

## Sincerely Recruit Local Agents

--BOTO goes hand in hand with you



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## Environmental Test Equipment Experts

Today's Quality is for Tomorrow' Tomorrow Market



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GROUP

**BOTO GROUP**

BOTO GROUP LTD. is a manufacturer of research, development, design, production, sales, service and construction. The company is located in Anting Town, Jiading District, Shanghai, close to SAIC Volkswagen City, is located in beautiful Kunshan Huaxun Industrial Park, National Highway 312, more convenient transportation, with offices in major central cities such as Tianjin, Dongguan, Zhuhai, Wuhan, Chongqing, Hefei, specially responsible for pre-sale, sale and after-sales service. The company's products mainly include temperature and humidity testing, climate resistance and mechanics, as well as large comprehensive testing, products are widely used in aviation, aerospace, electrical electronics, new energy, automobile, communication, chemical, medical, new materials and other manufacturing fields, serving universities, scientific research, military and other institutions. Company in the development of multiple variety management at the same time, always based on "technology, service as the guarantee, talent as the fundamental, cooperation as the soul", according to various test instruments and automation control development trend, using SolidWorks design platform for product design, most important parts of instruments imported from Europe, the United States, Japan.

The company took the lead in passing the ISO9001 quality system certification, strictly controlling every link from product scheme finalization to product factory, the equipment control part strictly abide by CCC quality standards, to ensure that each product is a perfect display of "high quality, high performance, high standard", and obtained a number of national patents.

We provide not only products, technology and services, but also confidence in Bai Yi brand, the company has solid technical strength, rich experience in many core technologies, product structure, refrigeration, heating and electrical control, with novel design, quality products, with unremitting efforts, continuous improvement and optimize after-sales service, solemn commitment to customers "do products, satisfied in service", always adhere to the following business policy:

Today's quality, tomorrow's market!

Manufacturing must rely on low cost, competition depends on high quality.

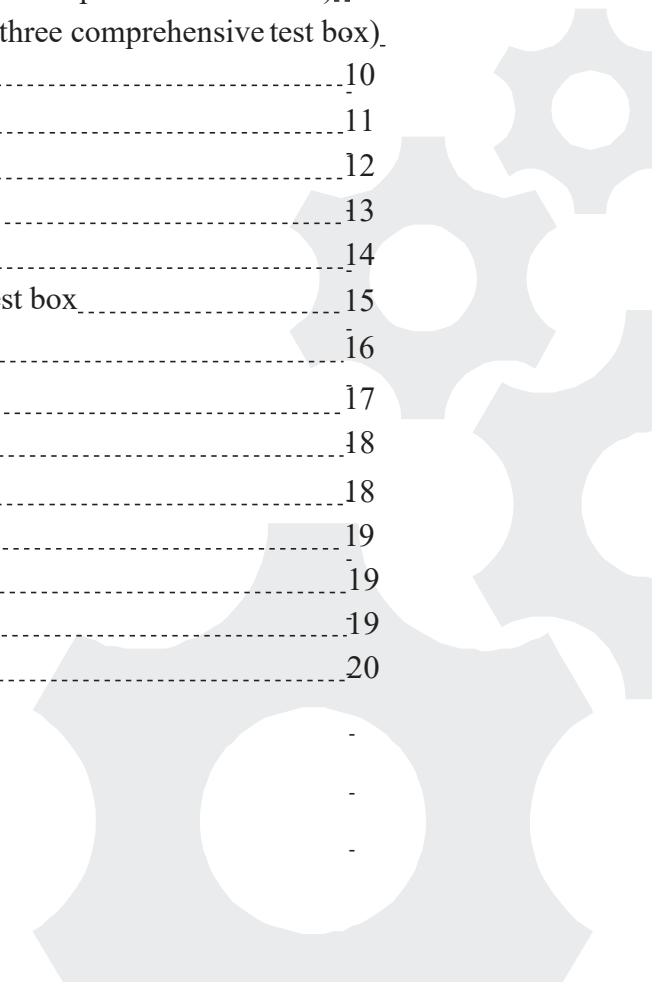
Shanghai Boyi has always been adhering to the company concept of "quality first, service first", relying on perfect design, leading technology, excellent quality and quick service to customers sincerely contribute the optimization of products, assist enterprises to improve product quality and reduce quality management cost. We sincerely welcome friends from all walks of life at home and abroad to seek extensive cooperation and development on the basis of mutual benefit. Shanghai Bai Yi, from China to the world, excellent quality, careful commitment!



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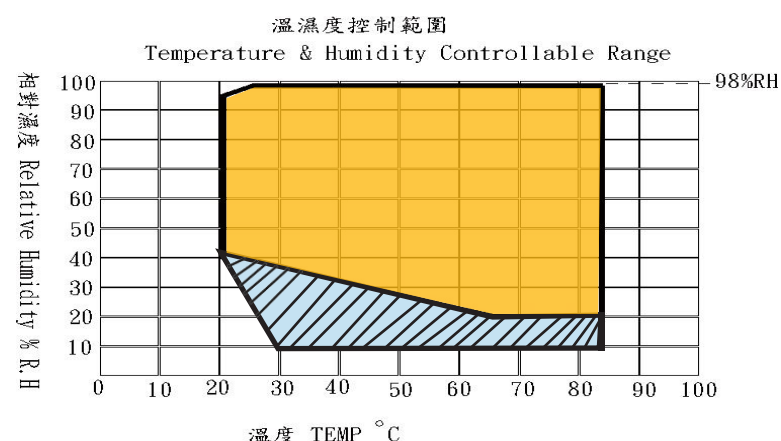




**Standard:**  
ACCORDING MIL STD GB JIS JEDEC IEC ISO

**Useage :**  
It is mainly used in the R & D of national defense industry, aviation industry, automotive parts, electronic parts, plastics industry, food industry, pharmaceutical industry and related products, and the test specification of quality management engineering

- Features :**
1. Imported compressors and refrigeration accessories of international famous brands are adopted to ensure the stability of the refrigeration system;
  2. It can display the cause of the fault and is easy to eliminate;
  3. Special air supply cycle design, good temperature and humidity distribution uniformity;
  4. A full range of imported microcomputer controllers, color touch screen, Chinese and English display;
  5. Ultra silent design, effectively reducing equipment operation noise;
  6. Multiple safety protection: refrigerant high voltage protection, compressor overload protection, current overload protection, overtemperature protection and leakage protection.



