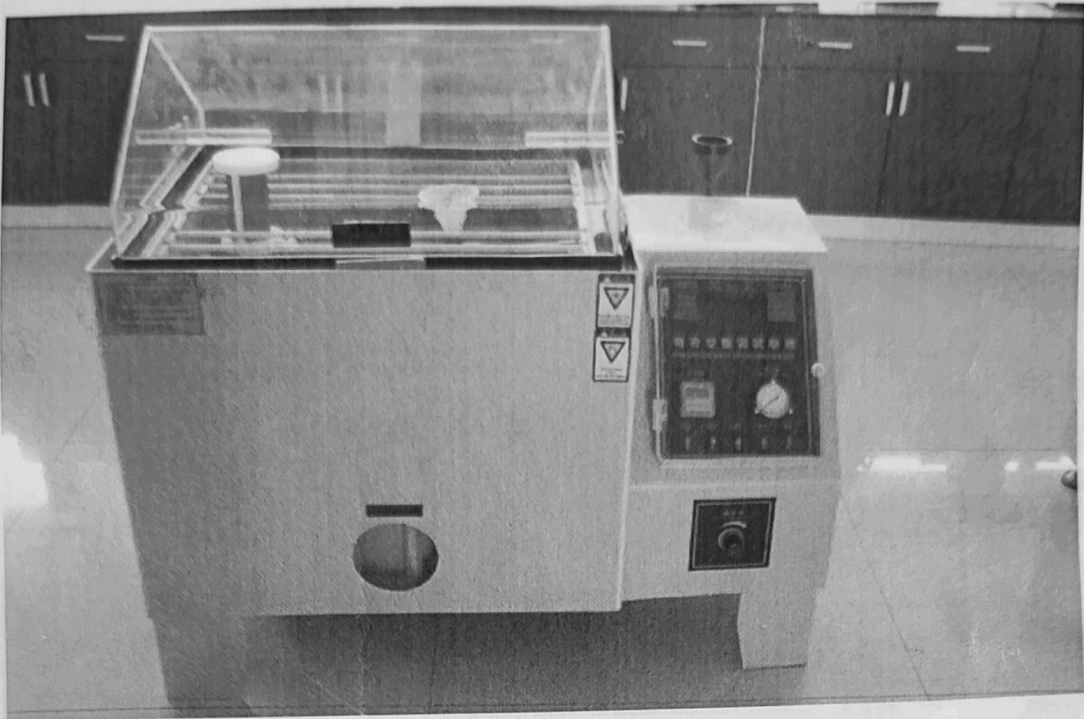


Method of Salt Spray (Fog) Test for Surface Finishing



✧ Scope of application:

This product is used to test the corrosion resistance of the electrodeposited coating of many kinds of metallic materials.

✧ Test procedure:

Use the salt spray test machine to spray the Sodium Chloride Solution to the surface of electric coating to achieve the purpose of detection.

✧ Main test conditions:

project	During dispensing	During experience	remarks
Concentration of Sodium Chloride Solution (g/L)	50	40~60	①
PH	6.5	6.5~7.2	②
Compressed air pressure(kgf/cm ²)	...	1.00±0.01	③
Spray amount(ml/80cm ² /h)	.....	1.0~2.0	④
Pressure barrel temperature(°C)	.....	47±1	
Salt water bucket temperature(°C)	.....	35±1	
Laboratory temperature(°C)		35±1	⑤
Relative humidity of testing room	.....	More than 85%	⑥
Test time			⑦

- ① Best to calibrate the concentration once a day.
- ② Test the PH value during experience after collection.
- ③ Continuously, cannot interrupt.
- ④ Collect once per hour, at least 16 hours, mean the average value.
- ⑤ Test at least twice a day, interval seven hours every time.
- ⑥ Other humidity required by the seller and the buyer agreement.
- ⑦ Continuous time from the beginning to the end.

✧ Preparation of test solution :

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✧ Preparation of test solution :

Dissolve some reagent grade sodium chloride in distilled water to compound the test solution with a concentration of 5%, PH value should be 6.5~7.3. And reagent solution can not contain solid suspensions before testing.

