

Founded in 2005, Zhongzhi Testing Instruments Co., Ltd has been dedicated to the R&D and manufacturing of environmental simulation and reliabity testing instruments.

Headquartered in Dongguan City, our company has a production site of 24,000 square meters (South China) and 130 workers, and we have set up a second factory in Jiangxi (Central China) and a third factory in Tianjin (North China) as well as sales & support offices in Shanghai, Ningbo, Xiamen & Wuhan. Currently we are one of the top 5 manufacturers of environmental simulation test instruments in China, with an annual sales revenue of over 200 million CNY (31 million USD) in 2020.





# **ENVIRONMENTAL TEST MACHINES**

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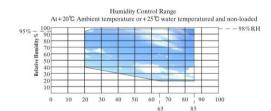
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### Climate Chamber

Climate Chamber is also called environment testing machine, used to test various types of materials for their tolerances of heat, cold, dry, humidity. Application: Quality inspection for all types of electronic products, electric appliance, and products from communication, instrument, automobile, plastic, metal, food, chemical, building materials, medical and aerospace industries.

#### **Meeting Standard**

- GB2423.1-2008/IEC6008-2-1-2007
- GB/T 2423.2-2008
- GJB150.3A—2009
- GJB150.4A-2009
- GB2423.22-2008
- GBT 2424.5-2006
- GB/T 10589-2008
- GB/T2423.3-2008(IEC68-2-3)
- GJB150.9A-2009
- G/BT 2423.4-2008/IEC6008-2-30:2005
- GB/T5170.18-2005
- GB/T10586-2006
- GBT 2424.6-2006
- GBT 2424.7-2006



#### **Features**

- High texture appearance, the machine body is shape, and the surface is painted and uses the plane without reaction handle which is safe and reliable and easy to operate.
- Rectangular multi-layer glass view window is used to observe the test products in the testing. The window with anti-sweat electric heater
  device can prevent condensation water droplets; the window also has high brightness PL fluorescent lamp to keep the inside machine light.
- The door's double insulated seal strip can effectively isolate internal temperature leakage.
- The external water supply system is convenient for supplementing water to humidification barrel pot, and the water can recycle automatically.
- Refrigeration and dehumidification system adopts French "Tecumseh" brand compressor, with the advantages of energy saving, low noise, low energy consumption, and stable performance, and adopts environmental protection refrigerant (R23, R404a).
- Controller adopts imported LCD display screen which can simultaneously display measured value and the set value, time, etc.
- Controller has multi-segment program, so editing and temperature and humidity can quickly and sloped control.
- The bottom of machine is installed mobile pulley and positioning foot cups which is convenient to move, place and fix position.
- The dimensions of the testing room are customized to satisfy the customers' requirements.









#### **Technical parameter**

Model	CZ-A-80(A-G)	CZ-A-150(A-G)	CZ-A-225(A-G)	CZ-A-408(A-G)	CZ-A-608(A-G)	CZ-A-800(A-G)	CZ-A-1000(A-G)
Internal Dimension WxHxD(mm)	400x500x500	500x600x500	500x750x600	600x850x800	800x950x800	1000x1000x800	1000x1000x1000
External Dimension WxHxD(mm)	600x1650x1100	700x1750x1200	700x1850x1300	800x1950x1500	1000x2050x1500	1200x2100x1500	1200x2100x1700
Temperature Range	-70℃~+100 (A:25℃ B:	0℃(150℃) 0℃ C:-20℃ E	:-40°C E:-50°	C F:-60°C G:	-70°C)		
Humidity Range	20%~98%F	I.H.(10%-98%	R.H/5%~98%F	.H is a special	optional condit	ion )	
Analytic Accuracy/Evenness Degree of Temperature and Humidity	0.01℃; 0.1	%R.H./±1.0℃	; ±3.0%R.H.				
Control Accuracy/Temperature Stabicity of Temperature and Humidity	±.0℃; ±2	±.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.					
Heating/Cooling Rate		Approximately 3.0 ℃/minute; approximately1.0 ℃/minute ( "2℃~10 ℃decrease per minute" is a special optional condition)					
Inner and Outer Materials	Outer mater	Outer material is cold-rolled with paint treatment, inner material is SUS#304 stainless steel					
Insulation Material	High tempe	High temperature resistant high density polyurethane rigid foam insulation materials.					
Cooling System	Air cooling	Air cooling/single segment compressor (-20°C), air water cooling/double segment compressor					
Protection Devices		Fuse-free switch, overloading protection switch for compressor, high and low voltage coolant protection switch, over-humidity and over-temperature protection switch, fuses, failure warning system					
Parts	Recorder (optional), watching window, 50mm testing hole,PL internal bulbs,partition plate, dry and wet ball gauze						
Controller	South Kore	South Korea "TEMI"					
Compressor	France's "	France's "Tecumseh" Brand					
Power	1Φ 220VAC	± 10% 50/60H	Z & 3Φ 380VA	C ± 10% 50/60H	ΗZ		

### Temperature Humidity Chamber(Rapid Temperature Change Type)

Temperature Humidity Chamber is also called environment testing machine, used to test various types of materials for their tolerances of heat, cold, dry, humidity. Application: Quality inspection for all types of electronic products, electric appliance, and products from communication, instrument, automobile, plastic, metal, food, chemical, building materials, medical and aerospace industries.

### **Meeting Standard**

- GB2423.1-2008/IEC6008-2-1-2007
- GB/T 2423.2-2008
- GJB150.3A-2009
- GJB150.4A-2009
- GB2423.22-2008
- GBT 2424.5-2006
- GB/T 10589-2008
- GB/T2423.3-2008(IEC68-2-3)
- GJB150.9A-2009
- G/BT 2423.4-2008/IEC6008-2-30:2005
- GB/T5170.18-2005
- GB/T10586-2006
- GBT 2424.6-2006 GBT 2424.7-2006



#### **Technical parameter**

Model	CZ-C-80 (A-G)	CZ-C-150 (A~G)	CZ-C-225 (A~G)	CZ-C-408 (A~G)	CZ-C-608 (A~G)	CZ-C-800 (A~G)	CZ-C-1000 (A~G)
Internal Dimension WxHxD(cm)	40x50x40	50x60x50	50x75x60	60x85x80	80x95x80	100x100x80	100x100x100
External Dimension WxHxD(cm)	90x136x94	100x146x104	100x161x117	110x171x137	130x181x137	150x186x137	150x186x157
Temperature Range	-70℃~+100 (A:25℃ B:0	℃(150℃) ℃ C:-20℃ D	:-40℃ E:-50°	℃ F:-60℃ G	:-70℃)		
Humidity Range	20%~98%R	.H.(10%-98%	R.H/5%~98%F	R.His a special	optional condi	tion )	
Analytic Accuracy/Evenness Degree of Temperature and Humidity	0.01℃; 0.1	%R.H./±1.0℃	; ±3.0%R.H.				
Control Accuracy/Temperature Stabicity of Temperature and Humidity	±1.0℃; ±	:1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.					
Heating/Cooling Rate		Approximately 2~15°C/minute(The machine should be with the cooling rate is 515/min and capacity is above 408L)					
Inner and Outer Materials		The external box is the SUS304# stainless steel surface strips ,the inner box is SUS304# stainless steel.					
Insulation Material	High tempera	High temperature resistant high density polyurethane rigid foam insulation materials.					
Cooling System	Air, Water o	Air、Water cooling/double segment compressor					
Protection Devices	Fuse—free switch, overloading protection switch for compressor, high and low voltage coolant protection switch, over—humidity and over—temperature protection switch, fuses, failure warning system						
Parts	Recorder (optional), watching window, 50mm testing hole,PL internal bulbs,partition plate, dry and wet ball gauze						
Controller	South Kore	а "ТЕМІ"					
Compressor	France's "7	France's "Tecumseh" Brand/BITZER GERMAN					
Power	3 Ф 380VAC	± 10% 50/60H	Z				

2 ZHONG ZHI http://www.testing-chambers.com



### Walk In Chamber

Walk in chamber is made up of control panel, switchboard, insulation storehouse board, forced draught blower, heater, humidifier, refrigerator. Offer large-scale part, semi-manufactured goods, finished product, temp &humidity environment test for the manufactory, for instance; computer teminal machine, automobile part.





South Korea imported liquid crystal display touch screen controller(TEMI2700)

### Humidity Control Range At+20°C Ambi ent temperature or+25°C water temperatured and non-loaded 20 30 40 50 60 70 80 90 100

#### **Meeting Standard**

- GB2423.1-2008/IEC6008-2-1-2007
- GB/T 2423.2-2008
- GJB150.3A-2009
- GJB150.4A-2009
- GB2423.22-2008
- GBT 2424.5-2006
- GB/T 10589-2008
- GB/T2423.3-2008(IEC68-2-3)
- GJB150.9A-2009
- G/BT 2423.4-2008/IEC6008-2-30:2005
- GB/T5170.18-2005
- GB/T10586-2006
- GBT 2424.6-2006
- GBT 2424.7–2006

#### Features

- The appearance can use different colors or all stainless steel according to the interior design, the interior is made of SUS304# stainless steel.
- Rectangular multi-layer glass view window is used to observe the test products in the testing. The window with anti-sweat electric heater device can prevent condensation water droplets.
- Indoor installs explosion-proof light which can let people clearly observe product test condition, and it is safe to use because of the installation of non-slip aluminum plate at the bottom of the laboratory.
- The door's double insulated seal strip can effectively isolate internal temperature leakage.
- The pure water filter unit directly filters tap water; it is easy to use and doesn't need to add water manually.
- Refrigeration and dehumidification system uses imported brand compressor, with the advantages of energy saving, low noise, low energy consumption, and stable performance, and uses environmental protection refrigerant (R23, R404a).
- Controller adopts imported LCD display screen, can simultaneously display measured value and the set value, time, etc.
- Controller has multi-segment program, so editing and temperature and humidity can quickly and sloped control.
- The TEMI 2700 Table 7.5-inch TFT LCD display with RS-232/RS-485 communication interface, 2GB standard SD memory card can connect to Ethernet; the TEMI 880 Table 5.7-inch color display with RS-232 /RS-485 communication interface (select optionally under the request).
- The bottom of the machine uses the channel to weld into a mesh structure in order to increase the load-bearing, it will never deform; the bottom of the unitary testing chamber installs mobile casters and positioning goblet; the channel at the bottom of compositional testing chamber directly installs in the ground of laboratory.

Technical parameter								
Model	CZ-A-4000 (A-G)	CZ-A-8000 (A-G)	CZ-A-10000 (A-G)	CZ-A-15000 (A-G)	CZ-A-20000 (A-G)	CZ-A-25000 (A-G)	CZ-A-30000 (A-G)	CZ-A-40000 (A-G)
Internal Dimension WxHxD(m)	1.5x1.8x1.5	2.0x2.0x2.0	2.5x2.2x2.0	3.0x2.0x2.5	4.0x2.0x2.5	4.0x2.5x2.5	4.0x2.5x3.0	5.0x2.5x3.2
External Dimension WxHxD(m)	2.5x2.1x1.7	3.1x2.3x2.26	3.6x2.3x2.26	4.1x2.3x2.76	5.1x2.3x2.76	5.1x2.8x2.76	5.1x2.8x3.3	6.1x2.8x3.5
Temperature Range			C will be custo C D:-40℃		50℃ G:-70℃	;)		
Humidity Range	20%~95%	R.H.(10%-98	3%R.H/5%~9	8%R.H spec	ial conditions	for selection	)	
Analytic Accuracy/Evenness Degree of Temperature and Humidity	0.1℃; 0.	0.1°C; 0.1%R.H./±1.0°C; ±3.0%R.H.						
Control Accuracy/Temperature Stabicity of Temperature and Humidity	±1.0°C;	±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.						
Heating/Cooling Rate		About 3.0 $^{\circ}$ C / minutes; About 1.0 $^{\circ}$ C / minutes per minute (down 2 ~ 10 $^{\circ}$ C per minute for special conditions of application)						
Inner and Outer Materials			SUS304# sta 4# stainless s		urface strips	or cold-rolled	d steel paint (	optional),
Insulation Material	High temp	erature resist	ant high dens	sity polyureth	ane rigid foar	n insulation m	naterials.	
Cooling System		hamber is les III water–cool		can select a	ir-cooled or	water-cooled	; if more than	10 m3,
Protection Devices						nigh and low ve ses, failure wa		
Parts	Recorder (optional), watching window, 50mm testing hole,PL internal bulbs,partition plate, dry and wet ball gauze							
Controller	South Korea "TEMI"							
Compressor	France's	"Tecumseh"	' Brand					
Power	3Ф 380V	AC ± 10% 50/	60HZ					
Note		If the space is less than 10 $m^3$ , it can be made as whole structure, movable or board assembly structure; if it more than 10 $m^3$ , all of them are board assembly structure.						



### Thermal Shock Chamber (Two Chambers)



Touch-screen Color Controller Japan's(OYO)U-8226S

#### **Meeting Standard**

- ●GJB150.5A-2009
- ●GB/2424.13-2002
- GJB360B-2009GB2423.1-2008/IEC6008-2-1-2007
- GBT 2423.2-2008
- ●GBT 10589-2008
- ●GBT 11158-2008

Thermal Shock Chamber is used to test the capability of material structure or composite materials to withstand the continuous environmental changes between extremely high temperature and low temperatures during a short period, and therefore understand the chemical changes or physical damages caused by expansion from heat and contraction from cold in the shortest possible time. It is applicable to metals, plastic, rubber, electronics amongst other materials. The test result can be used as a reference or basis for product improvement.

#### Features

- Two chambers equipment is divided into high temperature area and low temperature area. The test specimen is put in the hanging basket, when shock, the specimen will be moved by the hanging basket to the high temperature area or low temperature area to impact the dynamic mode of the specimen.
- Using touch-control graph control as operation interface, easy to operate.
- Applying wind route conversion to the shock method to distribute temperature to the testing zone for cold and thermal shock measurement.
- For high temperature shock or low temperature shock,maximum time is up to 999H,and maximum circulation cycles are 9999 times.
- The system can be used for automatic circulation Shock or manual selective shock.
- Binary cooling system is adopted for cooling, with quick cooling effect. The method is water cooling.
- Can not do normal temperature shock test.