型号说明

B T H 80 (A~E)

- 极限试验低温  
A: 0°C B: -20°C C: -40°C  
D: -60°C E: -70°C
- 标称内容积:  
80: 80L 80型  
120: 120L 120型  
225: 225L 225型  
408: 408L 408型  
504: 504L 504型  
800: 800L 800型  
1000: 1000L 1000型
- H: 湿度  
T: 温度  
(TH: 湿热型)

Boyi 柏毅仪器

- ◎ external coating: Box ral7047 gray, control area decorative color ral5015 blue.
- ◎ test space: The internal experimental space is composed of 304 stainless steel plate. All joints are seamless welded and impermeable to steam.
- ◎ pressure balance valve: The box is equipped with a pressure balance system and a shaking valve to automatically balance when there is a pressure difference between the internal pressure of the box and the outside.
- ◎ air handling system: attached to the rear wall in the box, it contains the following components: cold and heat exchanger, heating exchanger, humidification inlet pipe, dehumidification coil, heat conditioning air recirculation blower, temperature and humidity sensor. The thermally conditioned air flows into the air handling unit and is treated by each of the components mentioned above before entering the test chamber.
- ◎ dehumidification system: This is achieved using a flat tube coil connected to the refrigeration system.
- ◎ internal air circulation: the external extended shaft motor drives the internal fan to realize forced circulating convection.
- ◎ humidification system: It is completed by the low-pressure steam generator with electronic heater, equipped with water softener and heating pipe, which can realize automatic water replenishment.

SPEC:

Mode I	DRY HEAR	B-T-80 (A~E)	B-T-120 (A~E)	B-T-225 (A~E)	B-T-408 (A~E)	B-T-504 (A~E)	B-T-800 (A~E)	B-T-1000 (A~E)
	DAMP HEAT	B-TH-80 (A~E)	B-TH-120 (A~E)	B-TH-225 (A~E)	B-TH-408 (A~E)	B-TH-504 (A~E)	B-TH-800 (A~E)	B-TH-1000 (A~E)
工作尺寸 (CM) Internal Dim		40×50×40	45×60×45	60×75×50	60×85×80	70×90×80	100×100×80	100×100×100
外部尺寸 (CM) External Dim (W*H*D)		67×165×82	72×175×108	90×177×130	90×187×160	100×192×160	130×202×160	130×202×180
湿度范围 (仅温湿度型) Relative humidity		20%~98%RH (10%~98%RH非标可选)						
温度范围 Temp Range		-70℃~150℃ (180℃) (A:0℃ B:-20℃ C:-40℃ D:-60℃ E:-70℃)						
升温时间 Heat-up time (min)		About 3~5℃/min						
降温时间 Pull-down time (min)		About 0.7℃~1℃/min						
温度波动度 Temp Fluctudtion		±0.5℃						
温度均匀度 Temp Uniformity		±1.0℃						
温湿度偏差 Temp&Humi. Deviation		±1.0℃ / ±3.0%RH						
内部材质 Interior		SUS#304不锈钢 SUS#304Stainless steel plate						
外部材质 Exterior		冷轧板喷塑或SUS#304不锈钢 Coating or SUS#304Stainless steel plate						
电源功耗 Power Source		AC:220V/380V 50/60Hz						
功率 (KW) Power (KW)		2KW~6KW	2KW~6.5KW	2.5KW~7KW	3KW~7.5KW	3KW~8KW	3.5KW~9KW	4KW~10KW

Note: the power depends on the temperature.



France "Taikang" totally enclosed compressor



Emerson drying filter



Original German "bize" high-power semi closed compressor



Independently developed controller



Danfoss thermal expansion valve



AIRMENDER Oil gas separator



Italy Castro solenoid valve



Small constant temperature and humidity test chamber

Features:

- 1.Small size, special design, the machine can overlap, does not occupy the plane space, suitable for the laboratory
- 2.Low power consumption, energy saving and consumption reduction; Low noise, low radiation, green environmental protection;
- 3.High efficiency, communication mode adopts Qualcomm software F4 controller, and multiple tests are completed at the same time;
- 4.Side test holes are installed on the left and right sides for easy operation;
- 5.Multiple safety protection: refrigerant high voltage protection, compressor overload protection, current overload protection, overtemperature protection and leakage protection.



Table type constant temperature and humidity test chamber

Name		Small constant temperature and humidity test chamber		Table type constant temperature and humidity test box	
Model	Dry Heat	B-T-105 (A~D)	B-T-107 (A~D)	B-T-36L (A~E)	B-T-48L (A~E)
	Humid Heat	B-TH-105 (A~D)	B-TH-107 (A~D)	B-TH-36L (A~E)	B-TH-48L (A~E)
工作尺寸 (cm) Internal Dim		30.5×23×20	30.5×23×29	30×40×30	40×40×30
外部尺寸 (cm) External Dim (W*H*D)		53×68×63	53×68×72	50×80×107	60×80×107
温度范围 Temp Range		-40℃ (-60℃) ~ 130℃ (100℃) (A:0℃ B:-20℃ C:-40℃ D:-60℃)		-70℃ ~ 150℃ (100℃) (A:0℃ B:-20℃ C:-40℃ D:-60℃ E:-70℃)	
湿度范围 Relative humidity Range		20%~98%RH (10%~98%RH非标可选)			
升温时间 Heat-up time (min)		About 3℃/min			
降温时间 Pull-down time (min)		About 0.7℃~1℃/min			
温度波动度 Temp Fluctuation		±0.5℃			
温度均匀度 Temp Uniformity		±1.0℃			
温度偏差 Temp Deviation		±1.0℃			
电源功耗 Power Source		AC:220V 50/60Hz 1kw			
功率 (KW) Power (KW)		1KW~2KW		1.5KW~2.5KW	



Usage :

Rapid temperature change test chamber, also known as rapid temperature change test chamber, is used to test the performance of materials in various environments and test the heat, cold, dry and moisture resistance of various materials. It is mainly used in the R & D of national defense industry, aviation industry, automotive parts, electronic parts, plastics industry, food industry, pharmaceutical industry and related products, and the test specification of quality management engineering.

Features:

- 1.Imported compressors and refrigeration accessories of international famous brands are adopted to ensure the stability of the refrigeration system
- 2.Special air supply cycle design, good temperature and humidity distribution uniformity;
- 3.A full range of imported microcomputer controllers, color touch screens, Chinese and English systems, It can be used as program setting function, and USB can export test data.
- 4.It can display the cause of the fault and is easy to eliminate.
- 5.Ultra silent design, effectively reducing equipment operation noise;
- 6.Multiple safety protection: refrigerant high voltage protection, compressor overload protection, current overload protection, overtemperature protection and leakage protection. It can ensure the safety of samples, more effectively protect the overload operation of equipment components, and greatly reduce the equipment cost the occurrence rate of standby failure makes the equipment operation more stable and reliable.