Notes:

1. Sodium chloride cannot contain impurity of nickel Tongxing. The content of sodium iodide in solid should be less than 0.1%. Because the impurities may contain corrosion inhibitors, the impurity amount should be less than 0.3%.
2. Specific gravity of the test liquid should be 1.0258~1.0402 if the temperature is 33 ~ 35 , if the temperature is about 25, the ratio should be 1.0292~1.0443.
3. The PH value of test solution should be adjusted with reagent grade hydrochloric acid or sodium hydroxide solution ,and measure with PH meter or other reliable methods.

◇ Equipment:

All equipment needed in the test: Spray nozzle, salt water barrel, test piece support, spray liquid collection container, test chamber, salt water, supply tank, pressure tank, supply equipment and exhaust equipment required for compressed air, the device is shown in Fig, and test as followed.

- ✓ Blunt material is required, it is required that the material itself cannot be corroded, and it can not affect the corrosion test.
- ✓ The fog nozzle cannot spray the test liquid directly to the sample , the solution at the top of the spraying chamber cannot drop on the test piece.
- ✓ The test liquid dropped from test piece cannot flow back to the salt bucket again for the test.
- ✓ The solution should not contain grease and dust, so you have to prepare an air cleaner.
- ✓ The level area of the spray taking device is 80 cm², the diameter is about 10 cm. Put the spray taking device beside the test piece.
- ✓ Spray liquid should be collected at least 16 hours, an average per hour can be collected 2ml to 1ml solution. Use the final average to represent the amount of spray.
- ✓ The concentration of the Sodium Chloride Solution should be maintained at 40~60g/L.
- ✓ The temperature of the pressure barrel should be kept in 47+1 degree, temperature of the brine barrel should be kept in 35+1 degree.

◇ Sample:

✓ Adopted place:

Samples may be taken from the main surface of the product, or directly use the product as a sample. But if the product can't be used to test or judge, you can use a test piece instead, the test piece is required to stand for the product.

✓ Size:

The standard size of the test piece is 150*70mm or 100*65mm.

✓ Amount:

The amount of the test pieces depends on actual situation.

