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UV Xenon Weathering Test Chamber

Xenon lamp test box adopts can simulate full sunlight spectrum xenon arc lamp to reproduce the destructive waves of light of different environment, for scientific research, product development and quality control to provide the corresponding environmental simulation and accelerated test.

xenon lamp test chamber can be used for the selection of new materials, improvement of existing materials or evaluate material composition change after the change of the durability test, can be a good simulation under different environmental conditions, materials exposed to changes in the sun.

Functions

- Full spectrum xenon lamp
- > A variety of alternative filtration system
- Water spray
- Relative Humidity Control
- > Test chamber air temperature control system
- Irregular shape of the fixed frame sample
- Cheap and fine xenon arc lamp
- Easy installation and easy to use and with almost no daily maintenance characteristic
- > Xenon arc lamp life depends on the use of radiation intensity of illumination level, general lamp life 1600 hours. Fast and convenient to replace the tubes, long-lasting guarantees the spectra of the filter for maintaining the needed.

Parameters

- 1.Environment temperature: 5° C \rightarrow + 35° C (The average temperature in 24 hours \leq 35°C)
- 2. Environment humidity: ≤85%R.H
- 3. Operating environment need 35 degrees at room temperature and ventilation is good, the machine put anything cannot be placed around before and after each 80 cm;

Main Technical Feature

- 1. Dimensions of the working chamber (mm): (800×800×800)(W×D×H)
- 2. Temperature Range: 10°C ~80°C
- 3. Humidity Range: 20%~80%
- 4. Blackboard Temperature: 63° C. 100° C (precision $\pm 3^{\circ}$ C)
- 5, temperature fluctuation: ≤±0.5°C
- 6、temperature uniformity: ≤±2.0 $^{\circ}$ C



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- 7、humidity fluctuation: +2%~-3% R.H
- 8. Glass filter: borosilicate glass
- 9, xenon light source: Water-cooled xenon arc source of imports
- 10 Xenon lamp power: 3KW
- 11、Xenon lamp power: 1pcs
- 12、Rainfall time: $1\sim$ 9999min, Adjustable continuous rainfall
- 13、Rainfall cycle : $1\sim$ 240min, Interval rainfall is adjustable
- 14、Spray nozzle aperture: Φ0.8mm (Back to the hose ultra-fine filters to prevent the nozzle blocking)
- 15. In the rain water pressure: 0.12~0.15kpa
- 16. Water cycle (time of spray water/ time of no spray water) :18min/102min or 12min/48min(time of spray water/ time of no spray water) Pressure of spray water $0.12 \sim 0.15$ Mpa
- 17、Heating power: 4.5KW
- 18. Humidifying power: 3KW, The sample tray size: 970×980mm
- 19. Continuous adjustable light cycle time $0\sim$ 999 hours
- 20 \searrow spectral wavelength:295nm \sim 800nm Irradiance range 100W \sim 800W/m 2 Adjustable
- 21. Strictly according to the GB/T16422.2-99 (2007) technical parameters this product is

designed and manufactured

At the same time meet such standard as (GB/T1865-97 (2007), GB/T9344-88, GB/T16422.2-99, GB/T2423.24-1995, ASTMG155, ISO10SB02 / B04, SAEJ2527, SAEJ2412)

COOLING SYSTEM

- (1) Cooling system and the compressor
- 1. Refrigeration compressor: Imported from French "Tai Kang" fully enclosed refrigerating unit.
- 2. Cooling mode: air cooling

Refrigerating fluid: Environmental protection refrigerants R404A

4. The main refrigeration accessories: Japanese "Lu Gong" electromagnetic valve The United States "Emerson" dry filters, etc.

Quality home and abroad well-known brands of air-cooled condenser and evaporator fins more.

- (2) Refrigeration system advantages
- 1. Improve the lubrication performance and lower the piston temperature lead to greater reliability;
- 2. Streamlined fuselage improves airflow management; Reduces pressure and improves the refrigeration efficiency;
- 3. At the top of the unloading valve provides continuous minimum discharge pulse;
- 4. SENTRONIC provide reliable lubrication protection system;
- 5. Use would not be prohibited the Montreal convention or London amendment of environmentally friendly refrigerant R23, R404A (excluding CFC)

CONSTRUCTIVE MAIN FEATURES Enclosure structure and main characteristics

Ø The overall structure is introduced

- 1 The whole body shell adopts delicate painting or stainless steel material
- 9 Optional); Laboratory of SUS304 advanced anti-corrosion lining material mirror stainless steel plate, reasonable structure design, and sophisticated manufacturing technology, beautiful in appearance. According to the laboratory temperature requirements, design of insulation layer thickness is 100 mm. (at the top of the light box, the use of



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advanced design, easy to open lamp maintenance and repair.)

- 2 Inside the box and carton between thermal insulation material for high quality superfine glass fiber insulation cotton, heat preservation of cold or hot, the effect was good.
- 3. Between the door and door frame adopts imported seal material and unique silicone seal structure, good sealing performance.
- 4. Testing chamber door structure: Single-door .Locks, hinges and other hardware accessories for "KUNLONG" original accessories.
- 5. Inside duct using binary system, the long axis axial flow fan, stainless steel centrifugal rotor vane and circulation of air duct, in the wind, into the bellows under uniform temperature, improve the ability of the air flow, heating and cooling, significantly improve the uniformity of temperature and humidity test chamber.
- 6. The board temperature: double metal blackboard thermometer
- 7. Humidification way: external isolation type stainless steel shallow surface evaporative humidifier;
- 8. Heating system: the whole system independently, nickel-chromium alloy electric heating heater;
- 9. Water supply system, add wet water use pump automatic control;
- 10 Temperature and humidity system: adopting the special high temperature resistant type long axis of the low noise fan motor, high and low temperature resistance of stainless steel vane impeller, so as to achieve strength vertical convection diffusion circulation;
- 11 On top of the studio installed four nozzle;
- 12 Irradiance control: Can be controlled automatically by the radiometer adjusting power required to irradiance (than manual measuring method is accurate, because the lamp test cycle will droop and there is no guarantee that in a more accurate irradiance);





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Rotating sample rack

