Multifunction Aging Chamber

BEVS 3370

The BEVS 3370 is a multifunctional test chamber that integrates xenon lamp aging test and salt spray test. The xenon lamp is 6500W long arc water-cooled type, as the light source, which can simulate full sunlight spectrum. The salt spray adopts a corrosion-resistant fully automatic nozzle. By controlling the light irradiance, temperature (sample rack temperature, chamber temperature), relative humidity, spray mode, salt spray spray pressure and other ways, simulate the light, heat, rainfall, marine environment and other comprehensive conditions of outdoor climate, and conduct artificial accelerated aging, salt spray resistance and other tests on samples.

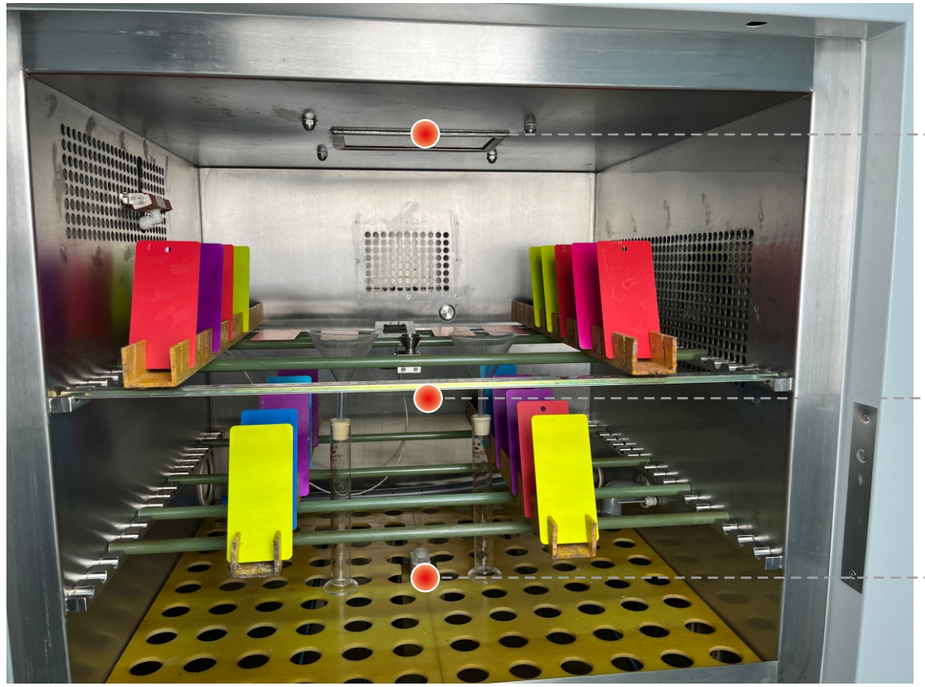
Application

- Used in industries such as coatings, plastics, rubber, chemical building materials, automobiles, aviation, military, etc.

- Used for selecting new materials, improving existing materials, or evaluating durability after changes in material composition.

Features

- Xenon arc lamps are high-efficiency via ultra-high voltage xenon gas discharge
- The water-cooled xenon lamp can maximize the simulation o outdoor sunlight spectrum, with a wider irradiation range
- Xenon lamp spectral range 250nm-3000nm
- The nozzle and box are made of anti-aging and corrosion resistant materials
- Dedicated xenon lamp triggering system to enhance xenon lamp life
- Accurate irradiance measurement technology, accurate and reliable irradiance control
- Unique testing chamber design for more uniform testing temperature and humidity
- Ultrasonic humidification system for more precise humidity control
- Fully automatic salt spray system
- Powerful software functions and remote control



Technical info.

Lamp power	6.5kw
Lamp shape	Long arc
Lamp cooling	Water
Lamp life	3000~4000h
Wavelength	Option: 340nm / 300 ~ 400nm / 420nm
Inner & outer filters	Supports different combinations of internal and external filters such as daylight type, window glass, and UV extension

Standard 340nm	0.3 ~ 1.3 W/㎡	Accuracy: ±0.01W/㎡
Option 300~400nm	25 ~ 150 W/㎡	
Option 420nm	0.55 ~ 2.75 W/㎡	

Chamber temp.	+35℃ ~ 85℃	Accucacy: ±2℃
Black panel temp. (BPT)	+40℃~110℃	
Black standard temp. (BST)	+40℃~120℃	
RH under illumination	10% ~ 75%	Accuracy: ±3%
RH under dark	10% ~ 100%	