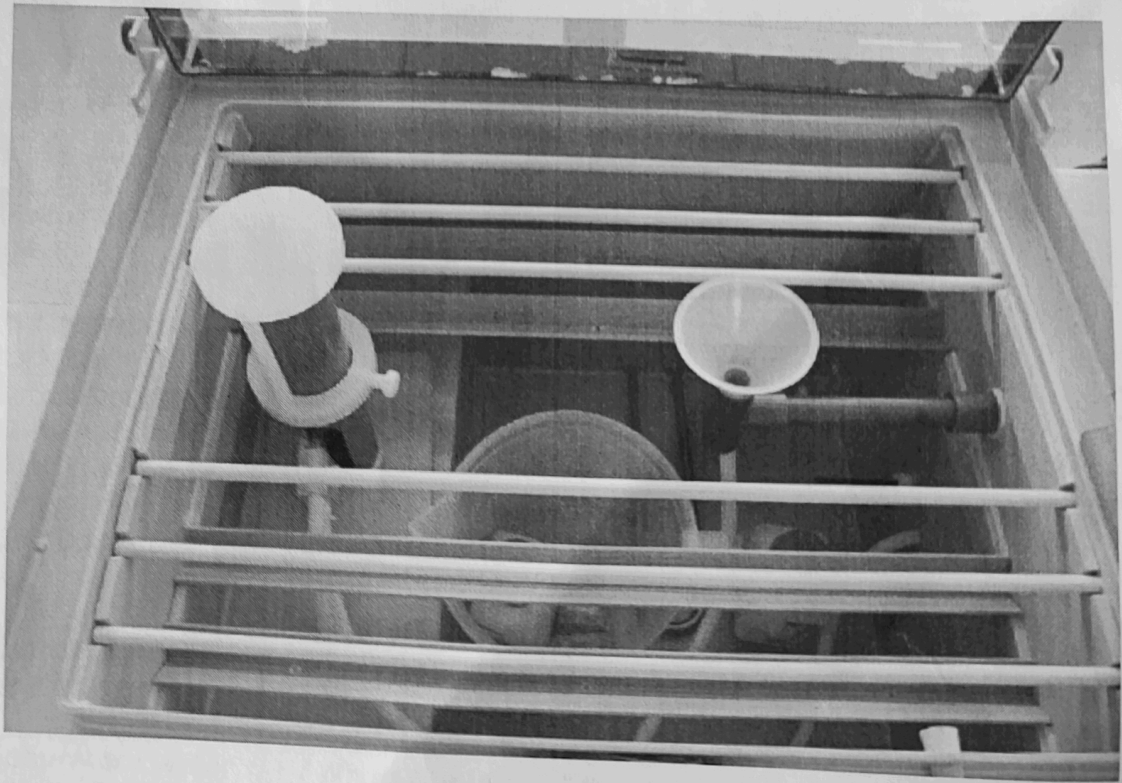
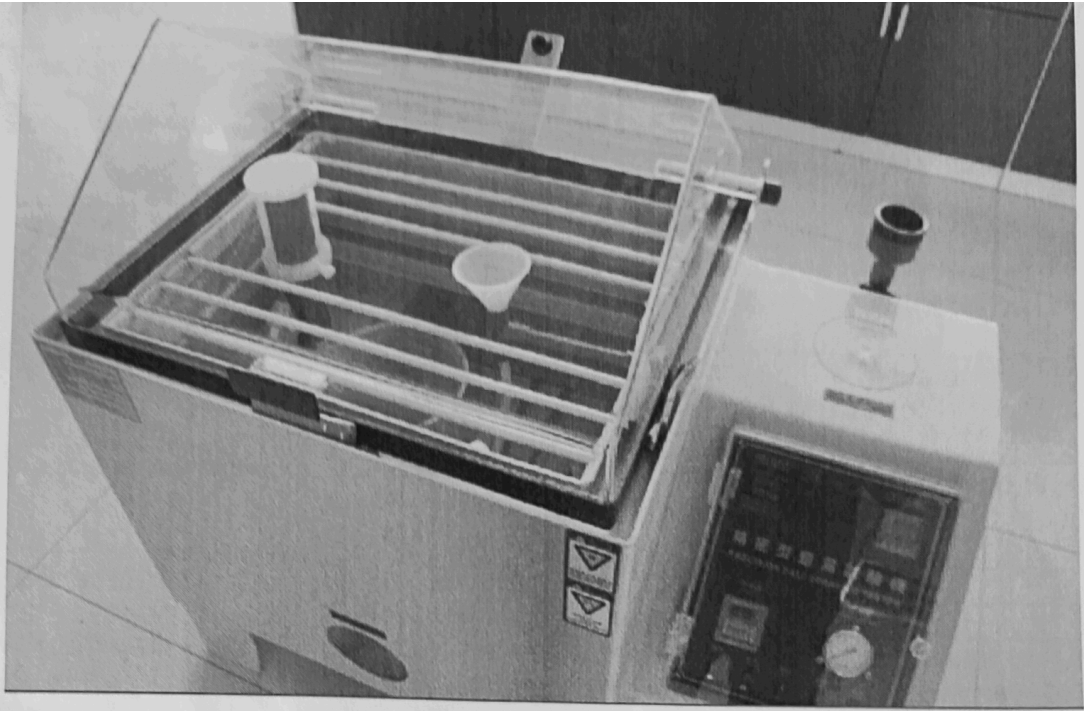
✓ Pretest treatment:

Some cleaning is required depended on the nature of the coating and the degree of cleanliness, the cleaning method should not damage the surface of the test piece.

The handprint may cause serious results of testing.

◇ Sample placement:

- ✓ If you need to test many pieces, make sure that every major surface can be detected by salt fog at the same time.
- ✓ Permutation of samples, the spray should be free to drop on all the test pieces, preventing the situation of blocking the spray.
- ✓ Each sample cannot be in contact with each other.
- ✓ Salt spray can't drop from one test piece to another one.
- ✓ Sample identification mark should be marked on the bottom of the test piece.



