

Xenon Arc Light Fastness Tester

KASONTTEST®



Introduction:

Carbon Arc Textile Lamp Aging Test Chamber is a comprehensive climate testing machine, in addition to climatic aging test, the light fastness of materials can be carried out to test, polymer materials exposed at simulated sunlight. It simulates the light, temperature, rainfall, condensing, humidity to test the materials; it can be used for choosing new materials, improving existing materials, or assessment of change in material composition;

Applicable industries:

Textile Xenon Arc Light Fastness Tester applied to control the product quality, such as electronic, plastic products, electrical appliances, instruments, food, vehicles, metals, chemicals, building materials, aerospace, medical care and so on.

Corresponding standard:

IEC 68-2-9, Basic Environmental Testing Procedures
 ISO 4892-1, Plastics-Methods of exposure to laboratory light sources
 ASTM G151, General Guidelines for Exposure of Nonmetallic Materials
 ASTM G155, Xenon-Arc Test Apparatus for Exposure of Nonmetallic Materials
 ASTM D7356, Standard Test Method for Accelerated Acid Etch Weathering of Automotive Clearcoats Using a Xenon-Arc Exposure Device
 AATCC TM 16, Colorfastness to Light
 AATCC TM 169, Weather Resistance of Textiles: Xenon Lamp Exposure
 ISO 2454, Indian Standard- Method for Determination of Colour Fastness Artificial Light(Xenon Lamp)
 ISO 105 B02, Textiles-Tests for colour fastness-Part B02: Colour fastness to artificial light: Xenon arc fading lamp test
 ISO 11798, Information and documentation – Permanence of writing, printing & copying on paper
 ISO 12040, Graphic Technology - Prints and printing inks
 ASTM D6901, Standard Specification for Artists' Colored Pencils
 ASTM F2366, Lightfastness of Ink Jet Prints Exposed to Window Filtered Daylight
 ASTM D4303, Lightfastness of Artists' Pigments
 ASTM D5010, Testing Printing Inks & Related Materials
 ASTM D3424, Lightfastness of Printed Matter

Main feature:

Xenon-lamp Weather Resistance Tester(vertical climate resistance) the cold rolled steel sheet electrostatic pensu or high quality stainless steel sheet, the tank for high quality stainless steel plate. Radiation light source is the solar spectrum xenon lamp, automatically track irradiation intensity, precisely control the blackboard temperature, irradiation cycle, dark cycle, spray cycle all can set according to relevant test standards or customer's requirements. Xenon lamp box (desktop weather resistance test) according to the user's controller to choose imported touch screen control instrument or intelligent digital display controlling instrument.

Solar Radiation Test Chamber with ultraviolet radiation sensors, it can amend the aging tube or any other changes in the light energy decrease in time. Ultraviolet radiation sensors allows you to select proper light irradiation during the test. Ultraviolet radiation sensors can monitor indoor light irradiation intensity continuously, and by adjusting the power of tubes, can accurately keep the irradiation intensity in operation value.

Water spray cycle can effectively simulate temperature changing and rain erode process. Because of the rain was often flush, coating layer of lumber(including paint and coloring), will have erosion phenomenon. Recent research results show that the rain layer washed the material itself thus the materials are directly exposed to UV and water. The rain spray function can reproduce such environmental conditions, and enhance some paint climate aging test.

Main technical specifications

Testing room D×W×H	500*600*500mm; 800*800*800mm or customized	
index	Temperature range	RT+10℃~80℃

	Humidity range	65~98%R·H
	Spray time	1~9999min, adjustable
	Spray cycle	1-240min, interval adjustable
	spectral wavelength	290nm~800nm(60w/m ² / 150w/m ² / 7360w/m ²)
	light source	xenon lamp(air-cooled)
	Xenon lamp power	1kw,6kw(longevity:1600H)
Temperature and humidity control	Time controller	Import controller from Moeller
	Accurate range	Temperature: $\pm 0.1^{\circ}\text{C}$, / humidity: $\pm 0.1^{\circ}\text{C}\cdot\text{H}$
	Sensor	Platinum resistance Pt100 Ω /mv
	Heating system	Independent system, nickel chromium alloy electric heating type heater
	Humidity system	stainless steel, external Isolated humidifier
	Blackboard temperature	Bimetal thermometer blackboard 55 $^{\circ}\text{C}$ ~75 $^{\circ}\text{C}$
	Water supply	Humidification water supply with automatic control, xenon lamp cooled by water recycling
	Temperature controller	Import controller
	humidity	Irradiation: 30%~65%RH darkly: up to 90%RH
	Cycle system	low-noise air-conditioning-type motors, multi-leaf-type centrifugal wind wheel
material	Outside material	Advanced spray color plate /SUS304 stainless steel
	Inside material	SUS304 stainless steel
	Sample holder material	SUS304 stainless steel
	insulation	High and low temperature aging of silicone rubber
standard		a set of radiation-proof glass window, dynamic testing sample shelf 1, xenon lamp tube 2
protector		Leakage, short circuit, over-temperature, water shortages, motor overheating, over-current protection.
Power		AC380V $\pm 10\%$ 50 $\pm 0.5\text{HZ}$, Three-phase five-wire system
Environmental temperature		$\pm 5^{\circ}\text{C}$ ~+30 $^{\circ}\text{C}$ $\leq 85\% \text{R}\cdot\text{H}$

FOCUS IN MATERIAL TEST

KASONTTEST®

JINAN KASON TESTING
EQUIPMENT Co, LTD.

DuandianIndustrial Park , Jingshi Road, Jinan City,China.

P: +86 159 1008 1986

E: admin@jnkason.com | W: www.syjlab.com