SPEC:

Model	Dry Heat	B-T-80 (A~E)	B-T-120 (A~E)	B-T-225 (A~E)	B-T-408 (A~E)	B-T-504 (A~E)	B-T-800 (A~E)	B-T-1000 (A~E)
	Humid Heat	B-TH-80 (A~E)	B-TH-120 (A~E)	B-TH-225 (A~E)	B-TH-408 (A~E)	B-TH-504 (A~E)	B-TH-800 (A~E)	B-TH-1000 (A~E)
工作尺寸 (CM) Internal Dim		40×50×40	45×60×45	60×75×50	60×85×80	70×90×80	100×100×80	100×100×100
外部尺寸 (CM) External Dim (W*H*D)		75×203×203	80×208×208	95×217×217	95×243×243	5×243×243	135×243×243	135×263×263
湿度范围 (仅温湿度型) Relative humidity		20%~98%RH (10%~98%RH非标可选)						
温度范围 Temp Range		-70℃~180℃ (100℃) (A:0℃ B:-20℃ C:-40℃ D:-60℃ E:-70℃)						
升温时间 Heat-up time (min)		1℃~15℃/min (线性/非线性可选)						
降温时间 Pull-down time (min)		1℃~15℃/min (线性/非线性可选)						
温度波动度 Temp Fluctuation		±0.5℃						
温度均匀度 Temp Uniformity		±1.0℃						
温湿度偏差 Temp&Humi. Deviation		±1.0℃ / ±3.0%RH						
内部材质 Interior		SUS#304不锈钢 SUS#304Stainless steel plate						
外部材质 Exterior		冷轧板喷塑或SUS#304不锈钢 Coating or SUS#304Stainless steel plate						
电源功耗 Power Source		AC:220V/380V 50/60Hz						



**Standards compliant:**

ACCORDING MIL STD GB JIS JEDEC IEC ISO

**Useage :**

It is mainly used in the R & D of national defense industry, aviation industry, automotive parts, electronic parts, plastics industry, food industry, pharmaceutical industry and related products, and the test specification of quality management engineering

**Features :**

- 1.Touch controlled color man-machine interface + PLC + J inlet temperature controller is adopted;
- 2.Cycle and defrosting times can be set;
- 3.Display description of abnormalities and fault points, and simple troubleshooting teaching reminder;
- 4.Comprehensive system safety protection and power failure memory;
- 5.Multiple safety protection: refrigerant high voltage protection, compressor overload protection, current overload protection, overtemperature protection and leakage protection;
- 6.Air cooling or water cooling can be selected according to customer requirements.

**SPEC:**

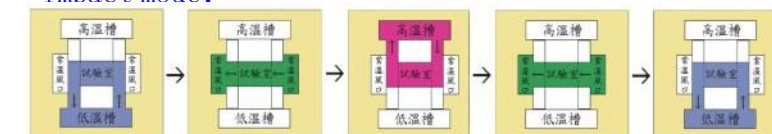
Model	B-TCT-401	B-TCT-402	B-TCT-403	B-TCT-501	B-TCT-502	B-TCT-503	B-TCT-601	B-TCT-602	B-TCT-603
Internal Dim (cm)	30×30×30	40×40×40	50×50×50	30×30×30	40×40×40	50×50×50	30×30×30	40×40×40	50×50×50
外部尺寸(CM) External Dim(W*H*D)	118×185×180	128×195×190	138×205×200	118×185×180	128×195×190	138×205×200	118×185×180	128×195×190	138×205×200
试料重量 Sample Weight	5KG	10KG	20KG	5KG	10KG	20KG	5KG	10KG	20KG
低温范围 Low Temp Range	-10℃~ -60℃			-10℃~ - 70℃			-10℃~ - 80℃		
测试温度范围 Test Temp Range	-40℃~150℃			-55℃~150℃			-65℃~150℃		
高温范围 High Temp Range	+80℃~200℃ (各种规格适用) +80℃ ~ 200℃ (various specifications applicable)								
恢复时间 Recovery time	3分钟内 Within 3 minutes								
内部材质 Interior	SUS#304不锈钢 SUS#304Stainless steel plate								
外部材质 Exterior	冷轧板喷塑或SUS#304不锈钢 Coating or SUS#304Stainless steel plate								
电源功耗 Power Source	AC: 380V 50/60Hz								

- \* 外尺寸包括送风机罩壳以及脚轮高度 (The height includes height of blower casing& foot wheels)
- \* 性能测试环境温度+23℃无负荷条件下 (Performance measured at ambient temperature of +23℃ without load)
- \* 使用环境温度+5℃~+35℃ (Usable temperature range +5℃~+35℃)



**Three-box impact mode (pneumatic damper switching mode) : (captured from the controller)**

**Impact mode:**



**Useage :**

It is mainly used in the R & D of national defense industry, aviation industry, automotive parts, electronic parts, plastics industry, food industry, pharmaceutical industry and related products, and the test specification of quality management engineering

**Features :**

- 1.Touch controlled color man-machine interface + PLC + J inlet temperature controller is adopted;
- 2.Cycle and defrosting times can be set;
- 3.Display description of abnormalities and fault points, and simple troubleshooting teaching reminder;
- 4.Comprehensive system safety protection and power failure memory;
- 5.Multiple safety protection: refrigerant high voltage protection, compressor overload protection, current overload protection, overtemperature protection and leakage protection;
- 6.Air cooling or water cooling can be selected according to customer requirements.



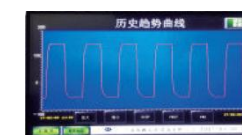
日本普洛菲斯控制



日本普洛菲斯控制



日本普洛菲斯控制



日本普洛菲斯控制

**SPEC:**

型号 Model	B-TS-401	B-TS-402	B-TS-403	B-TS-501	B-TS-502	B-TS-503	B-TS-601	B-TS-602	B-TS-603
工作尺寸(CM) Internal Dim	35x40x35	40×50×40	50×60×50	35×40×35	40×50×40	50×60×50	35×40×35	40×50×40	50×60×50
外箱尺寸(CM) *1 External Dim(W*H*D)	143x210x170	154×212×170	166×220×180	143×210×170	156×210×170	166×220×180	143×210×170	156×210×170	166×220×180
低温范围 Low Temp Range	-10℃~ -60℃			-10℃~ -70℃			-10℃~ -80℃		
测试温度范围 TestTempRange	-40℃~150℃			-55℃~150℃			-65℃~150℃		
高温范围 High Temp Range	+80℃~200℃ (各种规格适用) +80℃ ~ 200℃ (various specifications applicable)								
恢复时间 Recovery time	3~5分钟 3 to 5 minutes								
温度波动度 Temp Fluctudtiont	±2℃ (各种规格适用) ± 2℃ (various specifications applicable)								
内部材质 Interior	SUS#304不锈钢 SUS#304Stainless steel plate								
外箱材质 Exterior	冷轧板喷塑或SUS#304不锈钢 Coating or SUS#304Stainless steel plate								
电源功耗 Power Source	AC:380V 50/60Hz								



Precision high temperature test chamber

Economical high temperature test chamber

用途 Use :

It is mainly used in the R & D of national defense industry, aviation industry, automotive parts, electronic parts, plastics industry, food industry, pharmaceutical industry and related products, and the test specification of quality management engineering.