#### Operating Interface



#### Technical parameter

Model	CZ-H-42(A~C)	CZ-H-80(A~C)	CZ-H-150(A~C)	CZ-H-200(A~C)	CZ-H-252(A~C)		
Internal Dimension WxHxD(cm)	40×35×30	50×40×40	60×50×50	60×60×55	70×60×60		
External Dimension WxHxD(cm)	110x193x145	120x206x155	130x239x167	130x257x170	140x263x175		
Temperature Range	(150°C~A:-45°C;B: -	55°C;C: -65°C);( High te	mperature zone :+60°C~+	150°C; Low temperature z	cone :–10°C~–65°C)		
Heating Time(Heat Storage Area)	RT~200℃ about 35	min					
Cooling Time(Cool Storage Area)	RT~-70℃ about 55r	min					
Temperature Response Time / Time Change	≤5min / ≤10sec	≤5min / ≤10sec					
Precision Temperature Control / Distribution Accuracy	±0.5℃ / ±2.5%℃	±0.5°C / ±2.5%°C					
Inner and Outer Materials		The external box is the SUS304# stainless steel surface strips or cold–rolled steel paint (optional),the inner box is SUS304# stainless steel.					
Insulation Materia	Heat-resistance high	n-density aluminum sili	cate fiber cotton or PU	foam insulator material	s		
System	P.I.D+S.S.R+ Micro-	computer balanced ter	nperature control syste	m			
Cooling System	Semi-hermetic double	e-stage compressor (wa	ater-cooled type) /Herme	etic double-stage compr	essor (air-cooled type)		
Security Protection Devices	Non-fuse breaker, hig switch, failure warning	gh and low Pressure pro g system, electronic alar	tective switch of the com	pressor, refrigerator high	n-pressure protective		
Accessories	Viewing window (spec	Viewing window (special order), shelves (freely adjustable, 2 pcs), power-on test cable port, castor, horizontal support					
Power	AC380V 50HZ/60HZ	AC380V 50HZ/60HZ 3					
Weight (Approximate)	500Kg	700Kg	900Kg	1100Kg	1300Kg		
Controller	South Korea "SAMV	VOM TECH"					
Compressor	France's "Tecumsel	France's "Tecumseh" Brand/Germany's Bitzer					

#### Thermal Shock Chamber (Three Chambers)



Touch-screen Color Controller Japan's(OYO)U-8226S

#### **Meeting Standard**

- ●GJB150.5A-2009
- GB/2424.13-2002GJB360B-2009
- ●GB2423.1-2008/IEC6008-2-1-2007
- GBT 2423.2-2008GBT 10589-2008
- •GBT 10589-2008

# Thermal Shock Chamber is used to test the capability of material structure or composite materials to withstand the continuous environmental changes between extremely high temperature and low temperatures during a short period, and therefore understand the chemical changes or physical damages caused by expansion from heat and contraction from cold in the shortest possible time. It

damages caused by expansion from heat and contraction from cold in the shortest possible time. It is applicable to Lithium–ion battery, metals, plastic, rubber, electronics amongst other ,Lithium–ion battery. The test result can be used as a reference or basis for product improvement.

#### eatures

- Divided into three areas:high temperature,low temperature, the three-part test area, esting products placed on the test,when the impact of high temperature or cold temperatures into the area of impact testing area.
- Using touch-control graph control as operation interface, easy to operate.
- Applying wind route conversion to the shock method to distribute temperature to the testing zone for cold and thermal shock measurement.
- For high temperature shock or low temperature shock,ma x imum time is up to 999H,and maximum circulation cycles are 9999 times.
- The system can be used for automatic Circulation Shock or manual selective shock, capable of setting two zones or three zones shocks as well as cold and thermal shock start-up.
- Binary cooling system is adopted for cooling, with quick cooling effect. The method is water cooling.
- Normal temperature shocd test is allowed.

#### Operating Interface



roommour paramotor						
Model	CZ-I-42(A~C)	CZ-I-80(A~C)	CZ-I-100(A~C)	CZ-I-150(A~C)	CZ-I-252(A~C)	CZ-I-450(A~C)
Internal Dimension WxHxD(cm)	40×35×30	50×40×40	50×45×45	60×50×50	70×60×60	80×75×75
External Dimension WxHxD(cm)	140x185x145	150X193X153	150X195X160	160x220X185	175x212X197	190x227x221
Temperature Range (test Area)	(150°C~A:-45°C;E	3: -55°C;C:-65°C);	( High temperature z	one :+60°C~+150°C;	Low temperature zo	ne:-10°C~-65°C)
Heating Time (Heat Storage Area)	RT~200℃ about	35min				
Cooling Time (Cool Storage Area)	RT~-70℃ about	55min				
Temperature Response Time / Time Change	≤5min / ≤5se	C				
Precision Temperature Control / Distribution Accuracy	±0.5℃ / ±2.5°	±0.5°C / ±2.5%°C				
Inner and Outer Materials	The external box	The external box is the SUS304# stainless steel surface strips ,the inner box is SUS304# stainless steel.				
Insulation Material	Heat-resistance I	nigh-density alumin	um silicate fiber cott	on + PU foam insula	tor materials	
System	P.I.D+S.S.R+ Mic	ro-computer balance	ced temperature con	trol system		
Cooling System	Semi-hermetic do	ouble-stage compre	essor (water-cooled	type) /Hermetic doul	ble-stage compress	or (air-cooled type)
Security Protection Devices	Non-fuse breaker switch, failure war	r, high and low presenting system, electron	sure protective switc onic alarm	h of the compressor	, refrigerator high-p	ressure protective
Accessories	viewing window (s	special order), shelve	es (freely adjustable,	2 pcs), power-on te	est cable port, castor	, horizontal support
Power	AC380V 50HZ/6	AC380V 50HZ/60HZ 3 /				
Weight (approximate)	700Kg	900Kg	1100Kg	1200Kg	1400Kg	1900Kg
Controller	South Korea "SA	MWOM TECH"				
Compressor	France's "Tecum	rances "Tecumseh" Brand/Germanys Bitzer				

### **Temperature Vacuum Chamber**



#### **Meeting Standard**

●GB10590-89

●GB15091-89

●GB11159-89

GB/2423.25-1992GB/T2423.26-1992

•GJB150.2-86

#### Technical parameter

Mod	del	CZ-405 CZ-410 CZ-705 CZ-710 CZ-720					
Pov	ver	AC380V/50HZ Th	ree Phases Five W	ires			
Wat	tt (kw)	11	15	16	18	27	
Ten	nperature Adjustment Method	Balance thermostat	control system (BTC	system)			
Wo	rking Condition Temperature	+5℃~+35℃					
	Temperature Range	-40°C~+150°C			-70°C~+150°C		
	Degree of Temperature Fluctuation	±0.5℃					
70	Temperature Deviation	≥100°C, ± 3.0°C(At	mospheric pressure ar	nd no load ) , $<$ 100 $^{\circ}$ C,	± 2.0℃(Atmospheric	pressure and no load)	
erfo	Heating/Cooling Rate	0.7℃~1.0℃/min ( /	Average at a whole )				
m	Pressure Range	Atmospheric pressu	ure~1kpa			,	
Performance	Pressure Deviation	≥40kpa, ±2kpa;	TOTAL CONTRACT CONTRACT	.5kpa; ≤4kpa, ±0.	CACCO-MICAGO		
0	Falling Pressure Rate	Programme and the second	Atmospheric pressure ~1kpa≤30min (atmospheric temperature)				
	Pressure Recovery Rate	10kpa/Min(adjustable)					
	Temperature Uniformity	≤2.0°C(Atmospheric pressure and no load)					
-	Outer Material	Cold rolled stainless steel sheet (spray coated)					
Nate	Inner Material	Stainless steel plate(SUS304)					
Material	Pressure Bearing Material	Quality thick stainless steel plate (spray coated)					
200	Insulation Material	Quality glass wool					
Refr erat syst	Refrigerator	Semi-hermetic con	npressor				
tion tem	Cooling Method	Water-cooled					
Vac	cuumize Method	Mechanical sliding	vane rotary vacuum p	ump			
Hea	ater	Quality nickel chror	n heater				
Blo	wer	Axial-flow fan					
	w Window		ated observation insul	ated glass window			
A 10000	nperature Sensor	Pt100 sheathed pla					
Cor	ntroller	Touch-screen PLC	controller				
_	rkshop Volume(L)	504	1000	504	1000	2000	
Inte	rnal Dimensions WxHxD (cm)	70X90X80	100X100X100	70X90X80	100X100X100	120X150X120	
Saf	ety Device	Safeguard of ultra temperature, safeguard of fuel lean, excessive pressure, circuit break and overload for compressor. Overload blower safeguard, circuit wanting–phase protection, leakage protection, water level switch and vacuum pump fault alarm.					
Sta	ndard Configuration	and time integrator			), shelf, shelving stand	, ,	
Opt	Optional Accessories  Remote monitoring computers and software, RS485 communication interface. Recording meter, pri and added shelves. Special specimen holder				ording meter, printer		

The indicators are measured at room temperature 25° C under no load condition.

### **Temperature Humidity Vibration Chamber**

#### Purpose

Used with appropriate vibration test bench to meet respective integrated environmental test requirements of temperature, humidity and vibration; extensively applied in many a field including aviation and aerospace, shipping, electronics and telecommunications.

#### **Features**

A combined structure of test chamber and refrigerating system boasting compact and beautiful design; independent console to make it convenient for operation; original refrigerating compressor unit and its main accessories imported from abroad; imported LCD color touch screen controller capable of automatic control of temperature and humidity programs; and R232 telecommunication interface available. To meet their unique demands, users may choose from different models of vibration test bench to ensure that, in addition to good cool, heat and air seal system, this vibration bench will also boasts remarkable effect of mechanical vibration.



