

## CY013 Ozone Aging Test Chamber



(Figure 1.1: CY013 Ozone Aging Test Chamber)

## **A. Use conditions**

Ambient temperature: 0 °C ~ 35 °C

Pressure: standard atmospheric pressure

Relative humidity: ≤90%RH

Power: 220V±10%

## **B. The main technical indicators**

This series of test cases of ozone produced by ozone generator can be used in the nonmetallic material, organic material, coating, rubber, plastic, paint, paint, etc.) under the condition of ozone aging test.

1, Internal chamber size (mm): 400 \* 400 \* 500

2, Ozone concentration: 25 ~ 500 PPHM (adjustable)

3, Deviation of ozone concentration: ≤5%

4, Laboratory temperature: RT + 10 ° ~ 60 °C

5, Temperature fluctuation degree: ±0.5°C

6, Evenness±2°C

7, Test gas flow: 20~80L/min

8, Test device: static

9, Sample holder speed: 360 rotary rack (speed 1 revolutions per minute)



10, Ozone source: ozone generator

11, Sensor: British import ozone concentration sensor, can achieve precise control

12, PLC controller



13. Main control interface



14. Standard: GB/T7762-2003, ASTM1149 ,ISO1431,GB/T136421-92,HG/T2869-97

## **C. Structure and main characteristics**

### **Structure**

- 1, The whole body shell are studied experimentally by 1.2 mm by the CNC machine tool production of electrostatic spraying, color is shallow the color of camel's hair; Laboratory of SUS304 advanced anti-corrosion lining material of stainless steel plate, reasonable structure design, sophisticated manufacturing technology, beautiful in appearance. According to the laboratory temperature requirements, design of insulation layer thickness is 100 mm.
- 2, Box inside outside of thermal insulation material for quality cotton superfine glass fiber insulation, heat preservation of cold or hot, the effect was good.
- 3, Door and door frame between unique silicone seal structure and seal material imported, sealed performance is good.
- 4, Test structure: the door is a single to open the door. Lock, hinges and other hardware accessories for imported accessories.
- 5, With conductive film hollow glass observation window, the door window size 200 x 300mm. Observation on the glass with electric heater, prevent condensation and defrosting.
- 6, Heater: stainless steel 316 L1 fin chip dedicated electric heat pipe;
- 7, Equipped with four universal wheel is advantageous for the enclosure movement;

### **Control system**

- 1, PLC controller, ozone concentration control instrument, supporting the UK import ozone concentration sensor, detection and control precision of ozone concentration and ozone concentration deviation can be controlled to  $\leq 5\%$  (national standard  $\leq 10\%$ );

- 2, Temperature control instrument, PLC, man-machine touch screen
- 3, Heat sensors: PT100 platinum resistance temperature measurement tester;
- 4, Control ways: thermal equilibrium temperature adjustment way;
- 5, Electrical control components: the "schneider" and "omron" components, better control of temperature.

### **Safety protection device**

- 1, Overall equipment of temperature.
- 2, Overall equipment timing.
- 3, Overall equipment overloads.
- 4, There are other leakage, operation instructions, and alarm after the automatic shutdown protection, etc.

### **Power**

1. The rated power: 4.5 KW
2. Power supply: AC220V $\pm$ 10%, 50HZ
3. Machine noise:  $\leq$ 70dbA