Standard rack	30 pcs, 145×70 mm panel
Spray	Auto spray on the surface and back of the sample
Test procedure	User set
Salt spray pressure	0.1 ~ 0.4Mpa, auto run
Salt spray dispersion	0.5 ~ 4.0ml/h/80cm²

Control system

- PLC controller, automatic control, safe and reliable
- Large touch screen, simple operation and powerful functions
- Real time display and automatic control of sample rack temperature (BST, BPT), chamber temperature, relative humidity, irradiance energy, time
- Monitoring of equipment status, monitoring and confirmation of equipment faults
- Setting of various test parameters and program editing
- Equipped with alarm and information display functions, and automatic protection for abnormalities
- Automatic recovery from abnormal power outage

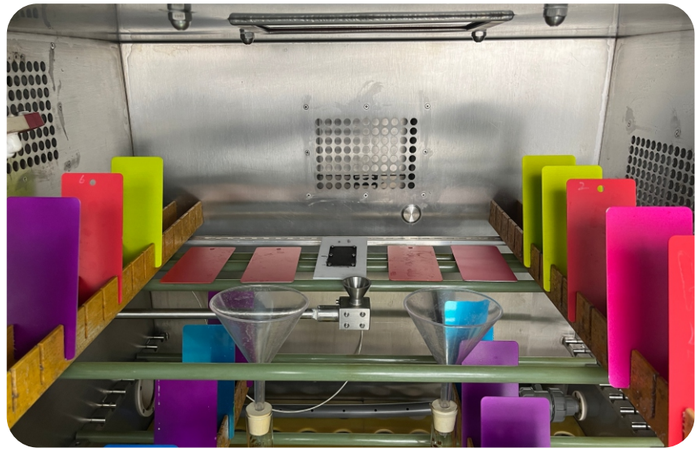
Test conditon

Inside	Outside	Simulated conditions
Borosilicate	Borosilicate	Simulated outdoor climate test
Borosilicate	Soda-lime glass	Through glass (indoor) test
Quartz	Borosilicate glass	Shorter UV energy than sunlight
Filtered infrared glass	Borosilicate glass	Simulate sunlight, but with lower temperatures

Control system

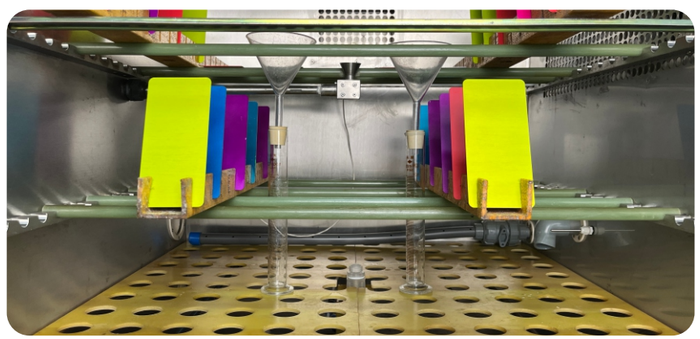
Xenon lamp control system

(1) Automatic control of xenon lamp irradiance
(2) Xenon lamp can be triggered 3-5 times in a short time
(3) Automatic calibration function, with alarm messages reminding users every 400 hours
(4) The temperature controller auto controls the cooling water temp. of the xenon lamp, and auto shuts down in case of severe overheating
(5) The cooling water circulation system auto monitors flow and protects xenon lamps
(6) Monitoring the cooling water quality of xenon lamp and improving the service life of xenon lamps
(7) Easy xenon lamp installation design