●CZ-J-1000

Internal Dimension WxHxD(cm)  60x85x80  80x95x80  100x100x80  100x100x80  100x100x100  External Dimension WxHxD(cm)  110x171x137  130x181x137  150x186x137  150x186x157  Temperature Range  -70°C+100°C(150°C)  (A:25°C B:0°C C:-20°C D:-40°C E:-50°C F:-60°C G:-70°C)  Humidity Range  20%-98%R.H.(10%-98%R.H/5%-98%R.H as special seleition condition)  Analytic Accuracy/Evenness Degree of Temperature and Humidity  0.1°C; 0.1%R.H./±1.0°C; ±3.0%R.H.  Control Accuracy/Temperature Stabicity of Temperature and Humidity  ±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.  Heating/Cooling Rate  Approximately 3.0°C/minute; approximately 1.0°C/minute  ("2°C-10°Cdecrease per minute" is a special optional condition)  Inner and Outer Materials  Outer plate is sus 304# stainless steel with matte treatment  Insulation Material  High temperature resistant high density polyurethane rigid foam insulation materials.  Cooling System  Air cooling /single segment compressor (-20°C), air water cooling/double segment compressor  Protection Devices  Protection Devices  Recorder (optional), watching window, 50mm testing hole, PL internal bulbs, partition plate, dry and wet ball gauze	rediffical parameter						
External Dimension WxHxD(cm)  110x171x137  130x181x137  150x186x137  150x186x157  Temperature Range  -70°C+100°C(150°C) (A:25°C B:0°C C:-20°C D:-40°C E:-50°C F:-60°C G:-70°C)  Humidity Range  20%-98%R.H.(10%-98%R.H/5%-98%R.H as special seleition condition )  Analytic Accuracy/Evenness Degree of Temperature and Humidity  1.0°C; ±2.0%R.H./±1.0°C; ±3.0%R.H.  Control Accuracy/Temperature Stabicity of Temperature and Humidity  ±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.  Heating/Cooling Rate  Approximately 3.0°C/minute; approximately 1.0°C/minute ("2°C-10°Cdecrease per minute" is a special optional condition)  Inner and Outer Materials  Outer plate is sus 304# stainless steel with matte treatment  Insulation Material  High temperature resistant high density polyurethane rigid foam insulation materials.  Cooling System  Air cooling /single segment compressor (-20°C), air water cooling/double segment compressor Protection Devices  Fuse-free switch, overloading protection switch for compressor, high and low voltage coolant protection switch, over-humidity and over-temperature protection switch, fuses, failure warning system  Parts  Recorder (optional), watching window, 50mm testing hole, PL internal bulbs, partition plate, dry and wet ball gauze  Vibration Table  selection based on the customer's requirement; Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller  South Korea "TEMI"  Compressor  France's "Tecumseh" Brand	Model	CZ-J-408 (A~G)	CZ-J-608 (A~G)	CZ-J-800 (A-G)	CZ-J-1000 (A~G)		
Temperature Range  -70°C+100°C(150°C) (A:25°C B:0°C C:-20°C D:-40°C E:-50°C F:-60°C G:-70°C)  Humidity Range  20%-98%R.H.(10%-98%R.H/5%-98%R.H as special seleition condition )  Analytic Accuracy/Evenness Degree of comperature and Humidity  0.1°C; 0.1%R.H./±1.0°C; ±3.0%R.H.  Control Accuracy/Temperature Stabicity of Temperature and Humidity  ±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.  Heating/Cooling Rate  Approximately 3.0°C/minute; approximately 1.0°C/minute ("2°C ~10°Cdecrease per minute" is a special optional condition)  Inner and Outer Materials  Outer plate is sus 304# stainless steel with matter treatment  Insulation Material  High temperature resistant high density polyurethane rigid foam insulation materials.  Cooling System  Air cooling /single segment compressor (-20°C), air water cooling/double segment compressor  Protection Devices  Fuse-free switch, overloading protection switch for compressor, high and low voltage coolant protectic switch, over-humidity and over-temperature protection switch, fuses, failure warning system  Parts  Recorder (optional), watching window, 50mm testing hole, PL internal bulbs, partition plate, dry and wet ball gauze  selection based on the customer's requirement; Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller  South Korea "TEMI"  Compressor  France's "Tecumseh" Brand	Internal Dimension WxHxD(cm)	60x85x80	80x95x80	100x100x80	100x100x100		
Carbon Perature Hange   Carb	External Dimension WxHxD(cm)	110x171x137	130x181x137	150x186x137	150x186x157		
Analytic Accuracy/Evenness Degree of Temperature and Humidity  Control Accuracy/Temperature Stabicity of Temperature and Humidity  ± 1.0°C; ± 2.0%R.H./± 0.5°C; ± 2.0%R.H.  Heating/Cooling Rate  Approximately 3.0°C/minute; approximately 1.0°C/minute ( "2°C - 10°C decrease per minute" is a special optional condition)  Inner and Outer Materials  Outer plate is sus 304# stainless steel with matte treatment  High temperature resistant high density polyurethane rigid foam insulation materials.  Cooling System  Air cooling /single segment compressor (-20°C), air water cooling/double segment compressor  Protection Devices  Fuse-free switch, overloading protection switch for compressor, high and low voltage coolant protection witch, over-humidity and over-temperature protection switch, fuses, failure warning system  Parts  Recorder (optional), watching window, 50mm testing hole, PL internal bulbs, partition plate, dry and wet ball gauze  Selection based on the customer's requirement; Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller  South Korea "TEMI"  France's "Tecumseh" Brand	Temperature Range		C D:-40℃ E:-50℃ F:-6	60℃ G:-70℃)			
Temperature and Humidity  O.1 C; 0.1%H.H./±1.0 C; ±3.0%H.H.  Control Accuracy/Temperature Stabicity of Temperature and Humidity  ±1.0 C; ±2.0%H.H./±0.5 C; ±2.0%H.H.  Approximately 3.0 C/minute; approximately 1.0 C/minute ("2°C -10°C decrease per minute" is a special optional condition)  Inner and Outer Materials  Outer plate is sus 304# stainless steel with matte treatment  Insulation Material  High temperature resistant high density polyurethane rigid foam insulation materials.  Cooling System  Air cooling /single segment compressor (-20°C), air water cooling/double segment compressor  Protection Devices  Fuse-free switch, overloading protection switch for compressor, high and low voltage coolant protection switch, over-humidity and over-temperature protection switch, fuses, failure warning system  Parts  Recorder (optional), watching window, 50mm testing hole, PL internal bulbs, partition plate, dry and wet ball gauze  Vibration Table  selection based on the customer's requirement; Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller  South Korea "TEMI"  France's "Tecumseh" Brand	Humidity Range	20%~98%R.H.(10%-9	8%R.H/5%~98%R.H as sp	ecial seleition condition )			
of Temperature and Humidity  ### ### #### #######################	Analytic Accuracy/Evenness Degree of Temperature and Humidity	0.1℃; 0.1%R.H./±1.0	℃; ±3.0%R.H.				
Inner and Outer Materials  Outer plate is sus 304# stainless steel with matte treatment  Insulation Material  High temperature resistant high density polyurethane rigid foam insulation materials.  Cooling System  Air cooling /single segment compressor (-20°C), air water cooling/double segment compressor  Protection Devices  Fise-free switch, overloading protection switch for compressor, high and low voltage coolant protection switch over-temperature protection switch, fuses, failure warning system  Parts  Recorder (optional), watching window, 50mm testing hole, PL internal bulbs, partition plate, dry and wet ball gauze  Vibration Table  selection based on the customer's requirement; Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller  South Korea "TEMI"  France's "Tecumseh" Brand	Control Accuracy/Temperature Stabicity of Temperature and Humidity	±1.0℃; ±2.0%R.H./	±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.				
Insulation Material  High temperature resistant high density polyurethane rigid foam insulation materials.  Cooling System  Air cooling /single segment compressor (-20°C), air water cooling/double segment compressor  Protection Devices  Fuse-free switch, overloading protection switch for compressor, high and low voltage coolant protection switch over-humidity and over-temperature protection switch, fuses, failure warning system  Parts  Recorder (optional), watching window, 50mm testing hole, PL internal bulbs, partition plate, dry and wet ball gauze  Vibration Table  selection based on the customer's requirement; Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller  South Korea "TEMI"  Compressor  France's "Tecumseh" Brand	Heating/Cooling Rate						
Air cooling /single segment compressor (-20°C), air water cooling/double segment compressor  Protection Devices Fuse-free switch, overloading protection switch for compressor, high and low voltage coolant protection switch, over-humidity and over-temperature protection switch, fuses, failure warning system  Parts Recorder (optional), watching window, 50mm testing hole, PL internal bulbs, partition plate, dry and wet ball gauze  Vibration Table selection based on the customer's requirement; Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller South Korea "TEMI"  Compressor France's "Tecumseh" Brand	Inner and Outer Materials	Outer plate is sus 304# stainless steel with matte treatment					
Protection Devices  Fuse-free switch, overloading protection switch for compressor, high and low voltage coolant protection switch, fuses, failure warning system  Parts  Recorder (optional), watching window, 50mm testing hole,PL internal bulbs,partition plate, dry and wet ball gauze  Vibration Table  selection based on the customer's requirement;Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller  South Korea "TEMI"  France's "Tecumseh" Brand	Insulation Material	High temperature resistant high density polyurethane rigid foam insulation materials.					
Parts Switch, over-humidity and over-temperature protection switch, fuses, failure warning system  Recorder (optional), watching window, 50mm testing hole,PL internal bulbs,partition plate, dry and wet ball gauze  Vibration Table Selection based on the customer's requirement;Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller South Korea "TEMI"  France's "Tecumseh" Brand	Cooling System	Air cooling /single segr	Air cooling /single segment compressor (-20°C), air water cooling/double segment compressor				
Vibration Table selection based on the customer's requirement; Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory  Controller South Korea "TEMI"  Compressor France's "Tecumseh" Brand	Protection Devices		Fuse-free switch, overloading protection switch for compressor, high and low voltage coolant protection switch, over-humidity and over-temperature protection switch, fuses, failure warning system				
South Korea "TEMI"  Compressor  France's "Tecumseh" Brand	Parts	Recorder (optional), watching window, 50mm testing hole,PL internal bulbs,partition plate, dry and wet ball gauze					
Compressor France's "Tecumseh" Brand	Vibration Table	selection based on the customer's requirement; Detail technology parameters please see the vibration system, at the page of 18 to 20, of the mechanical test instrument version directory					
	Controller	South Korea "TEMI"					
Power 3	Compressor	France's "Tecumseh" Brand					
	Power	3Φ 380VAC ± 10% 50/	3Φ 380VAC ± 10% 50/60HZ				

### **UV Chamber**



●CZ-UV-1

#### **Product Description**

Meeting ASTM G154, GB/T16422.3-2014, GB/T16422.3-2014

#### Technical parameter

lecnn	ical parameter			
Model		CZ-UV-1		
Internal I	Dimension	45x110x50cm		
Purpose		Simulation Sunlight ,dew on maaterials and samples of the harm caused by test,widely used to assess climate resistant performance of material		
Standard	i	GB/T16422.3,GB/T5170.9		
Sex	Temperature Range	RT+10℃~+70℃		
Ability	Temperature Fluctuation	≤ ± 0.5℃		
Ability	Humidity Range	95%~100%RH		
External	Dimension D x W x H	50X 130 X 148cm		
Usage E	nvironment Temperature	+5℃ ~+35℃		
Test Light Source		UV-A/B		
Test Light Source Wave-Length		280~400nm		
Sample	Frame Size	150 × 75 × 1.5mm		
Center Distance Between Sample and Lamp		50mm ± 2mm		
Center D	istance Between Lamp and Lamp	70mm ± 2mm		
Material	Working Room	Advanced Brushed Stainless Steel		
iviateriai	Outer Shell	Advanced Brushed Stainless Steel		
Heating	Humidifier	Electric heating type steam generates heat and humidify		
Control	Operation Interface	Digital intelligent type soft touch key input (programmable control		
System	Running Method	Programmable control/constant running		
-,	Setting Range	As temperature range		
	Input	Blackboard temperature meter,PT-100 sensor		
	Subsidiary Function	Upper-lower limit alarm, alarm display, timer function		
Standard	Configuration	28 stainless steel sample		
Safety D	evice	Leakage, overload power failure protection, over- temperature protection, water shortage, groud protection		
Power si	upply	220v ± 1 0%,50Hz		
Watt(kw)		3		

#### Technical parameter

recunic	cai parameter		
Model		CZ-UV-300L( Chamber Type)	
Internal D	Dimension	1000×500×600 (mm) W×H×D	
Exteral D	Dimension	About 1600 x 1412 x 800 ( mm ) W x H x D	
The Cent	ter Distance of Inner Lamp Tube	70mm	
Distance and Lam	For Test Surface of Specimen p Tube	50 ± 3 mm Spacing adjustable	
Lamp Tu	be Length	1220mm	
Lamp Tu	be Power(kw)	40W	
Service L	ife of Lamp Tube	Above 1600h	
Lamp Tu	be Quantity	8 Pieces in all	
Usage Er	nvironmental Condition	Environment temperature:+25℃;R.H. ≤85%,this two values measured under the condition of no test sample in the chamber	
Tempera	ture/Humidity Range	Irradiation temperature:+50 ~ +70 ℃,condensation temperature:RT ~ +60 ℃, spray temperature : RT, RH ≥85%RH	
Material	Working Room	Advanced Brushed Stainless Steel	
iviateriai	Outer Shell	Advanced Brushed Stainless Steel	
Main Tec	chnical Parameter	Temperature resolution:0. 01°C, temperature deviation: $\pm$ 1°C, temperature uniformity: $\pm$ 2°C, temperature fluctuation: $\pm$ 0.5°C, spray time: 1min $\sim$ 99h adjustable ,ultraviolet wavelength: UV-A wavelength coverage is 320-400nm, wavelength of center is 340nm,UV-B wavelength of coverage is 280-320nm, wavelength of center is 313nm.UV tube can choose UV-A / UV-B tube,If no special instruction,we will equip UV-A tube.	
Weight		200kg	
Power(kv	v)	About 5.5 KW	
Max Curr	rent	About 16A	
Power St	upply	AC 220V	

# Rain Spray Chamber



●CZ-1000LY

#### Features and purpose

- This equipment is used to evaluate the working performance of the product through the simulated dynamic operation of the test materials exposed to rains of varied intensity.
- Studio quality materials imported steel plates, steel casing of A3 electrostatic spraying.
- •All other contact with water components are copper or stainless steel material
- •This equipment applies to products and parts information for the village of Lake Test .



#### Technical parameter:

Model	CZ-600LY CZ-1000LY			
Workshop Size	60 × 60 × 60 cm 100x100x100cm			
Temperature Range of Working Chamber	RT	RT		
Nozzle Diameter	0.4mm	0.4mm		
Swing Pipe Radius	200mm	400mm		
	Premium semicircle stainless steel spray arc circular pipe diameter is 400 mm	Premium semicircle stainless steel spray arc circular pipe diameter is 800 mm		
Nozzle Spacing	50mm	50mm		
Spray Volume	1.1L/min	1.8L/min		
Spray Water Pressure	80 ~ 100 Kpa	80 ~ 100 Kpa		
Meeting Level	IPX3、IPX4			
Swing Pipe Angle	1 ~ 300°, from centre to both sides around each pendulum 1~150°can be arbitrary set. from centre to both sides around each pendulum 1 ~ 150°can be arbitrary set.			
Standard Selection Swing Pipe Size (mm)	R200,R400,R600,R800,R1000,R1200,R1400,R1600 (The pendulum pipe radius above 600 mm is the ordered specification)			

Features and purpose
This test is used to simulate the condition of strong high prefor auto parts to test performance index.



●CZ-IP-9K

Model	CZ—IP-9K
Specimen Limitation	This machine forbids doing inflammable, explosive, volatile, corrosive, strong radiation products test.
Standard Capacity	1000 L
Inner Dimension	1000 × 1000 × 1000 ( mm ) W × H × D
Outer Dimension	About 1820 × 1887 × 1500 ( mm ) W × H × D
Weight	About 480kg
Max Installation Power	About 22 KW
Max Electric Current	About 33A
Usage Environmental Condition	Temperature:+25°C;R.H.≤85%,this two values measured under the condition of no test sample in the chamber
Water Temperature Range	RT~+85℃
Spray Volume	14 ~ 16L/min
Pray Pressure	About 8000 ~ 10000Kpa
Spray Method	Distance between nozzle and specimen 100–150mm adjustable 2 0° ,30° ,60° ,90° spray time of each angle adjustable
Rotating Speed of Test Table	1 ~ 10 ± 1r/min Adjustable
Rotary Table Bearing Load	≤30kg
Rotary Table Diameter	∮ 600mm
Height of Rotary Table	Adjustable by product size
Specimen Fixed (Selection Item)	According the shape and dimension of products to make the grip of test specimen(customers should provide detail dimension drawing of specimen or entity)
Testing Meet Requirement	DIN40050-9 IPX9K high pressure/steam jet cleaning method
Observation Window	location on the door,dimension 500x500mm DxH
Spray System	Automatic leakage pressure protection once over-pressure
Storage Environmental Requirement	Environmental temperature of machine should keep within 0℃ ~ +35℃



### **Ozone Chamber**

#### Application:

The ozone is few in the content in the atmosphere but is the main factor that the rubber crack, the aging box of ozone imitates and enhances the ozone in the atmosphere condition, studying thee ozone to the function regulation of the rubber, authenticate and evaluate the rubber anti-ozone method of the aging function and a protection of the antiozone effect guickly, then adopt to defend the aging measure

defectively, with the service life that the exaltation rubber product.