规格 SPEC:

精密型	型号	B-RUL-45				B-RUL-60				B-RUL-80				B-RUL-100			
	工作尺寸 (CM)	45×45×45				60×60×60				80×80×80				100×100×100			
	外箱尺寸 (CM)	103×123×77				118×138×92				138×158×112				158×178×132			
	温度范围	RT+10℃~200℃ (300℃)															
经济型(台式)	型号	23A	53A	123A	203A	30A	70A	140A	240A	35A	55A	75A	145A	245A			
	工作尺寸	宽 (CM)	34	42.5	55	60	34.5	45	55	60	34.5	42.5	45	55	60		
		高 (CM)	32.5	40	45	55	32.5	40	45	50	32.5	40	40	45	50		
		深 (CM)	30	34.5	55	60	32.5	45	55	75	32.5	34.5	45	55	75		
	外箱尺寸	宽 (CM)	62.5	70.5	83	88	62.5	74	83	88	62.5	70.5	74	83	88		
		高 (CM)	51	58	65	77	51	58	65	77	51	58	58	65	77		
		深 (CM)	49	53	73	82.5	49	63	73	82.5	49	53	63	73	82.5		
温度范围	RT+10℃~200℃				RT+10℃~250℃				RT+10℃~300℃								
经济型(立式)	型号	L030A	L070A	L140A	L240A	L420A	L620A	L920A	L036A	L076A	L146A	L246A	L426A	L626A	L926A		
	工作尺寸	宽 (CM)	30	40	45	50	60	80	100	30	40	45	50	60	80	100	
		高 (CM)	30	40	55	60	55	60	60	30	40	55	60	55	60	60	
	外箱尺寸	深 (CM)	35	45	55	75	130	130	160	35	45	55	75	130	160	160	
		宽 (CM)	44.5	55	64	69	78	98	118	44.5	55	64	69	78	98	118	
温度范围	RT+10℃~200℃																
升温时间	高 (CM)	47	60	74	78	76	80	80	47	60	74	78	76	80	80		
温度波动度	深 (CM)	70.5	80	90.5	110	180	180	210	70.5	80	90.5	110	180	210	210		
温度均匀度																	
温度偏差																	



专利号 : ZL 2016 2 0201796. 1

用途 Use :

The machine realizes the cold and heat cycle test by alternately using two independent fluid baths. It is a special testing instrument for the production process control of printed circuit board, which is used for the cold and heat shock test of printed circuit board. It can also be connected to the low resistance test system for on-line resistance test.

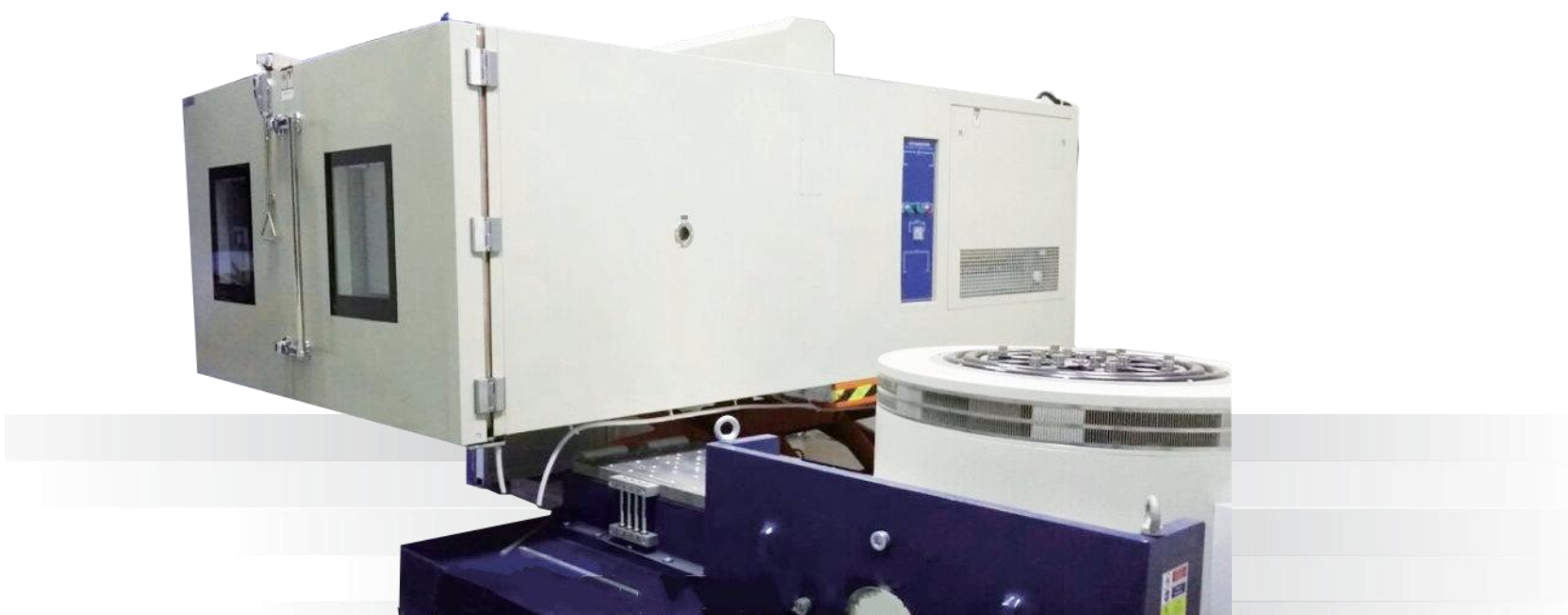
特点 Features :

- 1.Applicable test plate specification: 350mm x 210mm;
- 2.Sanyo stepping motor and precision module are adopted for Transmission, with small vibration and low voice;
- 3.The equipment is divided into high and low temperature chamber;
- 4.Quickly change the temperature of the test room to make the test sample accept cold and hot shock.

Note: Precision high temperature test chamber can be customized

规格 SPEC:

型号 Model	B-OIL-01	B-OIL-02	B-OIL-03
载物篮尺寸 (cm) Loading baskets Dimensions (cm)	17 x 23 x 20	23 x 29 x 30	28 x 34 x 35
外箱尺寸 (CM) External Dim(W*H*D)			
操作界面 Operator interface	采用5.7彩色液晶触摸屏加PLC控制系统 With 5.7" color LCD touchscreen and PLC control system		
控制方式 Control mode	日本进口时间/温度控制器, 温控精度高, 加热、制冷均采用PID运算 Japan's imported time/temperature controller, high precision temperature control, heating, cooling PID operation are used		
PLC	日本三菱 Japanese Mitsubishi		
加热器 Heaters	进口镍铬丝加热器 Imported nickel wire heater		
行车移动方式 Carriageway mobile means	步进驱动控制 Stepping drive control		
行车组件配置 Carriageway Component Configuration	进口模组 Imported modules		
制冷方式 Cooling mode	进口压缩机 Imported compressor		
热油缸温控范围 (°C) Hot oil cylinder temperature range (°C)	RT+40℃---- 260℃ Room+40℃---- 260℃		
热油缸温控精度 (°C) Hot oil cylinder temperature control accuracy (°C)	±5℃		
冷油缸温控范围 (°C) Cold oil cylinder temperature range (°C)	20~25℃		
计数显示范围 (次) Counting display range (times)	1-199		
冲击范围	20~260℃		
计时显示范围 (S) Time display range (S)	热缸1-199.9 Hot cylinder 1-199.9		
输入电源: Input Power:	380V 50Hz		
重量 (KG) Weight (KG)	450	550	800
功率 (W) Power (W)	15KW	18KW	21KW



Temperature, humidity, vibration composite test chamber can simulate the temperature and humidity environment. After cooperating with the shaking table, it can carry out the comprehensive reliability test of three environmental factors of temperature, humidity and vibration, which can cooperate with both the vertical shaking table and the horizontal sliding table of the shaking table.

