

UV Accelerated Weathering Aging Test Chamber (Horizontal Type) Model: RC-UV3



Product Introduction:

This device is suitable for the accelerated aging test by exposing to light and water. It is used to predict relative durability of paint, coating, plastic and other non-metallic materials. It is suitable for observing physical properties of durable materials especially, such as gloss reduction, haze, strength reduction, pulverization, cracking, blistering, embrittlement and faded, etc.

Like other accelerated tests in laboratories, we can't use the test result of this device replace natural exposure to determine actual durable time of materials. But this device is relatively practical on assessing the anti-aging performance of materials rapidly, selecting or improving the new and old formulas, monitoring the quality of products by providing the contrastive experiment conditions.

Ultraviolet light is the main light factor result in durability reduction of outdoor products. Combine with fluorescent tubes possess stable spectral energy distribution and low price, ultraviolet aging test chamber becomes the most popular test chamber in the world because of its quick, convenient and economic advantages.

Because water is an important factor of accelerating aging. This device adopts the way of water spraying to simulate the effect of moisture. It can close to some environmental conditions of final use by setting the spray time, such as temperature change or rain wash result in mechanical erosion.

This model can also adjust the rate of photochemical reactions by temperature control mechanism in the appropriate range. To satisfy the durable demands of weather resistance tester, this device structures adopt corrosion resistant stainless-steel materials widely. Its design is simple, easy to use and maintenance.

You can get to know damages level of materials in a short time and judge the quality gap between test products and reference samples as long as you pay low use cost.

Standards:

IEC61215, ASTM D4329, D499, D4587, D5208, G154, G53;
ISO 4892-3, ISO 11507; EN 534; BS 2782; JIS D0205; SAE J2020, etc.

Features:

- UV accelerated weathering aging test chamber is designed according to uses' operation, it's easy to operate, safe and reliable.
- The thickness of specimen installation is adjustable and the specimen installation is fast and convenient.
- UV accelerated weathering aging test chamber door rotating up does not interfere with the operation and the tester takes a very small space only.
- UV accelerated weathering aging test chamber has unique compensating system can be contented by tap water.
- The heater is under the container rather than in the water, which is long life, easy to maintain.
- The water level controller is outside the box, easy to monitor.
- UV accelerated weathering aging test chamber has truckles, convenient to move.
- Computer programming is convenient, automatically alarming when incorrect operated or faulted.
- UV accelerated weathering aging test chamber has Chinese and English instruction book, convenient to consult.

Technical parameters:

Chamber Dimension	1100*580*350mm
Materials	Inside and Outside SUS#304 stainless steel
Temperature range	RT+10~70°C
Temperature uniformity	±2°C
Temperature fluctuation	±0.5°C
Temperature control	PID SSR control
Humidity range:	95%RH
Irradiance intensity	0.3-1.55 W/m ² (Adjustable)
Controller	Korean TEMI 880 programmable controller
Control mode	Balance temperature humidity control (BTHC)
Test Cycle setting	Illumination, condensation and water spray test cycle is programmable
Fluorescent UV Lamp power	40W/Piece 8pcs 320W
Distance from sample to lamp	Adjustable
Centre distance between the lamp	70mm
Wavelength ultraviolet light	UV-A: 315-400nm (4pcs) UV-B: 280-315nm (4pcs) (8pcs, 2000h lifetime)
Irradiation black panel temperature	45°C~80°C
Standard Specimen Size	≤1100 x 500mm Support Irregular Sample Shape
Water consumption	8L per day
Testing time	0~999H, adjustable
Power	220V/50Hz /±10% 4.5KW
Protection system	Overload short circuit protection, over temperature protection, water lacking

Machine Structure:

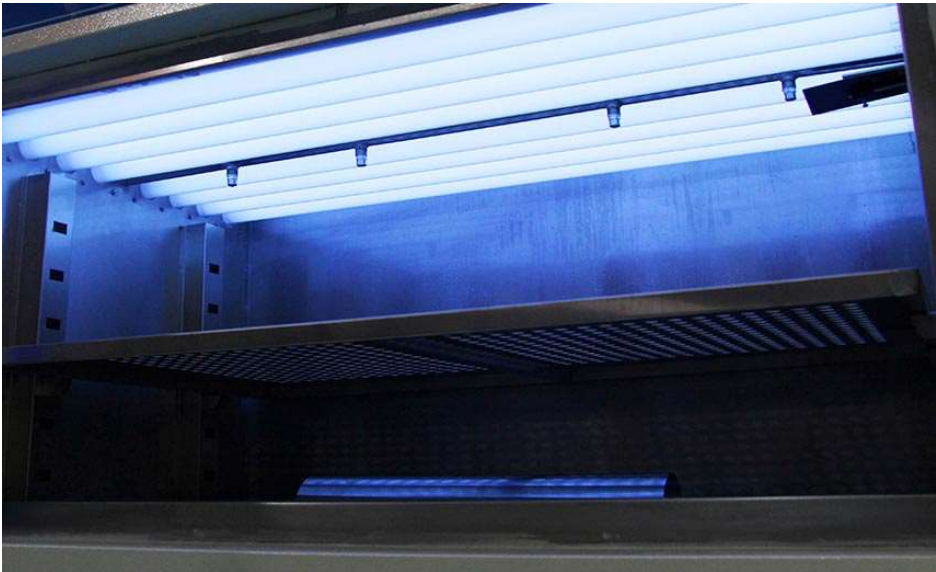


Figure 1.1: 8pcs of UV Testing Lamp on Top