Uses to test the rubber product to bear the ozone aging performance, the equipment satisfies by the related standard:JISK6259 ASTM1149



#### Meeting Standard

- GB7762-2003 GBT2951.21-2008/IEC60811-2-1-2001
- GJB1217-91
- ISO\_1431-1-2004

#### **Technical Parameters of the Equipment:**

Model	CZ-150CY
Workshop Size (DxWxH )	50 × 50 × 60 cm
Temperature Range of The Working Chamber	RT+10~+60℃
Emperature Fluctuation	±0.5℃
Temperature Deviation	±1.0℃
Temperature Resolution	0.1℃
Turntable Rotary Speed	1~30r/min adjustable
Stretching Speed	1~30r/min adjustable
Stretching Distance	1~150mm adjustable
Product's Extension Length	1~100mm adjustable
Ozone Concentration	0 ~ 1000 pphm (control of the set value) adjustable
Deviation of Ozone Concentration	≤5%pphm
Air Velocity	Realizable gas velocity is 12 ~ 16 mm/s or 600 mm/s + 100 mm/s
Watt	3.5KW

### **Dust Chamber**

### **Meeting Standard**

- GB2423.37-2006/IEC 60068-2-68-1994
- GB4208-2008/IEC60529:2001
- GJB150.12-2009
- GB7000-1-2007
- GB10485

#### Technical parameter:

	reciii	ecillical parameter.								
	Model		CZ-500SC	CZ-800SC	CZ-1000SC	CZ-1500SC	CZ-2000SC			
(COMMENT)	Working	Room Capacity(L)	500	800	1000	1500	2600			
2025 2025	523.02	Metal Screen Standard Spacing	50um							
00-0	유	Metal Wire Diameter			75um		33			
******	ara shn	Talcum Powder Usage		2	Kg/m² ~4Kg/ı	m²				
	Technique Characteristic	Spray Powder Falling Dust Method	Decline the dust type freely:The adoption leaves the heart breeze machine to blow the sand dust to the box to take over 1/5 make it sink freely highly will 2.Blow the sand dust:Thebarometric type of bottom sprays the ash,three file pressures are adjustable							
	The utility	D	80	90	100	100	120			
	room Size	W	80	90	100	100	120			
	(cm)	Н	80	100	100	150	180			
		Working Room	SUS 304# stainless steel							
	Material	Outer Shell	Cold rolled sheet antirust coating processing or # SUS304 stainless steel (optional)							
- 0	Control	Operation Interface	The liquid crystal display color touch screen controller of LCD controller (optional)				or touch-tone			
	system	Running Method	Program operation/ constant type operation							
		Input	PT-100 sens	sor						
	Power S	Supply	AC380V or the 220V+10%,50HZ							
	Standar	d Configuretion	Two pieces of test material shelf, one instruction, and one dust screen							

### ●CZ-1000SC

### **Drying Oven**

- 1. Outer material adopts SECC steel plate with paint treatment; inner material adopts sus stainless steel
- 2.New high temperature resistant long axis motors
- 3.Turbofan
- 4.(Sillcon Packing)
- 5. Over-temperature protection: Overload automatic power failure system
- 6.Recirculation:Forced horizontal air supple cycle
- 7.Heating:PID+S.S.R
- 8.Temperature range: RT +20°C~260°C(300°C)
- 9. Temperature Controller: PID Microcomputer Control
- 10. Timer: record time when temperature reached; cut off the power when time is up

# **Meeting Standard**

- GBT 11158-2008
- GB/T 2423.2-2001
- GBT 2423.2-2008





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Model	WxHxD(cm)	WxHxD(cm)	Heating time	Accuracy (°C)	Uniformity (%)	Power 50/60HZ	Power (KW)	Gate	Remark	
CZ-452A	45x40x40	61x86x80	RT+10°C~150°C  About 20 minutes  RT+10°C~200°C  About 25 minutes  RT+10°C~260°C				3.6	2		
CZ-602A	50x60x50	66x106x90					4.2	2		
CZ-802A	60x80x50	76x126x90				220V, 1ψ	4.6	2		
CZ-902A	60x90x50	76x136x90					5.2	2		
CZ-1002A	100x100x100	116x146x140					12	2		
CZ-1202HA	90x120x50	106x166x90		RT+10℃~260℃	±1.0	2.5%		7.8	2	
CZ-1202LA	120x90x50	184x126x68			±1.0	2.5 /6		7.8	2	Double doors
CZ-1402A	140x120x60	204x156x78	About 30 minutes			380V, 3ψ	12	2	Double doors	
CZ-1502A	150x150x120	214x186x138	RT+10°C~300°C			360ν, 3ψ	15.6	2	Double doors	
CZ-1602A	160x140x80	224x176x98	About 35 minutes				15.6	2	Double doors	
CZ-1802A	180x140x100	244x176x118					16.2	2	Double doors	
CZ-2002A	200x160x120	264x296x138					18.2	2	Double doors	



### **Drying Oven**

#### **Features**

- 1.SECC use foreign steel, precision powder paint;SUS used in stainless steel
- 2.New high temperature long axis motors
- 3.Turbofan
- 4. High temperature resistant fiber
- 5. Over-temperature protection: Strong system load automatically offline
- 6.Recirculation:Air mandatory recycling
- 7.Heating:PID+S.S.R
- 8.Temperature:Room temperature +20~500℃
- 9.Temperature Controller: PID Microcomputer Control
- 10. Timer: Wen to time; Current time to cut heating
- 11.Also have 400℃ drying oven for your choice



●CZ-905B

●CZ-1005B

#### **Technical parameter**

Model	WxHxD(cm)	WxHxD(cm)	Heating time	Accuracy (℃)	Uniformity (%)	Power 50/60HZ	Power (KW)	Gate	Remark	
CZ-455B	40x45x40	73x114x72	RT~350℃ About 35 minutes  RT~400℃ About 40 minutes  RT~450℃	About 35 minutes RT~400℃				6.6	2	
CZ-605B	50x60x50	82x127x83						7.2	2	
CZ-805B	60x80x50	92x148x83							8.6	2
CZ-905B	60x90x50	92x158x83		±1.0	2.5%	380V, 3ψ	9.2	2		
CZ-1005B	100x100x100	132x170x125	About 45 minutes				18	2	Double doors	
CZ-1205HB	90x120x50	122x190x83	RT~500℃ About 50 minutes				15.8	2		
CZ-1205LB	120x90x50	150x158x83	About 30 minutes				15.8	2	Double doors	

### **Programmable Drying Oven**

#### **Features**

- 1.SECC use foreign steel, precision powder paint; SUS used in stainless steel
- 2.New high temperature long axis motors
- 3.Turbofan

Control below structure diagram

Control structure diagram on the right

High-temperature resistant long-axis motor

High-temperature ▼ resistant long-axis motor

- 4.(Sillcon Packing)
- 5. Over-temperature protection: Super automatic load electricity system
- 6.Recirculation:Air mandatory recycling
- 7.Heating:PID+S.S.R
- 8.RT+20 -- 300 °C

#### **Meeting Standard**

- GBT 11158-2008
- GB/T 2423.2-2001
- GBT 2423.2–2008



●CZ-452C

- Controller (Korean SP790): imported thin-film key-type controller with LCD display,
- Control method: temperature programmable alternating control,
- Capacity of programmable group: 30 Pattern (group) /300 Step (section) Maximum section runtime: 99 hours and 59 minutes,
- Memory function: In case of a power cut, the machine can resume the unfinished test as soon as power is recovered,
- Can be connected with computer through RS232 port to have a complete record of temperature graphs.

Model	WxHxD(cm)	WxHxD(cm)	Heating time	Accuracy (℃)	Uniformity (%)	Power 50/60HZ	Power (KW)	Gate	Remark							
CZ-452C	45x40x40	61x86x80					3.6	2								
CZ-602C	50x60x50	66x106x90				220V, 1ψ	4.2	2								
CZ-802C	60x80x50	76x126x90	RT+10°C-250°C About 20 minutes  RT+10°C-200°C About 25 minutes  RT+10°C-260°C About 30 minutes	About 20 minutes  RT+10°C~200°C  About 25 minutes			220ν, 1φ	4.6	2							
CZ-902C	60x90x50	76x136x90			About 20 minutes	About 20 minutes	About 20 minutes	About 20 minutes	About 20 minutes	About 20 minutes				5.2	2	
CZ-1002C	100x100x100	116x146x140						12	2							
CZ-1202HC	90x120x50	106x166x90				±1.0	2.5%		7.8	2						
CZ-1202LC	120x90x50	184x126x68		11.0	2.5 /6		7.8	2	Double doors							
CZ-1402C	140x120x60	204x156x78		About 30 minutes	About 30 minutes			380V, 3ψ	12	2	Double doors					
CZ-1502C	150x150x120	214x186x138	RT+10℃~300℃			σσον, σφ	15.6	2	Double doors							
CZ-1602C	160x140x80	224x176x98	About 35 minutes	About 35 minutes				15.6	2	Double doors						
CZ-1802C	180x140x100	244x176x118					16.2	2	Double doors							
CZ-2002C	200x160x120	264x296x138					18.2	2	Double doors							

Meeting Standard

UL1581-2001

• GBT 2423.2-2008

GB/T3512-2001



### **Yellowing Test Machine**



This machine is specially used for testing UV-resistant performance of materials under the radiation of UV light tube.

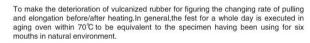
#### **Meeting Standard**

- ASTM D1148-1995
- GBT 11158-2008
- GBT 2423.2-2008

#### Technical parameter

Model	CZ-60NH(Vertical)	CZ-35NH(Horizontal)			
Source	Bulb ( 300W )	UVLamp (15Wx2f)			
Internal Dimension (WxDxH)cm	50×50×60	46x30x35			
External Dimension (WxDxH)cm	100×65×140	65x40x45			
Optical Density	Adjustable	1			
Temperature	RT+10℃~100℃	1			
Sample Table	360 degree rotation, rotate speed is 1~30r/min adjustable	T			
Weight	140Kg				
Power	1 Φ,AC 220V,50/60HZ				

### **Aging Test Machine**



#### **Meeting Standard**

- GBT 11158-2008
- GB/T 2423.2-2001
- GBT 2423.2-2008

#### Technical parameter

Model	CZ-7217-M	CZ-7217-L			
Internal Dimension(WxDxH)cm	40x40x50 50X60x50				
External Dimension(WxDxH)cm	80x108x82	90x118x92			
Temperature Range	RT +10~200℃ (300)℃				
Sample Rack Rotating Speed	5~10r/min				
Electricity	3KW	3.6KW			
Air Supply Motor	1/4	HP			
Rotary Motor	12	W			
Weight	87KG	90KG			
Power	1 Φ ,AC 220V,50/60HZ				
Accessories	Two pieces of sample holder plate grid, one sample turntable, and one instruction				

### **Ventilation Chamber**



●CZ-45HQ

- Ventilation conversion formula: N=(3590(X-Y)x2)
- VD ∆t N:Ventilators;
- V: Case of volume;
- X:Cutting open the ventilator when consumption of power;
- Y: Ventilators are not consumed by
- △t:temperature and ambient
- temperature difference; Constant:3590

#### Tachnical parameter

rechnical parameter					
Model	CZ-45HQ	CZ-60HQ			
Internal Dimension WxHxD)mm	450x500x450	500x600x500			
External Dimension WxHxD)mm	980x1060x660	1050x1160x680			
External Material	Inner box SUS # 304 stainless steel, 1.0t fog surface treatment SECC steel casing used by the paint powder.				
Temperature Range	RT+10℃~20	°C(300°C)			
Distribution Uniformity	2.5%	ဗ			
Air Ventilation Rate	0 ~ 200/hr available mode,7 buttons attached, Watt-hor				
Increase Speed Test	5~10r	pm			
Power	1 ∮ 220V	50HZ			

# Vacuum Drying Oven

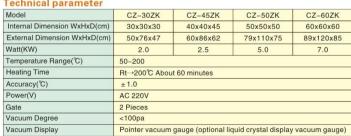
●CZ-45ZK

This kind of vacuum drying oven is one of the commonly used equipment in all sorts of aging test, it is suitable for electronic instruments and meters, materials, electrical, vehicles, metal, electronic products, all kinds of electronic SAP parts at high temperature or room temperature vacuum environment where can test various performance indicators and quality management.

#### **Meeting Standard**

- GBT 11158-2008
- GBT 2423.2-2008

#### **Technical parameter**





●CZ-7217-M

18 ZHONG ZHI http://www.testing-chambers.com



### **Cyclic Corrosion Chamber**

Cyclic Corrosion Chamber is used for imitating natural status in increase imitation test. The imitating condition is harder than status that we usually meet. The tester can combine the follow status such as: salt smog, dry,humidity, normal temperature, low temperature. The tester is for product used in intense changeable environment, such as: parts of automobile, navigation equipment, camera equipment, building material, electroplate coating and resistant to metal electrolytic corrosion in electrical system

#### **Meeting Standard**

- GB/T 10125-2012/ISO9227-2006
- GB/T 31467.3-2015
- GB/T2423.17-2008/IEC 60068-2-11-1981
- ASTM.B117-2009
- GB/T 2423.2-2008/IEC60068-2-2:2001
- GB/T 2423.3-2006/ IEC60068-2-78:2001
- GB/T 2423.4-2008/ IEC60068-2-30:2005
- GB/T 10587-2006
- GB/T 10586-2006
- GB/T 5170.8-2008



#### **Features**

- Adopt LCD color touch screen controller(SAMWOM TECH TEMI2500), can record all temperature humidity test curve.
- Control method: temperature programmable alternating control, humidity programmable alternating control and temperature/humidity programmable alternating control.
- Capacity of programmable group: 140 Pattern (group) 1400 Step (section) There can be a maximum of Repest99 section for every programmable group.
- Mode execution time for every section can be between zero to 999 hours and 59 minutes.
- ●1-999 circle of partial circulation or 1-999 circle of complete circulation can be set for every group.
- Memory function: In case of a power cut, the machine can resume the unfinished test as soon as power is recovered.
- Can be connected with computer through RS232/RS-485 port.
- Controller has SD storage card, 2G capacity, can record 2 years test data.