Introduction of product structure:

Test barrel internal structure	
Spray tower	The internal built-in sprinkler nozzle in spray tower, after the guide tube conical diffuser dispersed into the test chamber.
Spray regulator	Adjust the amount of the spray, add and reduce
Collector	The spray nozzle falls out, by a free falling funnel falls in the cup, then flow through the catheter to the metering cup.
Placing rack	The rack is made of plastic steel, the focus of the weight of not more than 2 kg, if placed to withstand 10 kg.
Heating water tank	The heating water tank with U type heating pipe is used to hold the water heater to keep the temperature of the test chamber stable.
Gauging tank	Collect the amount of spray per test
Water seal tank	Water seal to avoid leakage of salt mist.
Saturated air drum	Warming and humidification of air, after the air is saturated, the air is reached to the spray nozzle.
Test inlet	Automatic adding salt solution
Test cover	Used to cover the top of the test chamber
Pressure regulating valve	Used to adjust spray pressure, only when the spray switch is turned on, the machine can be adjusted.
Pressure gauge	The pressure displayed by the pointer is that the air is heated by the saturated air tank and communicated to the pressure of the nozzle.
exhaust pipe	When doing the experiment, it is best to connect a hose to the salt spray to the bucket, cannot be blocked or seeped.
Test chamber drain valve	Open the valve when the test chamber needs to be replaced.
Test room temperature controller	This is a tool to control the temperature of the test room.
Saturation barrel temperature controller	The temperature safety set value should be 5 degrees higher than the actual temperature.
time-meter	Can be arbitrarily set the time required for the test.
Salt spray test	Test room temperature controller sets 35 degree, saturation barrel temperature controller sets 47 degree.
Corrosion resistance test	Test room temperature controller sets 50 degree, saturation barrel temperature controller sets 65 degree.
Laboratory water shortage lamp	When the laboratory is short of water, the light is on, reminding us to add water.
Saturation barrel water shortage lamp	When the saturated barrel is short of water, the light is on, reminding us to add water.

