



Dongguan Hust Tony Instruments Co.,Ltd

东莞华科东尼仪器有限公司

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Xenon Lamp Aging Testing Machine TW-028-Manufactuer



1.Xenon Lamp Aging Testing Machine can simulate the xenon arc lamp of the full sunlight spectrum to reproduce the destructive light waves existing in different environments, which can provide corresponding environmental simulation and accelerated testing for scientific research, product development and quality control.

2.The SN type xenon arc lamp test chamber can be used for the selection of new materials, the change of existing materials or the change test to evaluate the durability of material composition changes, and can well simulate the change of materials exposed to sunlight under different environmental conditions.

3. Aging test is carried out by exposing the material sample to the light and thermal radiation of xenon arc lamp. To evaluate the light resistance and weather resistance of some materials under the action of high temperature light source. Mainly used in automobile, paint, rubber, plastic, pigment, adhesive, fabric and so on.

Technical Specifications

Model	TW-028
Inside Dimension	300×400×500mm (W × D × H)
Overall Dimension	1460×1280×1950mm (W × D × H)
Temperature Range	10°C~80°C
Humidity Range	65%~98%R.H
Black Panel Temp	63°C, 100°C (deviation ±3°C)
Temperature Fluctuation	≤±0.5°C
Temperature Uniformity	≤±2.0°C
Humidity Fluctuation	+2%~-3% R.H
Glass Window Filter	borosilicate glass
Xenon Lamp Source	Imported water-cooled xenon arc source
Xenon Lamp Power	3KW
Total number of Lamps	1 pcs
rainfall Time	1 ~ 9999 minutes, continuous rain adjustable
Rainfall Cycle	1 ~ 240 minutes, the interval (break) rainfall is adjustable
Nozzle hole Diameter	Diameter 0.8mm (return water ultrafine filter to prevent nozzle blockage)
Rain Pressure	0.12~0.15kpa
heating Power	4.5KW
Humidifying Power	3KW
Sample Tray Size	Sample tray size
The light cycle is continuously adjustable for a Time	0 to 999 hours
Spectral Wavelength	295nm~800nm
Irradiance Range	100W ~ 800W/m² adjustable
Net Weight	250 kg

Equipment Service Conditions

1. Ambient temperature: 5°C~+35°C (average temperature within 24 hours ≤35°C)
 2. Environmental humidity: ≤85%R.H
 3. The operating environment needs to be at room temperature below 35 degrees and well ventilated. Nothing should be placed 80 centimeters from the front, rear, left and right of the machine;
- Standards

GB/T1865-97 (2007)、GB/T9344-88、GB/T16422.2-99、GB/T2423.24-1995、ASTMG155、ISO10SB02/B04、SAEJ2527、SAEJ2412)

Box Raw Materials

- 1, the appearance of the instrument is made of high quality (t=1.2mm) A3 steel plate CNC machine tool processing, shell surface spray treatment, more bright and clean, beautiful;
- 2, the internal manufacturing material of the instrument is imported (SUS) 304 high-quality stainless steel plate;
- 3.High density glass fiber cotton and high pressure polyamine foam are selected as insulation materials.
- 4.Mixing system uses long-axis fan motor, high and low temperature resistant stainless steel multi-wing impeller, to achieve the strength of the convection vertical diffusion cycle;

5.A double-layer high tensile sealing strip with high temperature resistance is used between the door and the box to ensure the sealing of the test area;

6.High quality fixed PU movable wheel is selected at the bottom of the machine;

Heating System

1, choose far-infrared stainless steel high-speed heating electric heater;

2, high temperature, humidity, light completely independent system (do not interfere with each other);

3, temperature and humidity control output power is calculated by microcomputer, in order to achieve high precision and efficiency of electricity efficiency;

Humidification System:

1, the built-in boiler steam humidifier has the function of energy saving and consumption reduction, which can save 70% energy consumption;

2, with water level active compensation, water shortage alarm system;

3, humidity control is selected P.I.D+S.S.R, the system is harmonious control of the same channel;

Circuit control System:

1.Temperature and humidity control instrument selected "Korea original TEMI880" large screen - LCD display programmable microcomputer PID control SSR output operation, all imported large LCD contact screen screen, simple screen operation, simple program editing (optional);

2.P.I.D+S.S.R is selected for temperature control, and the system is controlled harmoniously with the same channel, which can improve the stability and life of the control components and interface

3. Touch setting, digital and direct display;

4. It has the function of automatic P.I.D calculation, which can reduce the inconvenience caused by manual setting;

5. Lighting, condensation, and spray can be controlled independently or replaced with cyclic control;

6. The independent control time of light and condensation and the time of replacement cycle control can be set arbitrarily within a thousand hours;

7.If an error occurs during operation or setting, a warning signal will be provided;

8. French "Schneider" components;

Lighting System:

1, blackboard thermometer: metal blackboard thermometer;

2, xenon lamp tube: test qualified water-cooled lamp, lamp life of 600-800 hours;

3, irradiance control: the required irradiance can be obtained through the radiometer and manual conditioning power, and the panel directly displays the radiation intensity of the lamp at that time;

Water jet circulation System:

- 1, water quality: deionized water (solid content less than 20ppm)
- 2, with the water level of the water storage tank;
- 3, the water sprayed is recyclable;
- 4, water spray pressure is adjustable between 0.12 ~ 0.15Mpa;
5. Two sprinkler heads are installed on the top of the studio;

Equipment Service Conditions

1. Ambient temperature: 5°C~+35°C (average temperature within 24 hours $\leq 35^{\circ}\text{C}$)
2. Environmental humidity: $\leq 85\%\text{R.H}$
3. The operating environment needs to be at room temperature below 35 degrees and well ventilated. Nothing should be placed 80 centimeters from the front, rear, left and right of the machine;

Standards

GB/T1865-97 (2007)、GB/T9344-88、GB/T16422.2-99、GB/T2423.24-1995、ASTMG155、ISO10SB02/B04、SAEJ2527、SAEJ2412)