#### **Technical parameter**

Lab External Dimension WxHxD(mm) 2450x1553x1430 2830x1560x1830 3230x1560x1830 3630x1560x1930  Temperature Range RT-80°C /-10°C-80°C  Humidity Range 20%-98%  Analytic Accuracy/Evenness Degree of Temperature and Humidity 20.1°C; 0.1%R.H./±1.0°C; ±3.0%R.H.  Control Accuracy/Temperature stabicity of Temperature and Humidity ±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.  Lab Temperature Saline testing method(NSS ACSS)35°C±1°C/Corrosion-resistant testing method(CASS)50°C±1°C  Pressure Pot Temperature 35°C±1°C 50°C±1°C  Saline Temperature 35°C±1°C 50°C±1°C  Saline Concentration Concentration Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration  Compressed Air Pressure 1.00±0.01kgf/cm³  Spray Volume 1.0-2.0ml/80cm³/h (at least collecting 16 hours and take the average value)  PH Value 6.5-7.2 3.0-3.2  Spray Method Continuous spraying/Discontinuous spray	Model	CZ-90D	CZ-120D	CZ-160D	CZ-200D				
Temperature Range  RT-80°C /-10°C-80°C  Humidity Range  20%-98%  Analytic Accuracy/Evenness Degree of Temperature and Humidity  control Accuracy/Temperature stabicity of Temperature and Humidity  ±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.  Ealine testing method(NSS ACSS)35°C±1°C/Corrosion-resistant testing method(CASS)50°C±1°C  Pressure Pot Temperature  Saline testing method(NSS ACSS)47°C±1°C/Corrosion-resistant testing method(CASS)63°C±1°C  Saline Temperature  35°C±1°C  Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration  Compressed Air Pressure  1.00±0.01kgf/cm²  Spray Volume  1.0-2.0ml/80cm²/h (at least collecting 16 hours and take the average value)  PH Value  6.5-7.2  3.0-3.2  Spray Method  Continuous spraying/Discontinuous spray	Lab Internal Dimension WxHxD(mm)	900x620x600	1200x760x1000	1600x760x1000	2000x760x1100				
Humidity Range 20%-98%  Analytic Accuracy/Evenness Degree of Temperature and Humidity ±1.0°C; ±2.0%R.H./±1.0°C; ±2.0%R.H.  Control Accuracy/Temperature stabicity of Temperature and Humidity ±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.  Lab Temperature Saline testing method(NSS ACSS)35°C±1°C/Corrosion-resistant testing method(CASS)50°C±1°C  Pressure Pot Temperature Saline testing method(NSS ACSS)47°C±1°C/Corrosion-resistant testing method(CASS)63°C±1°C  Saline Temperature 35°C±1°C 50°C±1°C  Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration  Compressed Air Pressure 1.00±0.01kgf/cm²  Spray Volume 1.0-2.0ml/80cm²/h (at least collecting 16 hours and take the average value)  PH Value 6.5-7.2 3.0-3.2  Spray Method Continuous spraying/Discontinuous spray	Lab External Dimension WxHxD(mm)	2450x1553x1430 2830x1560x1830 3230x1560x1830 3630x1560x193							
Analytic Accuracy/Evenness Degree of Temperature and Humidity  Control Accuracy/Temperature stabicity of Temperature and Humidity  ±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.  Lab Temperature  Saline testing method(NSS ACSS)35°C±1°C/Corrosion-resistant testing method(CASS)50°C±1°C  Pressure Pot Temperature  Saline testing method(NSS ACSS)47°C±1°C/Corrosion-resistant testing method(CASS)63°C±1°C  Saline Temperature  35°C±1°C  Solium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration  Compressed Air Pressure  1.00±0.01kgf/cm²  Spray Volume  1.0-2.0ml/80cm²/h (at least collecting 16 hours and take the average value)  PH Value  6.5-7.2  3.0-3.2  Spray Method  Continuous spraying/Discontinuous spray	Temperature Range	RT~80°C /-10°C~80°C							
Control Accuracy/Temperature stabicity of Temperature and Humidity  ±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.  Lab Temperature  Saline testing method(NSS ACSS)35°C±1°C/Corrosion–resistant testing method(CASS)50°C±1°C  Pressure Pot Temperature  Saline testing method(NSS ACSS)47°C±1°C/Corrosion–resistant testing method(CASS)63°C±1°C  Saline Temperature  35°C±1°C  Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration  Compressed Air Pressure  1.00±0.01kgt/cm²  Spray Volume  1.0-2.0ml/80cm²/h (at least collecting 16 hours and take the average value)  PH Value  6.5-7.2  3.0-3.2  Spray Method  Continuous spraying/Discontinuous spray	Humidity Range	20%~98%							
of Temperature and Humidity  ±1.0 °C; ±2.0%H.H./±0.5 °C; ±2.0%H.H.  Saline testing method(NSS ACSS)35 °C±1 °C/Corrosion–resistant testing method(CASS)50 °C±1 °C  Pressure Pot Temperature  Saline testing method(NSS ACSS)47 °C±1 °C/Corrosion–resistant testing method(CASS)63 °C±1 °C  Saline Temperature  35 °C±1 °C  Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration  Compressed Air Pressure  1.00±0.01kgl/cm²  Spray Volume  1.0-2.0ml/80cm²/h (at least collecting 16 hours and take the average value)  PH Value  6.5-7.2  3.0-3.2  Spray Method  Continuous spraying/Discontinuous spray	Analytic Accuracy/Evenness Degree of Temperature and Humidity	0.1℃; 0.1%R.H./±1.0℃	C; ±3.0%R.H.						
Pressure Pot Temperature  Saline testing method(NSS ACSS)47℃ ± 1℃/Corrosion−resistant testing method(CASS)63℃ ± 1℃  Saline Temperature  35℃ ± 1℃  Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration  Compressed Air Pressure  1.00 ± 0.01kgt/cm²  Spray Volume  1.0~2.0ml/80cm²/h (at least collecting 16 hours and take the average value)  PH Value  6.5~7.2  3.0~3.2  Spray Method  Continuous spraying/Discontinuous spray	Control Accuracy/Temperature stabicity of Temperature and Humidity	±1.0°C; ±2.0%R.H./±	±1.0°C; ±2.0%R.H./±0.5°C; ±2.0%R.H.						
Saline Temperature  35°C±1°C  50°C±1°C  Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration  Compressed Air Pressure  1.00±0.01kgf/cm²  Spray Volume  1.0~2.0ml/80cm²/h (at least collecting 16 hours and take the average value)  PH Value  6.5~7.2  3.0~3.2  Spray Method  Continuous spraying/Discontinuous spray	Lab Temperature	Saline testing method(NSS ACSS)35℃ ± 1℃/Corrosion–resistant testing method(CASS)50℃ ± 1℃							
Saline Concentration  Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration  Compressed Air Pressure  1.00 ± 0.01kgt/cm²  Spray Volume  1.0~2.0ml/80cm²/h (at least collecting 16 hours and take the average value)  PH Value  6.5~7.2  3.0~3.2  Spray Method  Continuous spraying/Discontinuous spray	Pressure Pot Temperature	Saline testing method(N	SS ACSS)47°C ± 1°C/Corros	sion-resistant testing metho	od(CASS)63℃±1℃				
chloride solution with 5% concentration  Compressed Air Pressure  1.00 ± 0.01kgt/cm²  Spray Volume  1.0-2.0ml/80cm²/h (at least collecting 16 hours and take the average value)  PH Value  6.5-7.2  3.0-3.2  Spray Method  Continuous spraying/Discontinuous spray	Saline Temperature	35°C±1°C 50°C±1°C							
Spray Volume  1.0~2.0ml/80cm³/h (at least collecting 16 hours and take the average value)  PH Value  6.5~7.2  3.0~3.2  Spray Method  Continuous spraying/Discontinuous spray	Saline Concentration			.26g copper chloride is add	ed to each liter of sodium				
PH Value 6.5~7.2 3.0~3.2  Spray Method Continuous spraying/Discontinuous spray	Compressed Air Pressure	1.00 ± 0.01kgf/cm <sup>2</sup>							
Spray Method Continuous spraying/Discontinuous spray	Spray Volume	1.0~2.0ml/80cm²/h (at le	east collecting 16 hours and	take the average value)					
	PH Value	6.5~7.2 3.0~3.2							
Power AC380V3Φ20A AC380V3Φ23A AC380V3Φ25A AC380V3Φ30A	Spray Method	Continuous spraying/Discontinuous spray							
	Power	AC380V3Ф20A	AC380V3Φ23A	AC380V3Φ25A	AC380V3Ф30A				

The dimensions of the testing room are customized to satisfy the customers' requirements.

### Walk In Salt Spray Chamber

#### Application:

It is applied in the testing of surface treatment for large products from industries such as auto-making, national defense and military, solar-related products manufacturing and ship-building.

#### Structural characteristics:

Chamber material adopts plate to assemble ,inner material is PVC,outer material is PVC or stainless steel.Contiouous spraying and cycle spraying can be selected, import intelligent digital display temperature controller.

#### **Meeting Standard**

- GB/T2423.17-2008/IEC 60068-2-11-1981
- ASTM.B117-2009
- JIS H8502
- GB/T10125-2012/ISO 9227-2006
- GB-T5170.8-2008GB-T5170.11-2008
- GB-T10587-2006



Model	CZ-8000C	CZ-12000C	CZ-16000C				
Inner Capacity	8 Cubic Meter	12Cubic Meter	16Cubic Meter				
Workshop Dimension(cm)	200x200x200	200x200x200 300x200x200 400x200x200					
Lab Temperature	Saline testing method(NSS ACSS)35℃ ± 1℃/Corrosion–resistant testing method(CASS)50℃ ± 1℃						
Pressure Pot Temperature	Saline testing method(NSS ACSS)47°C ± 1°C/Corrosion–resistant testing method(CASS)63°C ± 1°C						
Saline Concentration	Sodium chloride solution with 5% c solution with 5% concentration	oncentration or 0.26g copper chloride is	added to eachliter of sodium chloride				
Compressed Air Pressure	1.00 ± 0.01 kgf/cm <sup>2</sup>						
Spray Volume	1.0~2.0ml/80cm2/h(at least collecti	ng 16 hours and take the average value	)				
Relative Humidity In The Lab	Above 85%						
PH Value	6.5~7.2 3.0~3.2						
Spray Method	Continuous spraying						
Power	AC380V Ф 3 Phases 28.6KW	AC380V Ф 3 Phases 30.6KW	AC380V Ф 3 Phases 32.6KW				



# Salt Spray Chamber

Salt Spray Chamber is specially designde for the testing of the corrosion resistance of the products after their material surfaces have been treated with electric plating, anodizing, spray coating, anti-rusting oil and other anti-erosion treatment.









#### **Technical parameter**

Model	CZ-60A	CZ-90A	CZ-120A/ CZ-120A2	CZ-160A	CZ-200A		
Lab Internal Dimension WxHxD(mm)	600x400x450	900x500x600	1200x500x800	1600x500x1000	2000x600x1200		
Lab External Dimension WxHxD(mm)	1150 × 1090 × 672	1450 × 1200 × 842	2080 × 1285 × 1240	2480 × 1520 × 1450	2900x1550x1650		
Lab Temperature	Saline testing method(NSS ACSS)35°C ± 1°C/ Corrosion-resistant testing method(CASS)50°C ± 1°C  Saline testing method(NSS ACSS)35°C ± 1°C/ Corrosion-resistant testing method(CASS)50°C ± 1°C						
Pressure Pot Temperature	Saline testing method(NSS ACSS)47°C ± Corrosion–resistant testing method(CAS						
Lab Capacity	108L	270L	480L	800L	1440L		
Saline Tank Capacity	15L	25L	40L	40L	40L		
Saline Concentration	Sodium chloride solution with 5% concentr added to each liter of sodium chloride solu			Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration			
Compressed Air Pressure	1.00 ± 0.01 kgf/cm <sup>2</sup>		1.00 ± 0.01k	gf/cm²			
Spray Volume	1.0~2.0ml/80cm²/h (at least collecting 16	hours and take the average value)	1.0~2.0ml/80	cm²/h (at least collecting 16 hours and take the ave	erage value)		
Relative Humidity In The Lab	Above 85%		Above 85%				
PH Value	6.5~7.2 3.0~3.2		6.5~7.2	3.0~3.2			
Spray Method	Continuous spraying		Continuous s	praying			
Power	AC220V1Ф10A	AC220V1Ф15A	AC220V1Ф20A AC220V1Ф20A AC220V				

<sup>•</sup> The dimensions of the testing room are customized to satisfy the customers' requirements.

**Meeting Standard** 

• GB/T2423.17-2008/IEC 60068-2-11-1981

• ASTM.B117-2009

• JIS H8502 • GB/T10125-2012/ISO 9227-2006

• GB-T5170.8-2008 • GB-T5170.11-2008

• GB-T10587-2006



# Salt Spray Chamber

Salt Spray Chamber is specially designde for the testing of the corrosion resistance of the products after their material surfaces have been treated with electric plating, anodizing, spray coating, anti-rusting oil and other anti-erosion treatment.







### **Meeting Standard**

- GB/T2423.17-2008/IEC 60068-2-11-1981 ASTM.B117-2009
- JIS H8502
- GB/T10125-2012/ISO 9227-2006
- GB-T5170.8-2008
- GB-T5170.11-2008
- GB-T10587-2006
- GBT 20121-2006 / ISO11474-1998



Model	CZ-60B	CZ-90B					
		CZ-90B	CZ-120B	CZ-160B	CZ-200B		
Lab Internal Dimension WxHxD(mm)	600x400x450	900x500x600	1200x500x800	1600x500x1000	2000x600x1200		
Lab External Dimension WxHxD(mm)	1150 × 1090 × 672	1450 × 1200 × 842	2080 × 1285 × 1240	2480 × 1520 × 1450	2900x1550x1650		
Lab Temperature	Saline testing method(NSS ACSS)35℃ : Corrosion–resistant testing method(CAS	ng method(NSS ACSS)35°C ± 1°C/ resistant testing method(CASS)50°C ± 1°C					
Pressure Pot Temperature	Saline testing method(NSS ACSS)47°C : Corrosion–resistant testing method(CAS	sting method(NSS ACSS)47°C±1°C/  n-resistant testing method(CASS)63°C±1°C  Saline testing method(NSS ACSS)47°C±1°C/  Corrosion-resistant testing method(CASS)63°C±1°C					
Lab Capacity	108L	270L	480L	800L	1440L		
Saline Tank Capacity	15L	25L	40L	40L	40L		
Saline Concentration	Sodium chloride solution with 5% concer added to each liter of sodium chloride so			oride solution with 5% concentration or 0.26g copp ach liter of sodium chloride solution with 5% concer			
Compressed Air Pressure	1.00 ± 0.01kgf/cm <sup>2</sup>		1.00 ± 0.01	kgf/cm²			
Spray Volume	1.0~2.0ml/80cm²/h (at least collecting 16	hours and take the average value)	1.0~2.0ml/8	00cm <sup>2</sup> /h (at least collecting 16 hours and take the a	verage value)		
Relative Humidity In The Lab	Above 85%		Above 85%	6			
PH Value	6.5~7.2 3.0~3.2		6.5~7.2	3.0~3.2			
Spray Method	Programmable Spray(including Continuo	Programmable Spray(including Continuous spray and discontinuous spray)  Programmable Spray(including Continuous spray and discontinuous spray)					
Power	AC220V1Ф10A	AC220V1Ф15A	AC220V1 Ф20A	AC220V1Ф20A	AC220V1 Ф30A		

<sup>•</sup> The dimensions of the testing room are customized to satisfy the customers' requirements.