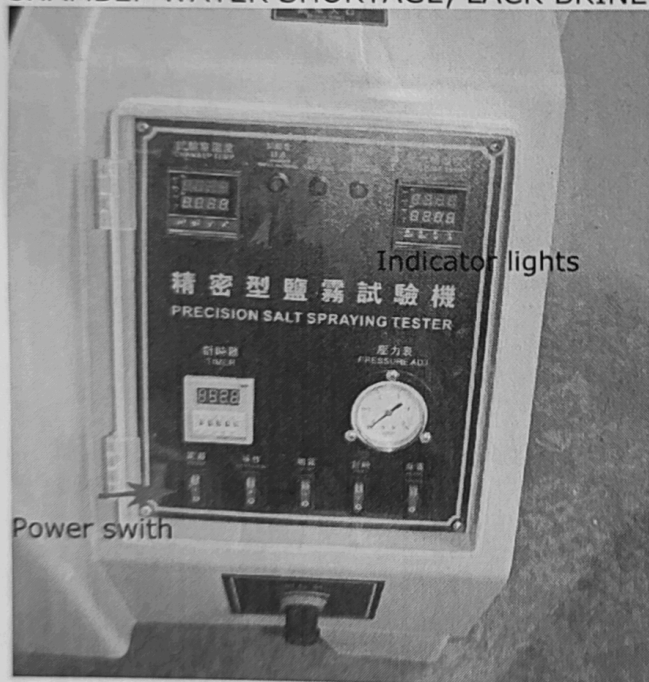
◇ Introduction of using

1. Plug on 110 v supply, inserted trachea (diameter 8mm) into the compressed air inlet.



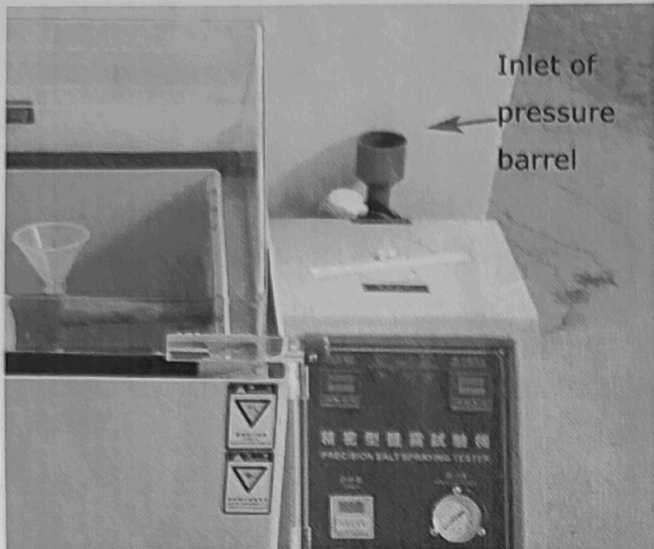
Notice: The inlet pressure is 2kg/cms.

2. Turn on the POWER switch. The operating board will display 3 lights. CHAMBER WATER SHORTAGE, LACK BRINE, PRESURE WATER SHORTAGE.

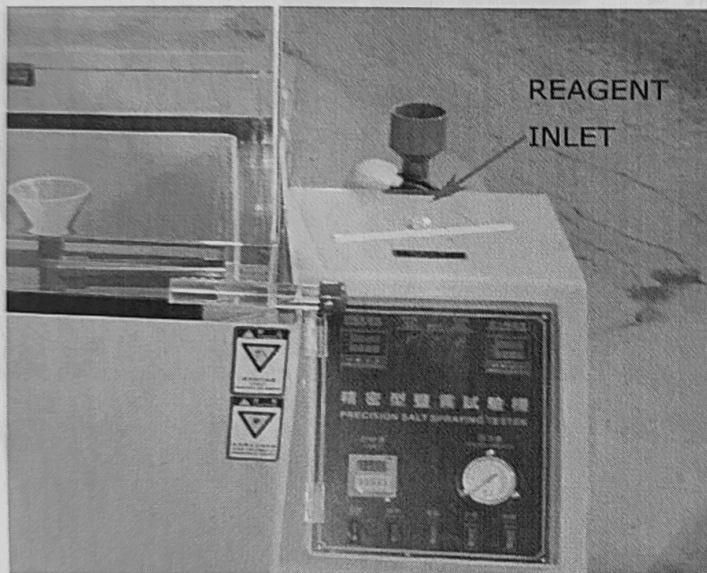


3. CHAMBER WATER SHORTAGE is red. Putting water(tap water) into the chamber cabin until the red light gone.

4. PRESSURE WATER SHORTAGE is red. Putting water (tap water) into the INLET until the red light gone.

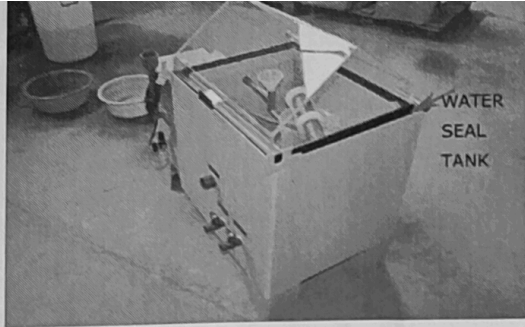


5. LACK BRINE is red. Putting salt water into the REAGENT INLET until the red light gone.



Notice: **The proportion of Configuration brine : NaCl 500g, Water 9500ML.**

6. Cover the transparent lid, pulling the water into WATER SEAL TANK to drown.



7. Turn on the OPERATING switch, set the CHAMBER TMP. PRESRURE TMP. The CHAMBEP TMP is 35C. PRESRURE TMP is 47C. Then put the V shelf and the O Support rods. Putting the experimental object on the shelf.



8. Turn on the SPRAY switch. Adjust the PUESSURE VALE to



Do not more than 1kg/cms, or the high pressure will damage the pipe.

9. Set the TIMER .