**用途 Use :**

Temperature, humidity, vibration composite test chamber it is applicable to the adaptability test of electronic and electrical products, automobile industry, military enterprises and their raw devices and other materials in the environment of high temperature, low temperature, damp heat, alternating damp heat and vibration. The temperature, humidity and vibration three comprehensive test chamber is mainly used to conduct environmental simulation test on the physical and other relevant characteristics of the product under the conditions of low temperature, high temperature, damp heat, alternating damp heat and vibration according to the requirements of national standards or user-defined requirements. After the test, the performance of the product can still meet the predetermined requirements, For product design, improvement, identification and delivery inspection.

**特点 Features :**

- 1.Non reaction door handle is adopted for easier operation;
- 2.It is composed of constant temperature and humidity box and V series electromagnetic vibration test;
- 3.Vibration controller, sensor and power amplifier are imported from the United States;
- 4.It can be used for sinusoidal vibration (standard equipment), random vibration (optional) and impact control;
- 5.It can be designed and manufactured according to the requirements of low air pressure;
- 6.The observation window is made of multi-layer hollow tempered glass and laminated conductive film on the inner side (the test process can be clearly observed).



主画面

与U盘连接使用画面

与打印机连接使用画面

与计算机串口通信画面

**规格 SPEC:**

型号 Model	风冷 Air-cooled condenser 水冷 Water-cooled condenser	BTHV225-70A BTHV225-70W	BTHV512-70A BTHV512-70W	BTHV1000-70A BTHV1000-70W
标称内容积 (升) Interior capacity (L)		216	512	1000
内箱尺寸 Interior Dimension (cm)	宽度 Width	60	80	100
	高度 Height	60	80	100
	深度 Depth	60	80	100
外部尺寸 *1 Exteriordimension (mm)		依具体型号而定 Depends on the model		
性能参数 Performance parameter	温度范围 Temperature	-70℃~+150℃		
	湿度范围 Humidity range	20%~98%RH		
	温度偏差 Temperature deviation	±2℃		
	温度波动度 Temperature fluctuation	±0.5℃		
	相对湿度偏差 Relative Humidity fluctuation	±5%RH (≤75%RH) ±3%RH (≤75%RH)		
	升温速率 Heating rate	1~15℃/min ( 可选择 )		
降温速率 Cooling rate	1~15℃/min ( 可选择 )			
制冷系统 Refrigeration system	制冷方式 Refrigeration method	机械压缩复叠制冷系统 Mechanical double-stage refrigeration system		
	制冷压缩机 Compressor	半封闭/全封闭式压缩机 Semi-Hermetic/Hermetic compressor		
	冷却方式 Cooling pattern	风冷或水冷 Air/Water-cooled condenser		
控制系统 Control system	控制器 Controller	TFT触摸屏控制器 TFT touch screen		
	语言 Language	中英文 Chinese or English		

\* 外尺寸包括送风机罩壳以及脚轮高度 (The height includes height of blower casing & foot wheels)

\* 性能测试环境温度+23℃无负荷条件下 (Performance measured at ambient temperature of +23℃ without load)

\* 使用环境温度+5℃~+35℃ (Usable temperature range +5℃~+35℃)



**Useage :**

The walk-in high and low temperature alternating damp heat environment test chamber is a necessary test equipment in the solar photovoltaic industry. It can carry out environmental reliability tests such as high temperature, low temperature, temperature cycle, rapid temperature change, high and low temperature alternating damp heat in accordance with iec60068, mil-std-81of, GJB150A, GB2423 and other standards.

**Features :**

- 1.The overall structure or library board unit combination can be adopted, the content product can be expanded arbitrarily, and the disassembly is easy;
- 2.The insulation layer adopts high-strength polyurethane (PU) foaming and high-density glass fiber cotton, which can avoid energy loss;
- 3.Multi layer filter water replenishment device, automatic water replenishment, no manual water addition, and automatic water shortage protection;
- 4.The box is equipped with test holes for external test power lines or signal lines.

**SPEC:**

型号 Model	B-TH3.75-D95	B-TH5.6-D95	B-TH9.8-D95
标称内容积 Interior capacity(M <sup>3</sup> )	3.75	5.6	9.8
可测试组件数量 Quantity of measurable module	5	8	12
组件最大尺寸 Max. module size	2000x1100x50mm		
内箱尺寸 Interior dimension (CM)	125×230×130	180×230×135	285×230×150
外箱尺寸*1 External dimension (CM)	依具体型号而定 Depends on the model		
温度范围 Temperature range	+20℃ ~ +150℃		
湿度范围 Humidity range	20 ~ 98%RH (+20℃ ~ +95℃)		
温度偏差 Temperature deviation	±2℃		
温度波动度 Temperature fluctuation	±0.5℃		
相对湿度偏差 Relative Humidity fluctuation	±5%RH (≤75%RH) ±3%RH (>75%RH)		
控制器 Controller	TFT触摸屏控制器(中英文) TFT touch screen (Chinese or English)		



原装进口日本日立高效节能半封闭压缩机/低噪音日立机组



离心风机



**SPEC:**

型号 Model	B-PCT-30-L
试验箱尺寸 (CM) Internal Dimension φ×L (CM)	30×45
全机外尺寸 External dimension (CM)	54×67×45
温度范围 Temperature range	+100℃ ~ +135℃ 饱和蒸气温度
湿度范围 Humidity range	100%RH 饱和蒸气湿度
压力范围 Pressure range	0.50Kg ~ 2.00Kg/cm <sup>2</sup> 安全耐压5Kg/cm <sup>2</sup> G
时间范围 Time range	000Hr ~ 999Hr
加压时间 duration of sustained injection	0.00Kg ~ 2.00Kg/cm <sup>2</sup> 约45分钟内
电源功耗 Power Source	单相220V 15A 50/60 HZ
温度波动均匀度 Temperature fluctuation	±0.5℃
温度显示精度 Temperature display accuracy	0.1℃
压力波动均匀度 Pressure fluctuation	±0.02Kg
湿度控制稳定度 Humidity fluctuation	±1%RH
湿度分布均匀度 Humidity Uniformity	±5%RH

**Useage :**

PCT test box is mainly used to test the physical and other related properties of electrical and electronic products, components, parts, metal materials and magnetic materials under the climate conditions of simulated high temperature, high temperature, high humidity and pressure, and judge whether the product performance can meet requirements through verification, so as to be used for product design, improvement, verification and delivery inspection.