# Salt Spray Chamber

Salt Spray Chamber is specially designde for the testing of the corrosion resistance of the products after their material surfaces have been treated with electric plating, anodizing, spray coating, anti–rusting oil and other anti–erosion treatment.







●CZ-120C

#### **Meeting Standard**

- GB/T2423.17-2008/IEC 60068-2-11-1981
- ASTM.B117-2009
- JIS H8502
- GB/T10125-2012/ISO 9227-2006
- GB-T5170.8-2008
- GB-T5170.11-2008
- GB-T10587-2006
- GBT 20121-2006 / ISO11474-1998





Touch-screen Color Controlle South Korea(TEMI880)

- Controller: Original Imported LCD Thin-film Touch-tone Controller
- Digital display of temperature and humidity is available
- Memory function: In case of a power cut, the machine can resume the unfinished test as soon as power is recovered.
- Can be connected with computer through RS232 port to have a complete record of temperature humidity graph

Model	CZ-60C	CZ-90C	CZ-120C CZ-160C		CZ-200C			
Lab Internal Dimension WxHxD(mm)	600x400x450	900x500x600	1200x500x800 1600x500x1000		2000x600x1200			
Lab External Dimension WxHxD(mm)	1150 × 1090 × 672	1450 × 1200 × 842	2080 × 1285 × 1240	2480 × 1520 × 1450	2900x1550x1650			
Lab Temperature	Saline testing method(NSS ACSS)35℃±1℃/ Corrosion-resistant testing method(CASS)50℃±1℃  Saline testing method(NSS ACSS)35℃±1℃/ Corrosion-resistant testing method(CASS)50℃±1℃							
Pressure Pot Temperature	Saline testing method(NSS ACSS)47°C ± 1°C/ Corrosion–resistant testing method(CASS)63°C ± 1°C  Saline testing method(NSS ACSS)47°C ± 1°C/ Corrosion–resistant testing method(CASS)63°C ± 1°C							
Lab Capacity	108L	270L	480L	800L	1440L			
Saline Tank Capacity	15L	25L	40L	40L	40L			
Saline Concentration	Sodium chloride solution with 5% concentration or 0.26g copper chloride is added to each liter of sodium chloride solution with 5% concentration added to each liter of sodium chloride solution with 5% concentration							
Compressed Air Pressure	1.00 ± 0.01kgf/cm <sup>2</sup>		1.00 ± 0.01	kgf/cm²				
Spray Volume	1.0~2.0ml/80cm²/h (at least collecting 16 hours and take the average value) 1.0~2.0ml/80cm²/h (at least collecting 16 hours and take the average value)							
Relative Humidity In The Lab	Above 85% Above 85%							
PH Value	6.5~7.2 3.0~3.2 6.5~7.2 3.0~3.2							
Spray Method	Programmable Spraying	Programmable Spraying Programmable Spraying						
Power	AC220V1Ф10A	AC220V1Φ15A	AC220V1 Ф20A	AC220V1Φ20A	AC220V1Φ30A			

<sup>•</sup> The dimensions of the testing room are customized to satisfy the customers' requirements.



### **Servo Control Universal Testing Machine**

#### Purpose:

These series of tensile strength tester are used to test tension, compression, shearing force, adhesion, peeling force, tear strength, ... etc. of specimen, semi-product and finished product in the field of rubber, plastic, metal, nylon, fabric, paper, aviation, packing, architecture, petrochemistry, electric appliance, automobile,...etc., which are the basic facilities for input quality contorl (I.Q.C.), Physical Inspection, Mechanics Research and Material Development



●CZ-8000A

#### High Accuracy

Adopt AC servo motor to drive high precision ball screw transmission, coordinate with high precision explosion–proof load cell, force accuracy is up to 0.25%, displace ment accuracy is up to 0.001 mm.

#### High Performance

Automatically identify fracture, automatically return, manually get point function, unit free switch and 9 languages (simplified/traditional Chinese, English, Japanese, German, French, Russian, Spanish and Portuquese).

#### Superior Software Program

Implement closed-loop control of force value, speed and location to meet the requirements for low-cycle fatigue test and material retention force (constant stress) test for rubber etc; test data and results recorded throughout the process; multi-graph analysis covering stress-strain graph, force-deformation graph, force-displacement graph, force-time graph and force-deformation graph.

#### Multi-function

Can do tensile ,compression ,bending ,shearing ,tear ,peel test ,coordinate with different fixtures.



Test Software

#### ZHONGZHI TESTING INSTRUMENTS CO.,LTD.



Test Report

Model	CZ-8000A					
Capacity(optional)	50kN	200/300kN				
Unit(Switchable)	N,kN,kgf,Lbf,MPa,Lbf/ln²,kgf/mm²					
Load Resolution	1/500,000					
Accuracy Grade of Machine	0.5 Level					
Load Magnifying Rate	Section-less					
MaxStroke(exclude the grips)	1200mm	00mm				
Effective Width	500mm others(Customized)	500mm others(Customized)				
Test Speed	0.001~500mm/min		0.001~300mm/min			
Speed Accuracy	± 0.25%					
Displacement Resolution	0.00004mm					
Software	Closed-loop control software					
Motor	Servo motor					
Transmission Rod	High accuracy of ball screw					
Main Unit Dimension(WxDxH)	1022x700x2000mm 1080x700x2340mm 1120x700x2520mm					
Power	AC220/50HZ 15A or specified by user					



### **Servo Control Universal Testing Machine**

#### Purpose:

These series of tensile strength tester are used to test tension, compression, shearing force, adhesion, peeling force, tear strength, ... etc. of specimen, semi-product and finished product in the field of rubber, plastic, metal, nylon, fabric, paper, aviation, packing, architecture, petrochemistry, electric appliance, automobile,...etc., which are the basic facilities for input quality control (I.Q.C), Quality Control (Q.C.), Physical Inspection, Mechanics Research and Material Development





#### **Technical parameter**

l echnical parameter							
Model	CZ-8000 CZ-8000B						
Capacity(Optional)	100N,250N,500N,1kN,2.5kN,5kN,10kN,20kN,30kN						
Unit(Switchable)	N,kN,kgf,Lbf,MPa,Lbf/ln²,kgf/mm²	N,kN,kgf,Lbf,MPa,Lbf/ln²,kgf/mm²					
Load Resolution	1/500,000 (0.5 Leve) / 1/250,000(1 Leve)						
Accuracy Grade of Machine	0.5Level/1Level						
Load Magnifying Rate	Section-less	Section-less					
Max Stroke(Exclude the Grips)	850 mm ( Standard ) ,1050 mm ( Heighten ) others ( Customized )						
Effective Width	400 mm ,others(Customized)						
Test Speed	1-500 mm/min,others(Customized)						
Speed Accuracy	± 0.25% (0.5 Leve) / ± 0.5% (1 Leve)						
Displacement Resolution	0.00004mm						
Software	Closed-loop control software	Random controller + standard control software					
Motor	Servo motor						
Transmission Rod	High accuracy of ball screw	High accuracy of ball screw					
Main Unit Dimension(WxDxH)	Standard: 793x553x2095 mm         Standard: 973x553x2095 mm           Heighten: 793x553x2295 mm         Heighten: 973x553x2295 mm						
Power	AC220/50HZ 10A or specified by user						

### **Economy Tensile Test Machine**

#### **TYPICAL applications:**

Strength test for metal sheets, rods and tubes; tensile test for rubber and plastic; bending test for metal and plastic; tensile, compression, bending and shearing tests for various special—shaped materials.

#### Applications:

Adhesive tape, automobile, ceramic, composite material, building, food and medical equipments, metal, paper, plastic,rubber, textile,wood and communications.





Model	CZ-8001A	CZ-8001A CZ-8001					
Capacity(Optional)	250N,500N,1kN,2.5kN,5kN,10kN,20k	250N,500N,1kN,2.5kN,5kN,10kN,20kN,30kN,50kN					
Unit(Switchable)	N,kN,kgf,Lbf,MPa,Lbf/ln²,kgf/mm²	N,kN,kgf,Lbf,MPa,Lbf/ln²,kgf/mm²					
Load Resolution	1/250,000	1/250,000 1/25,000					
Accuracy Grade of Machine	1Level						
Load Magnifying Rate	Section-less						
Max Stroke(Exclude the Grips)	1000mm,others(Customized)	1000mm,others(Customized)					
Effective Width	400 mm(Below 30kN)、500 mm(50kN 7	400 mm(Below 30kN)、500 mm(50kN Type)					
Test Speed	10~100mm/min,others(Customized)	10~100mm/min,others(Customized)					
Speed Accuracy	± 1%						
Displacement Resolution	0.00125mm	0.00125mm					
Software	Standard control software	Standard control software					
Motor	AC motor	AC motor					
Transmission Rod	High accuracy of ball screw	High accuracy of ball screw					
Main Unit Dimension(WxDxH)	1080x540x1775 mm (Below 30kN) 1280x620x2005 mm (50kN type)						
Power	AC220/50HZ 10A or specified by user						



### **Servo Control Universal Testing Machine**

#### Typical applications:

Peel strength test for adhesive tape 90°/180°; tensile test for rubber and plastic; bending test for plastic.

Tensile and bending test for wires and metal sheets; tear testof textiles; compression and bursting strength test for beverage package.

#### **Applications**

Adhesive tape, automobile,ceramic, composite material, construction, food and medical equipments, metal, paper, plastic,rubber, textile, wood and communications.





#### **Technical parameter**

Model	CZ-8002 CZ-8010						
Capacity(Optional)	50N,100N,250N,500N,1kN,2.5kN,5kN						
Unit(Switchable)	N,kN,kgf,Lbf,MPa,Lbf/ln²,kgf/mm²						
Load Resolution	1/500,000(0.5 Level) , 1/250,000(1 Level)						
Accuracy Grade of Machine	0.5 Level/1 Level						
Load Magnifying Rate	Section-less						
Stroke(Exclude the Grips)	650 mm Standard ,850 mm Heighten Optional						
Effective Width	No Limit						
Test Speed	0.001~500mm/min or others						
Speed Accuracy	± 0.25% 0.5 Level / ± 0.5% 1 Level						
Displacement Resolution	0.00004mm						
Software	Andom controller + standard control software Closed-loop control software						
Motor	AC servo motor						
Transmission Rod	High accuracy of ball screw						
Main Unit Dimension(WxDxH)	Standard:585x505x1290 mm,Heighten:585x505x1490 mm						
Power	AC220/50HZ 10A or specified by user						

### Micro-Computer Tensile Testing Machine

### **Typical applications:**



Model	CZ-8003	CZ- 8004	CZ-8007				
Capacity(Optional)	50N,100N,250N,500N,1,2.5,5kN	50N,100N,250N,500N,1,2.5,5kN					
Unit(Switchable)	N,kN,kgf,Lbf	N,kN,kgf,Lbf					
Load Resolution	1/25,000	1/25,000					
Accuracy Grade of Machine	1Level						
Max Stroke(Exclude the Grips)	1000mm		650mm/850mm				
Effective Width	No Limit	No Limit					
Test Speed	10-500mm/min others(Customize	10-500mm/min others(Customized) 5-					
Speed Accuracy	± 1%	±1%					
Displacement Resolution	Stroke:0.00125 mm/Extensometer	Stroke:0.00125 mm/Extensometer:0.025mm					
Motor	AC frequency control motor						
Transmission Rod	High accuracy of ball screw						
Displayer	Can display,print force value (strength), deformation (elongation);automatically stop when sample breaks down, overload protection function coverload protection function						
Main Unit Dimension(WxDxH)	500x400x1860mm	500x400x1860mm					
Power	AC220/50HZ 5A or specified by user						



### **Light - Weight Computer Type Tensile Test Machine**

#### Single column and desktop type (Small capacity500N):

The function of this machine is same as standard type with desktop design.lt is easy for small specimen test operation, it is small in size, light in weight, high in movement;

Can connect with the computer, easy in operation. It is suitable for light capacity within 500N material test;

Coordinate with various grips,can easily finish electron wire,metal,non-metal wire stretch,paper tensile resistance,SMT load, label, adhesive tap tear, sealing tape uncoiling force test.



●CZ-8011

#### Technical parameter

Model	CZ-8011
Capacity(optional)	10N, 50N,100N,250N,500N
Unit(Switchable)	N,kN,kgf,Lbf
Load Resolution	1/250,000
Precision Grade of Machine	1 Level
MaxStroke(Exclude the Grips)	400mm(Standard),600mm ( Heighten ) (Optional)
Effective Width	No Limit
Test Speed	1–500mm/min or others
Speed Accuracy	± 0.5%
Displacement Resolution	0.00125mm
Software	Standard control software / Closed-loop control softwar
Motor	Intelligent stepper motor
Transmission Rod	High accuracy of ball screw
Main Unit Dimension(WxDxH)	Standard: 280x335x840 mm, Heighten: 280x335x1040 mm
Power	AC220 5A or specified by user

### **Climate Tensile Chamber**

#### Functions and purposes:

Adopt latest design concept and manufacturing technology,coordinate precision high temperature,high low temperature,constant temperature and humidity test chamber with universal testing machine and use module design method with various affiliated parts and flexible collocation. It is used in rubber, plastic, electric wire, textile fabrics, waterproof material, non-woven fabrics and other non-metal materials or metal materials under the condition of different temperature/humidity to test its stretch, comperss, tear and other mechanical property test.