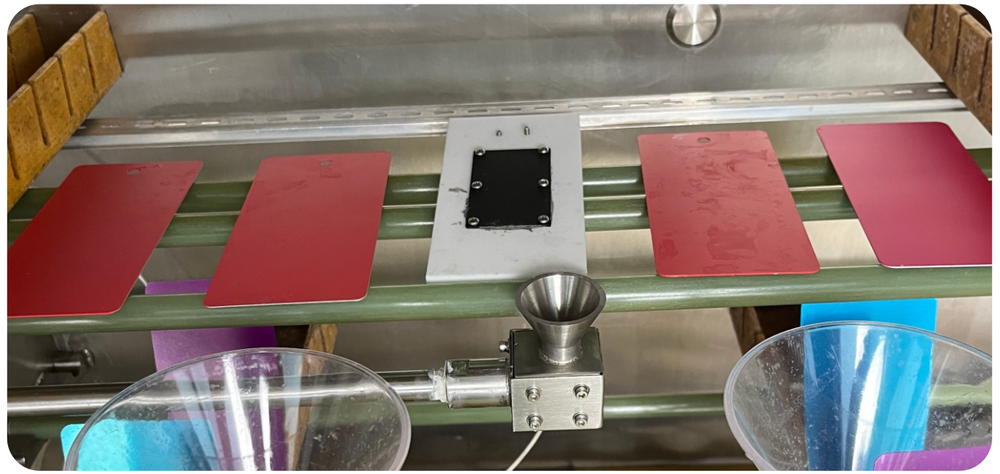
Salt spray control system

(1) Salt spray system
(2) Fresh air heating system
(3) Humidity generating device
(4) Chamber temperature control system



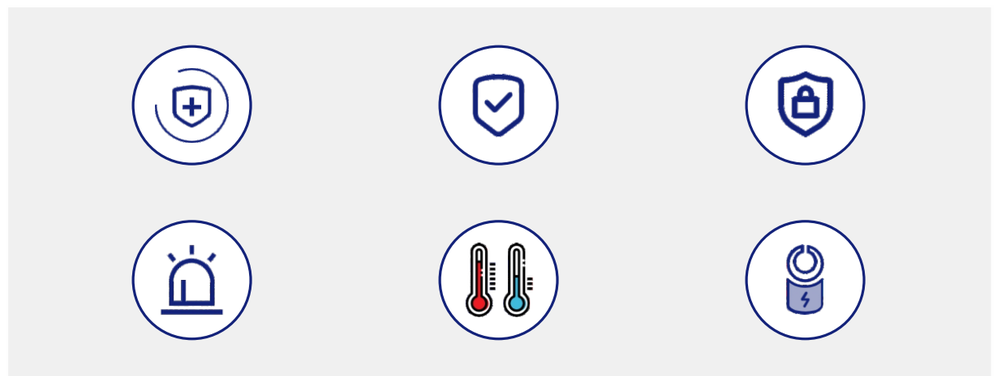
Temperature control system

(1) Adopting a damper actuator to control the internal and external circulation of air, automatically adjusting the opening and closing angle of the damper according to the temperature of the chamber
(2) The frequency converter controls the wind speed of the centrifugal fan to control the air exchange between the chamber and the outside
(3) Stainless steel air heating, assisted in regulating temperature



Safety protection system

(1) Accessories are of high-end materials
(2) Door safety protection
(3) Xenon lamp cooling water shortage and over temperature protection, conductivity protection
(4) Low / high xenon lamp irradiance alarm
(5) Test rack, chamber temperature high / low temperature protection
(6) Leakage, overcurrent and overload protection



Standard

GB(China)	ISO	ASTM		
GB/T 10485	ISO 105-B02	ASTM C1257	ASTM D4434	ASTM D6695
GB/T 12527	ISO 105-B04	ASTM C1442	ASTM D4459	ASTM D6878
GB/T 14522	ISO 105-B06	ASTM C1501	ASTM D4637	ASTM D750
GB/T 16259	ISO 105-B07	ASTM C1519	ASTM D4798	ASTM D7869
GB/T 16422	ISO 105-B10	ASTM C732	ASTM D4811	ASTM D904
GB/T 16991	ISO 11341	ASTM C734	ASTM D5010	ASTM F1164
GB/T 1865	ISO 12040	ASTM C793	ASTM D5019	ASTM F1515
GB/T 18833	ISO 16474-1	ASTM D1148	ASTM D5071	ASTM F2366
GB/T 29061	ISO 16474-2	ASTM D1670	ASTM D5383	ASTM G151
GB/T 32088	ISO 18909	ASTM D2565	ASTM D5398	ASTM G155
GB/T 5137	ISO 18930	ASTM D3424	ASTM D5819	SAE
GB/T 6151	ISO 18937	ASTM D3451	ASTM D6083	AATCC
GB/T 8427	ISO 29664	ASTM D4101	ASTM D6551	Others
GB/T 8430	ISO 3917	ASTM D4303	ASTM D6577	
GB/T 3511	ISO 4892-2	ASTM D4355	ASTM D6662	
GB/T 1771-2007	ISO 11997-1:2005	ASTM G85-2011(A1、A2、A3、A5)		
GB/T 10125-2021	ISO 9227-2017	ASTM B117-2019		
	ISO 14993:2018			

Order info.

Model	Name
BEVS 3370	Multifunction Aging Chamber