**Features :**

- 1.The dual circuit structure of imported high temperature resistant solenoid valve is adopted to reduce the service failure rate to the greatest extent.
- 2.Independent steam generating room to avoid direct impact of steam on the product, so as to avoid local damage to the product.
- 3.The labor-saving structure of the door lock solves the difficulty of locking the disc handle of the first generation of products.
- 4.Cold air in front of the test; The design of cold air exhaust in the test (air exhaust in the test barrel) improves the pressure stability and reproducibility.
5. The operation time of ultra long-term effect experiment is 1000 hours.
6. Water level protection: the protection is detected through the water level sensor in the test room.

**结构 product mix :**

- 1.Inner barrel material: stainless steel plate material # SUS-316
- 2.Outer barrel material: stainless steel plate material # SUS-304
- 3.Control system: the daily rkc-cb100 microcomputer is used to control the saturated steam temperature, the time controller adopts LED display, the pointer is used to display the pressure gauge, the microcomputer p.j.d automatically calculates and controls the saturated steam temperature, and the manual water inlet valve is used.

\* 外尺寸包括送风机罩壳以及脚轮高度 (The height includes height of blower casing & foot wheels)

\* 性能测试环境温度+23℃无负荷条件下 (Performance measured at ambient temperature of +23℃ without load)

\* 使用环境温度+5℃ ~ +35℃ (Usable temperature range +5℃ ~ +35℃)





执行标准

- 《IVECO汽车转向拉杆总成技术要求》
- NJ18. 3015. 90 《IVECO转向拉杆球接头总成技术条件》
- SAEJ193. FEB87 《汽车用球销试验方法》
- JASO. C715-88 《齿轮齿条式转向球头销节台架试验方法》
- JASO. C615-89 《独立悬架球头销节台架试验方法》

试验项目

- 1.Durability of mud water spraying at normal temperature;
- 2.And the function of normal operation in high and low temperature environment: high temperature 85 ° C, low temperature - 40 ° C, temperature tolerance soil 2'c, and the temperature is infinitely adjustable.



SPEC:

型号 Model	B-CAB
球头测试箱尺寸 (CM) Internal Dim	D 40 x H 40 x W 80
温度试验箱尺寸 (CM) Temperature range	D 56 x H 75 x W 60
外箱尺寸 (CM) Temperature Uniformity	D 175 x H 170 x W 85
温度范围 Humidity Range	高温85℃, 低温-40℃, 无极可调
测试工位 Air exchange rate	3个
温度均匀度 Temp Uniformity	±2℃
摆动频率 Shaking frequency	0.5~6Hz 无级可调
摆动角度 Flexing angles	0~±46°
旋转角度 Rotation Angle	0~±60°
旋转频率 Rotary Speed	0~6Hz 无级可调

组成部分 component:

- 1.The standard high and low temperature box, independent stainless steel insulation body and frame structure, has sufficient rigidity and strength to ensure no deformation under high and low temperature.
- 2.The main transmission mechanism consists of two 1kW servo motors and reducers to drive the six groups of X and Y transmission shafts of the testing machine.The transmission shaft is composed of Japanese original bearings, universal chuck and dynamic torque sensor of Aerospace Research Institute.
- 3.The internal components of the electric control cabinet are composed of PLC, air switch, contactor, relay and touch screen.
- 4.The mud spraying device adopts stainless steel 2400l sewage pump, with two groups of independent water supply and automatic switching of water tank for frozen liquid.

\* 外箱尺寸包括送风机罩壳以及脚轮高度 (The height includes height of blower casing& foot wheels)  
 \* 性能测试环境温度+23℃无负荷条件下 (Performance measured at ambient temperature of +23℃ without load)  
 \* 使用环境温度+5℃~+35℃ (Usable temperature range +5℃~+35℃)



Standards compliant:

该机符合IEC68-2-39~41等相关规范

Useage:

The machine is widely used in aerospace, electronics and electricians, instruments and meters, materials and equipment, spare parts and other test samples for routine test of high, low temperature and low pressure, cold resistance and low pressure test, high and low temperature alternating low pressure test and low temperature and low pressure storage, so as to analyze and evaluate the performance and behavior of products after test storage under the proposed environmental conditions.

Features :

1. Chinese / English LCD operation / fault cause / troubleshooting / guidance window
2. The window anti perspiration electric heater device prevents moisture condensation at low temperature
3. Large data screen is displayed during startup and operation, and other different test procedures can be edited at the same time

规格 SPEC:

型号 Model	B-ALT-602	B-ALT-603	B-ALT-603	B-ALT-604
工作尺寸 (CM) Internal Dim (W*H*D)	60×85×80	100×100×100	150×100×100	100×100×200
外部尺寸 (CM) External Dim (W*H*D)	130×187×167	170×203×184	220×203×184	170×203×284
温度范围 Temp Range	-60℃ ~ +100℃			
升温速率 Heating rate	20℃~+100℃/40 min (Minimum, 常压) 20℃~+100℃/60min (110torr)			
降温速率 Cooling rate	20℃~-40℃/60 min (Minimum, 常压) 20℃~-40℃/100min (110torr)			
压力范围 pressure range	常压~70,000 英尺 Atmospheric pressure~70000feet			
承载重量 Safe Load	底层承载重量 : 300kg. 栅盘承载重量 : 20kg. The bottom bearing weight: 300 kg. Grid plate load weight: 20 kg.			
内部材质 Interior	SUS#304不锈钢 SUS#304Stainless steel plate			
外部材质 Exterior	冷轧板喷塑或SUS#304不锈钢 Coating or SUS#304Stainless steel plate			
电源功耗 Power Source	AC:220V/380V 60Hz			

\* 外箱尺寸包括送风机罩壳以及脚轮高度 (The height includes height of blower casing& foot wheels)  
 \* 性能测试环境温度+23℃无负荷条件下 (Performance measured at ambient temperature of +23℃ without load)  
 \* 使用环境温度+5℃~+35℃ (Usable temperature range +5℃~+35℃)



符合标准Standards compliant:

符合MIL STD GB JIS JEDEC IEC ISO等测试规范

用途 Use :

The equipment can freely switch the test conditions in the three states of dry, wet and salt fog, more realistically simulate the natural environment and more truly respond to the test results. It is widely used in automobile, electronics, ferry and other industries.

特点 Features :

- 1.High precision imported intelligent controller for temperature and humidity of touch screen is adopted to effectively control temperature, humidity and drying;
- 2.two pole air intake decompression to ensure stable spray pressure.
- 3.spray cone cone diffuser, with salt spray guidance and regulation of salt spray uniformity and settlement;
- 4.Perfect protection functions (water shortage, humidity, overload, etc.) and the device has sound, alarm and shutdown functions.