Model	CZ-8012 High temp. type	CZ-8013 High&low temp.type	CZ-8014 Temperature&humidity type					
Capacity Selection	100N, 250N, 500N, 1kN, 2.5kN, 5kN, 10kN, 20kN							
Unit(Switchable)	N,kN,kgf,Lbf,MPa,Lbf/ln2,kgf/mm2							
Temperature Range	RT+10~200、300℃	0, -20, -40, -60~100℃						
Humidity Range	3 <u>000</u> 1		20-98%RH					
Control Method	P.I.D Auto Calculation							
Inner Dimension (WxDxH)	220x280x600 mm Accept customized 400x400x600 mm Accept customized							
Accuracy Grade of Machine	0.5 Level /1 Level							
Load Resolution	1/500,000 (0.5 Level ) / 1/250	0,000(1Level)						
Load Magnifying Rate	Section-less							
Test Speed	0.001-500 mm/min 、others(0	Customized)						
Speed Accuracy	± 0.25%(0.5 Level )/ ± 0.5%(1	Level)						
Displacement Resolution	0.00004 mm							
Motor	AC frequency control motor							
Transmission Rod	High accuracy of ball screw							
Main Unit Dimension (WxDxH)(standard)	795x1500x2300 mm 995x1500x2300 mm							
Power	AC220/50HZ or specified by user							



### **Grips & Fixtures For Each Testing Model**







CZ-20TWedge Clamp Metal Tension Clamp



CZ-5W Bending Clamp Three-point Bending Clamp



CZ-03 Rubber Clamp Rubber Tension Clamp



CZ-04 Copper-wire Clamp Copper-Wire tension Clamp



CZ-05 Safety Hook Clamp Safety-hook Tension Clamp



CZ-06 Woven-belt Clamp Woven-belt Tension Clamp



CZ-07 Rubber Clamp Rubber Tension Clamp



CZ-08 Butt Clamp Butt Tension Clamp



CZ-09 Lock Wrench Clamp Tear/Tension Clamp



CZ-10 Long-mouth Clamp Long-mouth Tension Clamp



CZ-11 Small butt-Clamp Small butt-tension Clamp



CZ-12 Compression Clamp Compression Testing Clamp



CZ-13 High-temperature Clamp High-temperature Metal Tension Clamp



CZ-14 90° Peel Grip Adhesive-tape Peel Grip

If there is some change for product appearance or specification, we will not notice again

The accessories such as the different grips, elongation measuring-devices....etc.are equipped according to the requirements specified in the contract; out salesman will also give the proper suggestions to our customer beforehand.

### **Spring Tension and Compression Testing Machine**

#### Purpose:

This product uses full computer control, high precision and easy operation, applies to spring tension and compression test, and allows calculating free spring length, calculating force with remaining length, calculating force with fixed deformation, calculating deformation with fixed force value, corresponding coefficient of elasticity, and stiffness.





●CZ-8010TH

●CZ-8000TH

Model	CZ -8010TH	CZ -8000TH					
Capacity(optional)	50N、100N、250N、500N、1kN、2.5kN、5kN	100N, 250N, 500N, 1kN, 2.5kN, 5kN, 10kN, 15kN, 20kN, 30kN					
Unit(Switchable)	N,kN,kgf,Lbf,MPa,Lbf/In²,kgf/mm²						
Precision Grade of Machine	0.5 Level/1 Level						
Load Resolution	1/500,000 (0.5 Level) / 1/250,000(1 Level)						
Load Magnifying Rate	Section-less						
MaxStroke(Exclude the Grips)	650 mm(Standard) 850 mm ( Heighten ) (Optional)						
Effective Width		400 mm ,others(Customized)					
Test Speed	0.001–500 mm/min or others	0.001–500 mm/min or others					
Speed Accuracy	± 0.5%						
Displacement Resolution	0.0004mm						
Software	Spring test special software						
Motor	Servo motor						
Transmission Rod	High accuracy of ball screw	High accuracy of ball screw					
Main Unit Dimension(WxDxH)	Standard:585x505x1290 mm Others(Customized)	Standard:585x505x1290 mm Others(customized)					
Power	AC220/50Hz 10A or specified by user						



### **Simulated Transport Vibration Testing Machine**

●CZ-8413

#### **Product Application:**

Standards: EN71 ANSI UL SATM ISTA international transportation standards.

The machine is suitable for simulated transport test of toys, electronics, furniture, gifts, ceramics, packaging and other products, and complies with U.S. and European transport standards.

#### **Technical parameter**

Model	CZ-8413
Speed	150~300RPM ( r/min )
Vibration Mode	Reciprocating (rotary)
Frequency	6.25Hz
Load	100KG
Effective Table	1.20x1.00(LxW)
Dimension	120x120x68(WxDxH)
Amplitude (P-P)	25.4mm(1inch)
Time Setting Range	0.1 second~999.99 hours
Start Time Limit	0~15 second
Motor Power	1HP
Speed Regulating Mode	DC speed regulating
Non-standard Specifications	Can be customized
Power	220V 50/60Hz

### **Mechanical Vibration Tester**



#### Purose

This machine used in electron, electrical equipment, dynamo, household applicances, communication products for vibration tachistoscope resistance test. It is for realized the quality or structure affect and change of the products after stood frequency and amplitude. Export sales products can do imitate transportation vibration after packaged.

#### Technical parameter

Model	CZ-25A	CZ-25AY	CZ-50A	CZ-50AY	CZ-70A	CZ-70AY	CZ-100A	CZ-100AY	CZ-150A	CZ-150AY
Maximum Load	25kg 50kg		70kg		10	0kg	150	)kg		
Frequency Range		10-55Hz or to be agreed								
Amplitude				1.5	mm P-P or	special by u	ser			
Wave Form		Sine wave								
Vibrating Direction		A Series Type: Vertical AY Series Type: Vertical + Horizontal								
Test Pattern		Fixed	frequency,s	weep frequer	ncy(linear sv	veep frequer	cy,logarithm	sweep freq	uency)	/25
Dimension(mm)	500x550	550x600	600x650	650x700	600x650	650x700	600x650	650x700	750x800	800x850
Weight	180kg 200kg 220kg 240kg 260kg 280kg 300kg 340kg 450kg						500kg			
Power	AC220/50HZ or specified by user									

### **Mechanical Vibration Test Machine**

#### **Product Application:**

Mechanical vibration test machine used in electronic product, component, module, mechanical and electrical product, instrument for simulation transportation vibration test.It is suitable for standard vibration test and reliability test in some of GB,UL,IEC standards.

- Use centrifugal shock excitation method, small noise
- Use four points synchro reverse direction, good uniformity for the test table
- Frequency is adjustable free,can meet different test specimen requirements
- Double Chinese and English Windows standard control interface
- Equip damping(trundle)air bag can fixed when no special land to use





Model	CZ-130A+	CZ-300A+	CZ-150AY+	CZ-500AY+				
Max Test Load	130kg	300kg	150kg	500kg				
Frequency Range	5-100Hz		10-60Hz					
Amplitude	0-3mm p-p	0-2.5	mm p-p	0-2mm p-p				
Acceleration Range	0-11G							
Control Interface	IBM Pc Serial Prot RS232 9P / USB Port							
Wave Form	Sine Wave							
Vibration Direction	Ver	izontal						
Test Pattrn	Fixed frequency,sweep	frequency(linear sweep frequency	ency,logarithm sweep frequen	cy), multistage random				
Working Platform	600x500mm	1000x800mm	800x600mm	1600x1200mm				
Main Unit Dimension ( WxDxH)	765x525x690mm	1000x800x650mm	1000x600x590mm	1650x1250x700mm				
Weight	250kg	450kg	360kg	1500kg				
Power	AC220/50HZ or specified by user AC380/50HZ or specified by user							



### **Electromagnetic Frequency-sweep Vibration Tester**

#### **Product Application**

Electromagnetic vibration tester series are broadly applied in national defense, aviation and aerospace, telecommunications, electronic, automobile, household appliances and other industries. These equipments are used to detect failure in an early stage, perform simulated assessment of actual operating conditions and structural strength tests, characterized by wide application, and notable and reliable test effects.



#### Technical parameter

Model	CZ-V4	CZ-70A
Maximum Test Load(Kg)	40	60
Frequency Range(Hz)	5-200	5-200
Frequency Sweep(Hz)	5-200	5–200
No-load Displacement Range(mm)	0–5	0-5
Vibration Direction(YZ)	Vertical	Vertical
Time Range(s)	1-350000	1-350000
Vertical Platform Dimension(mm)(LxWxH)	450 X 450 X46	550X550X46
Horizontal Platform Dimension(mm)(LxWxH)	450 X 450 X46	550X550X46
Bench Dimension(mm)(LxWxH)	450 X 450 X350	550X550X350
Size of Control Cabinet(mm)(LxWxH)	450X330X750	450X330X750
Power(V/Hz)	220/50 ± 2%	220/50 ± 2%
Power Consumption(KVA)	2.2	1.8
Cooling Method	Air cooling	Air cooling
Standard	GB/T2423.10	GB/T2423.10

### **Electromagnetic Vertical + Horizontal Vibration Table**

#### Product Application:

Electromagnetic vibration tester series are broadly applied in national defense, aviation and aerospace, telecommunications, electronic, automobile, household appliances and other industries. These equipments are used to detect failure in an early stage, perform simulated assessment of actual operating conditions and structural strength tests, characterized by wide application, and notable and reliable test effects.



●CZ-80ZY

#### Technical parameter

Comm	icai parameter							
Model		CZ-80ZY						
Maximu	m Test Load(kg)	40						
Manual	Frequency Range(Hz)	1–200						
Automat	tic Frequency Sweep Range(Hz)	1–200						
No-load	Displacement Range(mm)	0–5						
Vibrating	Direction	Vertical +Horizontal						
Vibration	n Waveform	Sine Wave						
Test Mo	de	FM/automatic Sweep frequency(several times, linear, frequency, random vibration)						
Time Ra	inge(S)	0.01S-99.99H						
Vertical	Platform Dimension(mm)(L/W/H)	450X450X46						
Horizont	al Platform Dimension(mm)(L/W/H)	450X450X46						
Bench D	Dimension(mm)(L/W/H)	1200X500X450						
Size of 0	Control Cabinet(mm)(L/W/H)	500X380X1050						
Power(V	//Hz)	220/50 ± 5%						
Power C	Consumption(KVA)	2.2						
Cooling	Method	Air cooling						
	Ambient Temperature	+5℃~+35℃						
Equipment	Relative Humidity	≤85%RH						
Condition	Ambient Air Quality Requirement	Without high-concentration dust and inflammable and explosive gas, as well as strong electromagnetic radiation source nearby						
Note		This equipment can not test or storage any inflamma-ble or explosive materials or those materials that can generate volatile or corrosive gases						

### **Vibration Test System**







#### Test condition and basic selection conduction

To select a suitable vibration test system, the most important thing is to know the needed excitation force for vibration test. It is need to know the specification to evaluate excitation as below:

clear test condition

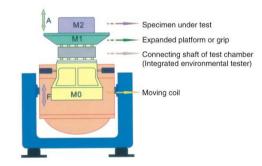
frequency(frequency range)

- maximum acceleration
- maximum displacement
- maximum speed
- quality of the specimen and clamping tools

It is need the upper limit and dimension of test frequency to select one grip (vertical expanded platform)or horizontal sliding platform to evaluate the needed excitation force of vibration test by its quality.quality of moving coil.

When evaluate the excitation force of the test, you can select a temporary quality of moving coil.

#### Calculate the needed excitation force



F=(M0+M1+M2)xAx1.3

Sine Force(p-p)

F: Exciting Force(kgf)

M0: Armature mass(kg)

M1: Auxiliary table or Fixture(kg)

M2: Specimen(kg)

A: Acceleration(g)

1.3:Safety Factor

Random Force(Rms)

=sine Force/ $\sqrt{2}$ 

Shock Force

Sine Force\*2

Note:When use gravitational unit,the acceleration unit is g, excitation unit is kgf 1g=9.8m/s $^{2}$ 



### Vibration test system

Vibration test system is the ideal equipment for small electronic components, automotive parts, mobile devices, storage devices, connectors and other screening tests.

#### Technical parameter

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Model	CZ-2-150/CZ-3-150	CZ-2-230/CZ-3-230	CZ-6-230
Sine Force	200kgf/300kgf	200kgf/300kgf	600kgf
Random Force	200kgf/300kgf	200kgf/300kgf	600kgf
Shock Force	400kgf/600kgf	400kgf/600kgf	1200kgf
Frequency Range	5~4,000Hz	3~2,500Hz	2~3,500Hz
Continuous Displacement	25mm	40mm	51mm
Shock Displacement	25mm	40mm	51mm
Max.Velocity(Sine)	2m/s	1.5m/s	1.8m/s
Max.Acceleration(Sine)	1000m/s²	250/350m/s <sup>2</sup>	1000m/s <sup>2</sup>
Armature Diameter	¢ 150mm	¢ 230mm	¢ 230mm
Fundamental Resonance Frequency(Bare table)	3400Hz/2900Hz	2700Hz	3300Hz
Equivalent mass of working parts	2kg/3kg	8kg/8.5kg	6kg
Natural Frequency-Thrust Axis	<3Hz	<3Hz	<3Hz
Max.Testload	70kg/120kg	140kg	300kg
Stray Flux Density	≤3mT	≤3mT	≤3mT
Dimension(Uncrated)(LxWxH)	696x530x653mm/764x530x660mm	764x530x698mm	826x530x720mm
Shaker Weight(Uncrated)	About 395kg/480kg	About 430kg	About 590kg
Air blower	CZ-B200	CZ-B200	CZ-B1000
Amplifiers	CZ-DA2/CZ-DA3	CZ-DA2/CZ-DA3	CZ-DA6

Vibration test system is ideal equipment for small parts screening test of higher acceleration test requirements, in addition, it can meet the typical test requirements of the other medium-sized electronic components, automotive parts, road navigation equipment and household appliances.