规格 SPEC:

型号 Model	B-CCT-60 (A^D)	B-CCT-90 (A^D)	B-CCT-120 (A^D)	B-CCT-160 (A^D)	B-CCT-200 (A^D)
工作尺寸(CM) Internal Dim(W*H*D)	60×45×40	90×60×50	120×100×50	160×100×50	200×100×50
外部尺寸(CM) *1 External Dim(W*H*D)	108×63×119	140×80×139	178×120×149	230×130×149	270×130×159
箱体材质 Cabinet Material	耐腐蚀高分子材料Corrosion-resistant polymer material				
湿度范围 Relative humidity	20%~98%RH (10%~98%RH非标可选)				
实验室工作温度(°C) Laboratory temperature (°C)	A : 25°C~70°C B : 0°C~70°C C : -20°C~70°C D : -40°C~70°C				
温度均匀度 Temp Uniformity	±1°C				
温湿度偏差 Temp&Humi. Deviation	±1.0°C / ±3.0%RH				
温湿度波动度 Temp Fluctudtion	±2.0°C / ±3.0%RH (>75%RH)				
饱和空气桶温度(°C) Saturated air barrel temperature (°C)	盐水试验方法: 35±1°C / 耐腐蚀试验法: 50±1°C Saline test method: 35±1°C/ Corrosion test method: 50±1°C				
饱和空气压力(kg/c m <sup>2</sup> ) Saturated air pressure (kg / c m <sup>2</sup> )	盐水试验方法: 47±1°C / 耐腐蚀试验法: 63±1°C Saline test method: 47±1°C/ Corrosion test method: 63±1°C				
饱和空气压力(kg/c m <sup>2</sup> ) Saturated air pressure (kg / c m <sup>2</sup> )	0.8~2.0±0.01				
盐雾沉降率(ml/80cm <sup>2</sup> .h) al Spray sedimentation rate (ml/80c m <sup>2</sup> .H)	1~2ml/80 cm <sup>2</sup> .h (可按) 1~2ml/80 cm <sup>2</sup> .h (Controllable)				
酸碱度PH值 PH value	盐水试验方法: 6.5~7.2 / 耐腐蚀试验法: 3.0~3.2 Saline test method: 6.5~7.2/ Corrosion test method: 3.0~3.2				
喷雾方式 Spray mode	连续喷雾 / 间隙喷雾(可调可设) Continuous spray / gap spray (adjustable may be provided)				
电源功耗 Power Source	AC:220V 50Hz / AC:380V 60Hz				

- \* 外箱尺寸包括送风机罩壳以及脚轮高度 (The height includes height of blower casing& foot wheels)
- \* 性能测试环境温度+23°C无负荷条件下 (Performance measured at ambient temperature of +23°C without load)
- \* 使用环境温度+5°C~+35°C (Usable temperature range +5°C~+35°C)



符合标准Standards compliant:

符合MIL STD GB JIS JEDEC IEC ISO等测试规范

用途 Use :

It is mainly used in the R & D of national defense industry, aviation industry, automotive parts, electronic parts, plastics industry, food industry, pharmaceutical industry and related products, and the test specification of quality management engineering.

特点 Features :

- 1.The automatic water adding system is adopted, which can automatically supplement the water level when the water level is insufficient, and the test will not be interrupted;
- 2.The precision glass nozzle diffuses with, falls on the test piece naturally, and ensures no crystal blockage;
- 3.the spray tower is equipped with a conical disperser, which has the functions of guiding fog, regulating fog quantity and even dropping fog.

规格 SPEC:

型号 Model	B-SST-60	B-SST-90	B-SST-120	B-SST-160	B-SST-200
工作尺寸(CM) Internal Dim(W*H*D)	60×45×40	90×60×50	120×100×50	160×100×50	200×100×50
外部尺寸(CM) *1 External Dim(W*H*D)	108×63×119	140×80×139	178×120×149	230×130×149	270×130×159
箱体材质 Cabinet Material	耐腐蚀高分子材料Corrosion-resistant polymer material				
实验室工作温度(°C) Laboratory temperature (°C)	盐水试验方法: 35±1°C / 耐腐蚀试验法: 50±1°C Saline test method: 35±1°C/ Corrosion test method: 50±1°C				
饱和空气桶温度(°C) Saturated air barrel temperature (°C)	盐水试验方法: 47±1°C / 耐腐蚀试验法: 63±1°C Saline test method: 37±1°C/ Corrosion test method: 63±1°C				
饱和空气压力(kg/c m <sup>2</sup> ) Saturated air pressure (kg / c m <sup>2</sup> )	0.8~2.0±0.01				
盐雾沉降率(ml/80c m <sup>2</sup> .h) Salt spray sedimentation rate (ml/80c m <sup>2</sup> .H)	1~2ml/80 cm <sup>2</sup> .h (可按) 1~2ml/80 cm <sup>2</sup> .h (Controllable)				
酸碱度PH值 PH value	盐水试验方法: 6.5~7.2 / 耐腐蚀试验法: 3.0~3.2 Saline test method: 6.5~7.2/ Corrosion test method: 3.0~3.2				
电源功耗 Power Source	AC:220V 50Hz				

- \* 1. 外尺寸包括送风机罩壳以及脚轮高度 (The height includes height of blower casing& foot wheels)
- \* 2. 性能测试环境温度+23°C无负荷条件下 (Performance measured at ambient temperature of +23°C without load)
- \* 3. 使用环境温度+5°C~+35°C (Usable temperature range +5°C~+35°C)



符合标准Standards compliant:

- T/310101002-C03-2016、
- HJ 571-2010、
- GB 18583-2008、
- GB18584、
- ASTM D5116-97、
- ISO 16000-9-2006 、
- ANSI/BIFMA X7. 1-2007、
- ENV 13419-1。

用途Use:

For the detection of VOCs (volatile organic compounds) release from furniture, carpets, toys, automotive interiors, musical instruments, plastic surfaces of outdoor sports venues and their raw materials

特点 Features:

- 1.Cabin material: the outer bulkhead adopts thickened color steel plate, the inner tank adopts SUS304 mirror stainless steel, and the insulation system adopts polyurethane insulation material.
- 2.Air supply system: it is composed of oil-free air pump, dehumidifier, flow controller, etc. The air pump adopts imported air pump with stable quality.
- 3.Air filtration system: mainly including VOC, formaldehyde filter and particulate membrane filter. High filtration efficiency, convenient replacement and low cost.
- 4.Humidity control system: the humidity adopts dry and wet mixed humidity control technology. PLC intelligent control, high precision and low energy consumption.
- 5.Temperature control system: the overall temperature control adopts the air jacket thermal radiation control mode.

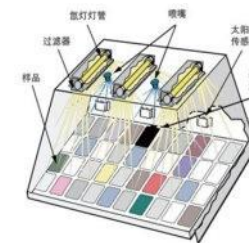
规格SPEC:

型号 Model	B-VOC
内舱容积 Internal Dim	50-1000L, ±2%
温度范围 Temperature range	15~70℃; ± 1℃
温度均匀度 Temperature Uniformity	±1℃
湿度范围 Humidity Range	60℃, 湿度5%, ±1%; 15-30℃, 湿度40%-60%, ±2%
空气交换率 Air exchange rate	0.20-2.0
空气流速 Air velocity	0.1-0.3m/s
甲醛本底 Formaldehyde background	≤0.006mg/立方
单体VOC	≤ 0.002mg/立方
直径大于0.5um颗粒物 Greater than 0.5 um	≤100particles/立方
TVOC	≤ 0.02mg/立方
甲苯回收率 Toluene recovery	≥80%
空气泄漏率 Air leakage flowrate	在1kPa正压时, 舱内空气泄漏率 VL ≤舱容×10-3立方/min
噪音值 Noise level	<65dB
电源功耗 Power Source	380V, 50HZ

- \* 外箱尺寸包括送风机罩壳以及脚轮高度 (The height includes height of blower casing& foot wheels)
- \* 性能测试环境温度+23℃无负荷条件下 (Performance measured at ambient temperature of +23℃ without load)
- \* 使用环境温度+5℃~+35℃ (Usable temperature range +5℃~+35℃)



示意图 Schematic:



氙灯老化试验箱  
Xenon lamp aging Chamber

- 1.Full spectrum xenon lamp sunlight is used to reproduce the full spectrum natural sunlight most truly;
- 2.It is very convenient to expose three-dimensional parts or large parts;
- 3.Special air supply cycle design, good temperature and humidity distribution uniformity;
- 4.The user interface has strong functionality, high reliability and convenient operation. The controller can conduct fault self diagnosis.

规格 SPEC:

型号	B-XD-120	B-XD-225	B-XD-408	B-XD-800
工作尺寸 (CM)	45×60×45	50×75×60	60×85×80	100×100×80
外部尺寸 (CM) *1	107×145×68	120×164×92	122×169×112	162×184×112
温度范围	RT+10℃~70℃			
湿度范围	50%~95%RH			
氙灯辐射强度	550W/m <sup>2</sup>			
光谱波长	290nm~800nm			
降雨时间	0~9999/min (是否带喷淋, 选配)			
氙灯功率	2KW/6KW			
冷却方式	风冷/水冷			
内部材质	SUS304不锈钢			
外部材质	冷轧板喷塑或SUS304不锈钢			
电源功耗	AC: 220V/380V 50/60Hz			

紫外光老化试验箱  
UV aging test Chamber

- 1.The heating method is tank tank heating, with fast temperature rise and uniform temperature distribution;
- 2.The drainage system uses vortex return and U-shaped sedimentation devices for drainage, which is convenient for users to clean;
- 3.The black aluminum plate is used to connect the temperature sensor, and the blackboard temperature instrument is used to control the heating, so the temperature is more stable;
- 4.The radiometer probe is fixed without loading and unloading each time;
- 5.Special ultraviolet radiation meter with high-precision display and measurement shall be used for radiation: the radiation degree shall not be greater than 50W/m<sup>2</sup>.

型号	B-ZW	
工作室尺寸D×W×H (CM)	45×117×50 支持样品量: 150×75约40块	
外部尺寸D×W×H (CM)	58×128×135	
功率(kw)	4KW	
性能指标	温度范围	RT+10℃~70℃
	湿度范围	≥95%R.H
	灯管间距离	35mm
	样品与灯管距离	50mm
	紫外波长	290nm~400nm UV-A、UV-B、UV-C(定时说明)
灯管功率	40W	
安全保护	漏电、短路、超温、缺水、过电流保护/控制器停电记忆	

臭氧老化试验箱  
Ozone aging test box



型号 Model	B-CY-120	B-CY-250	B-CY-500	B-CY-1000
工作室尺寸 (D*W*H)cm Studio Size (D*W*H)cm	45 x 45 x 60	50 x 60 x 75	70 x 80 x 90	100 x 100 x 100
性能指标 Performance indicators	温度范围 Temperature	0℃~70℃		
	湿度范围 Humidity range	>65%R·H		
	臭氧浓度 Ozone concentration	0~200PPm、0~300PPm		
	温度波动度 Temperature fluctuation	±0.5℃		
	试验装置 test apparatus	动态、静态 (选配) Dynamic and static (optional)		
	样架转速 Sample rack rotation speed	360度旋转样品架 (转速1转每分钟) 360 degree rotating sample holder (1 rpm per minute)		
	气体流速 Gas flow rate	12~16mm/s		
控制系统 Control Systems	温度控制器 Temperature Controller	进口LED数显P、I、D+S、S、R微电脑集成控制器 Imported LED digital display P, I, D+S, S, R microcomputer integrated controller		
	时间控制器 Time controller	高精度小时、分钟、秒时间控制器 Precision hours, minutes, seconds time controller		
	臭氧浓度分析 Ozone concentration analysis	进口浓度分析调节仪4~20mA输出, RS232通讯口 Imported concentration analysis regulator 4~20mA outputs, RS232 communication port		
	臭氧发生器 Ozone generator	无声放电管式 Silent discharge tube type		
安全保护 Security protection	漏电、短路、超温、电机过热、过电流保护 Leakage, short circuit, over temperature, motor overheating, over-current protection			

- \*1. 外尺寸包括送风机罩壳以及脚轮高度 (The height includes height of blower casing & foot wheels)
- \*2. 性能测试环境温度+23℃无负荷条件下 (Performance measured at ambient temperature of +23℃ without load)
- \*3. 使用环境温度+5℃~+35℃ (Usable temperature range +5℃~+35℃)

沙尘试验箱  
Sand and dust test box



型号 Model	B-SC	
工作室尺寸 (mm)	订做	
外体尺寸 (mm)	待定	
技术参数	温度	常温+10℃ (15℃) ~80℃
	温度波动度	±0.5℃
	温度均匀度	±2℃
结构特点	介质	滑石粉
	真空泵	0~3KPA
	定时范围	0~99小时59分
	点灯周期	0~99小时59分
	滑石粉规格	能通过筛孔75um, 金属丝直径为50um的方孔筛的干燥滑石粉
	内体材质	采用进口高级不锈钢
外材质	采用彩钢板喷漆	

淋雨试验箱  
Rain test chamber



型号	B-LY	
工作室尺寸 (mm)	订做	
外部尺寸 (mm)	待定	
结构特点	圆弧摆管半径	400mm
	直角摆管长度	500mm
	喷水水压	50~400kpa (调节)
	直角摆管喷水管径	16mm
	水箱材质	高级不锈钢板



大型液晶模组老化房



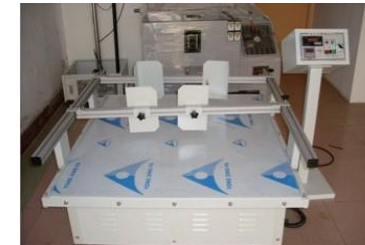
真空高温箱



高温老化房



高低温拉力试验机



模拟运输振动台

客户代表LOGO



院校合作LOGO