#### **Technical parameter**

Model	CZ-10-240	CZ-20-320/CZ-20-445	CZ-30-370/CZ-30-550
Sine Force	1000kgf	2000kgf	3000kgf
Random Force	1000kgf	2000kgf	3000kgf
Shock Force	2000kgf	4000kgf (Optional 6000kgf)	6000kgf (Optional 9000kgf)
Frequency Range	5~3,000Hz	5~3,000Hz/5~2,800Hz	5~2,800Hz/5~2,000Hz
Continuous Displacement	51mm	51mm	51mm
Shock Displacement	51mm	51mm	51mm
Max.Velocity(Sine)	1.8m/s	2m/s (Optional2.5m/s)	2m/s (Optional2.5m/s)
Max.Acceleration(Sine)	1000m/s²	1000m/s <sup>2</sup> /700m/s <sup>2</sup>	1000m/s <sup>2</sup> 500m/s <sup>2</sup>
Armature Diameter	¢ 240mm	¢ 320mm/ ¢ 445mm	¢ 370mm/ ¢ 550mm
Fundamental Resonance Frequency(Bare table)	2400Hz	2600Hz	2400Hz/2200Hz
Equivalent mass of working parts	10kg	20kg/28kg	55kg/30kg
Natural Frequency-Thrust Axis	<2.5Hz	<2.5Hz	<2.5Hz
Max.Testload	300kg	300kg	500kg/550kg
Stray Flux Density	≤1mT	≤1mT	≤1mT
Dimension(Uncrated)(LxWxH)	1046x660x783mm	1182x758x1052mm	1288x852x1145mm
Shaker Weight(Uncrated)	about 900kg	about 1700kg	about 2490kg/2550kg
Air blower	CZ-B1000	CZ-B2000	CZ-B3000
Amplifiers	CZ-DA10	CZ-DA20	CZ-DA30

### **Horizontal Vibration**

1.Motor-driven vibration table with horizontal sliding table can reach triaxial vibration test, horizontal sliding table is with smaller carrier (table) quality to

1.Motor-anvier vibration table with nonzontal sliding table can reach thaxial vibration test,nonzontal sliding table is with smaller carrier (table)quality to improve whole load capacity,in order to support bigger size and bigger quality load.

2.CZ-LT series is V type bearing-guide horizontal sliding table,this horizontal sliding table is made up of horizontal table,V type bearing,union joint,granite surface plate,base of horizontal sliding table,build-in type oil source.built-in fuel feed pump,compact structure,easy operation. 3.According to different sliding table size, the amount of V type bearing will be different. this V type bearing-guide horizontal sliding table has higher anti-

### Technical parameter

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Table body model Sliding table model		CZ-2-230 CZ-3-230 CZ-6-230 CZ-10-240	CZ-20-320	CZ-30-370 CZ-40-370	CZ-40-445 CZ-50-480 CZ-60-445	CZ-100-480	CZ-160-590		
CZ-LT0303	30 11.5/8.5	V	١	١	1	١	1		
CZ-LT0404	30 17.5/12.5	\	١	١	1	١	1		
CZ-LT0505	30 25.5/17.5	30 28/20.5	40 38/27.5	40 42/31.5	45 56.5/43	١	1		
CZ-LT0606	40 46/31	40 48.5/34	40 50.5/36	40 55/40	45 73/54	\	١		
CZ-LT0707	45 69/47	45 72/50	45 74/52	45 80/58	45 93/68	١	١		
CZ-LT0808	1	45 91/63	45 96/66	45 100/70	45 114/82	50 138/102	50 165/129		
CZ-LT0909	1	45 112/77	45 118/81	45 122/85	50 139/98	50 164/119	50 191/146		
CZ-LT1010	Table thickness(mm)	45 136/93	45 142/97	45 146/101	50 166/116	50 192/138	50 219/165		
CZ-LT1111	Equivalent mass of working parts(alumi-	45 167/113	45 169/115	45 173/119	50 195/136	50 223/159	50 250/186		
CZ-LT1212	num/magnesium kg)	45 196/133	45 198/135	45 202/139	50 228/158	50 257/181	50 284/208		
Work environment	Emperature range	:535° C,humidit	y range:≤ 90%(no	condensation)					
Remark	1.Equivalent mass of working parts is the sum total of horizontal table/union joint/V type guide rail and drive rod quality/not including moving coil quality),2.Upper limitation range of use is 2000Hz,3.Equivalent mass of working parts in the form is standard design,if any special requirement and design,it should recalculate the equivalent mass of working parts.								

# **Square Verticle Extender**

1. Equivalent mass and use efficiency range all represent aluminum-made vertical expending table, while the declining of equivalent mass for magnesium-made is equal to 65% of aluminum-made extending table, and the declining of use efficiency range is equal to 90% of aluminum-made extending table. 2.Standard hole arrangement:

From CZ-VT0303 to CZ-VT0505 adopts 50\*50 mm rectangle hole arrangement

From CZ-VT0606 to CZ-VT1212 and above adopts 100\*100mm rectangle hole arrangement 3.Standard writing of ordering extending table

> "CZ-VTDDDD-DD-DD ' Extender material:Mg-magnesium alloy,A1-aluminum alloy Extending table

> > Table size of moving coil

A CONTRACTOR OF THE PARTY OF TH							3
Moving coil diameter Model	-150	-230 -240	-320	-370	-445 -480	-550	-590
CZ-VT0303	7 2000	10 2000	١	\	١	١	1
CZ-VT0404	12 2000	21 2000	١	\	١	\	١
CZ-VT0505	20 2000	32 2000	32 2000	33 2000	١	١	\
CZ-VT0606	29 1200	38 1300	40 2000	40 2000	53 2000	\	1
CZ-VT0707	\	43 1000	60 2000	80 2000	80 2000	\	\
CZ-VT0808	\	60 1000	70 1200	80 1300	85 1300	125 1800	135 1800
CZ-VT0909	\	80 700	95 800	95 1000	100 1000	120 1000	120 1000
CZ-VT1010	\	73 400	100 600	110 800	185 1000	200 1000	210 1200
CZ-VT1111	\	1	1	\	230 500	245 700	160 700
CZ-VT1212	Equivalent mass of Upper limitation fre	f working parts(kg) equency(Hz)	1	\	250 400	265 500	280 500



### **Hydraulic Lifting Vertical Shock Machine**

#### Application

Hydraulic lifting vertical shock machine is used in imitating the shocking in actual environment and check its function reliability and structure integrity.

#### **Function and characteristic**

- Large margin many rail guide pillar combine with balance lifting system of hydraulic pressure, stable lifting without noise;
- Good design of aluminium magnesium alloy test base with high stiffness and frequency of low noise;
- Inside hydraulic brake drive, large braking force in case of secondary bounces;
- Digital lifting height feedback control system, make sure the impact repeatability;
- Designed with buffer pedestal which largely decreased the impact of ground, it is good to be placed in the floor of standard mechanical industrial workshop.





#### **Technical parameter**

	•																									
Model Parameter	CZ-10-2 Mechanical Type	CZ-	10-5	10-5 CZ-10-25			CZ-10-50 * CZ-10-1			100	CZ-10-200		CZ-10-400		CZ-10-600		600 **	CZ-	-10-	1000	CZ-	10-	1500			
Rated Load(kg)	2		5	2	5	50			100				200		400			600			1000			1500		)
Bench Dimension(mm)	200x200	200	x200	300	<b>350</b>	48	80x5	00	650x800			80	00x9	60	100	00x1	000	1200x1200		200	1000x1000 1200x1200			1000x1200 1200x1200		
Impact Wave	Half-Sine	Half -Sine	Final Peak Sawt- ooth	Half -Sine	Final Peak Sawt- ooth	Half -Sine	Final Peak Sawt- ooth	Trape- zoidal	Half -Sine	Final Peak Sawt- ooth	Trape- zoidal		Final Peak Sawt- ooth	Trape- zoidal	Half	Final Peak Sawt- ooth		Half	Final Peak Sawt- ooth		Half -Sine	Final Peak Sawt- ooth	Trape- zoidal	Half -Sine	Final Peak Sawt- ooth	Trape- zoidal
Impact acceleration (m/s²)	200	200 15000	150 - 1000	150 15000	150 - 1000	150 - 6000	~	300 1000	150 - 6000	150 - 1000	300	150 3500	~	300 1000	150 1500	150 ~ 500	300 500	150 1500	150 - 500	300 - 500	150 1500	150 ~ 500	300 500	150 - 1500	150 - 500	300 500
Pulse Duration (ms)	11 ~ 0.8	18 ~ 0.5	~ ~ ~ ~		30 ~ 1.5	18 ~ 6	12 ~ 6	30 ~ 1.5	18 ~ 6	12 ~ 6	30 ~ 2	18 ~ 6	12 ~ 6	30 ~ 6	18 ~ 6	12 ~ 6	30 ~ 6	18 ~ 6	12 ~ 6	30 ~ 6	18 ~ 6	12 ~ 6	30 ~ 6	18 ~ 6	12 ~ 6	
Dimension (LxWxH:mm)	900x510x 2100		725x	900x 22	725x 00	1260x960x 2600			x 1370x1000x 2600		1560x1210x 2600		1600x1210x 2600			1620x1350x 2600			1750x1500x 2800		1950x1750 2800					
Body Weight(kg)	500	5	50	850	)		2500	)	- 1	3100	)	-	380	0		4200	)		5100	)	6000				7000	)
Oil Source Dimension		- 0	350x3	00x69	0				63	30x4	50x	710								700	x530	x780	)			
Oil Source Volume			6	60L 60L 45KG/100L																						
Power	0.3kW	kW 380V 50/60Hz 1.5kW 380V 50/60Hz 1.5kW 380V 50/60Hz 2.2kW																								
Index Usage Standard					GJB1	50	GJB	360	GJ	B54	8 G	В/Т	242	3 J.	JG54	11 I	EC6	006	8-2-	-27						

Note: Minimum pulse width can be up to 0.8ms 2ms Minimum pulse width can be up to 2ms

### Pressure-driven Vertical Impact, Bump Test Bench

#### Application

Pressure–driven vertical impact, crash test system is an impact crash test equipment of novel design, high degree automation, simple operation, and easy maintenance, and allows performing regular half–sine, after–peak sawtooth, and square wave impact test

#### **Function and characteristic**

- All-pneumatic drive, simple structure, high reliability, pollution-free, ensuring clean and sanitary environment;
- Greatly improves the efficiency of continuous impact test, maximum collision frequency is up to 100 times / min:
- Easily achieve large width and small overload test
- Because shock machine structure is used and the impact rate is high, it can be used to replace the collision table, which has higher reliability
  and better collision waveform comparing with electrical or hydraulic driven collision table;
- Control the impact speed by adjusting the gas pressure, easy to adjust collision speed;
- Use SHoodDAQ series impact control, measurement system to perform manual impact, continuous impact, single impact, impact interval, and achieve a variety of impact modes;
- Buffer base is designed to reduce the impact on the ground, which can be placed on the terrace of standard mechanical industrial plant





Model Parameter	CZ-1	11-25	CZ-11-50 CZ-11-100				CZ	-11-	200	CZ-11-400			CZ-11-600			CZ	-11-	800	CZ-11-1000					
Rated Load(kg)	2	5		50			100			200			400			600			800			1000		
Bench Dimension(mm)	300	x300	50	00x50	00	- 17	600x600			600x800			800x1000			800x1000			1200x1200 1000x1200			1200x1200 1000x1200		
Impact Wave	Half -Sine	Final Peak Sawt- ooth	Half	Final Peak Sawt- ooth	Trape- zoidal	Half -Sine		Trape- zoidal	Half -Sine	Final Peak Sawt- ooth	Trape- zoidal		Final Peak Sawt- ooth	Trape- zoidal	Half -Sine	Final Peak Sawt- ooth	Trape- zoidal	-Sine	Final Peak Sawt- ooth	Trape- zoidal	Half	Final Peak Sawt- ooth	Trape- zoidal	
Impact Acceleration (m/s²)	30 ~ 6000	150 1500	30 6000	150 1500	300 - 1000	30 ~ 6000	150 1500	300 1000	30 2000	150 - 600	300 600	30 ~ 1500	150 ~ 600	300 600	30 ~ 1500	150 - 600	300 600	30 ~ 1000	150 ~ 500	300 - 500	30 ~ 1000	150 500	300 500	
Pulse Duration (ms)	40 ~ 1	11 ~ 3	40 ~ 1.5	18 ~ 3	12 ~ 6	40 ~ 1.5	18 ~ 6	12 ~ 6	40 ~ 3	18 ~ 6	12 ~ 6	40 ~ 6	18 ~ 6	12 ~ 6	40 ~ 6	18 ~ 6	12 ~ 6	30 ~ 6	18 ~ 6	12 ~ 6	30 ~ 6	18 ~ 6	12 ~ 6	
Dimension (LxWxH:mm)		780x 00		40x88 2120			60x88 2020	30x	1120x1220x 1450x1600x 2050 2450					1450x1350x 2450			1950x1550x 2450			1950x1550x 2450				
Body Weight(kg)	15	500		180	0		2500	)		2600			3800		3800				5200			5210	0	
Control Cabinet Size (mm)										į	545x7	20x1	335											
Booster Unit Dimensions(mm)		300x300x850 400x400x850																						
Maximum Collision Frequency	12	20		120			100		80			50		40		30		30						
Index Usage Standard	(Usage CIR150 CIR360 CIR548 CR/T2423 LIGE41 MIL STD 9105 EC60068 2 27																							



### **Automatic Bursting Strength Tester**

Meeting Standard: ISO 2759, GB/T1539, GB/T6545-1998

Product description: This machine is suitable for cardboard bursting strength test for footwear. automotive, electronics, wiring, electrical, instrumentation, hardware, luggage, food, furniture and other factories. The bursting strength testing machine of the company features parameter test, conversion, adjustment, display, memory, and printing function. With data processing capabilities, it can obtain the statistical results directly and reset automatically, ensuring easy operation, easy adjustment, and stable performance.



●CZ-101E

#### Technical parameter

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Model	CZ-101E							
Capacity: 250~5600kPa	Clamping indication:Pressure gauge (set clamping force)							
Resolution: 1kPa Test oil:glycerol:85%,distilled water:15%								
Unit: kg/cm²,Kpa,psi or custom  Automatic clamping and release device, sample clamping force:690kPa								
Induction mode:Pressure converter Air–pressure source: min.6kg/cm²(Customer–supplied )								
Display: LCD	Motor: Shockproof motor1/4HP							
Test Speed: 170cc/min. ± 10cc/min	Volume: 62x51x57cm(WxDxH)							
Accuracy: ±0.5%FS	Weight: About 67kg							
Clamp ring diameter: ∮31.5mm Power: 1 ∮, AC220V, 2.6A								
Indication mode:Digital (with micro-printer)								

### **Ring Pressure Strength Testing Machine**

Meeting Standard: TAPPI-T472, JIS-P8126, GB/T2679.9°

Product description: The machine senses with high precision sensor, analyzes with software and displays the sample strength in figures, applies to corrugating medium and kraft paper with thickness less than 1mm; place the sample in a ring container, test its compressive strength in vertical direction, and use a variety of accessories to test the vertical compressive strength, bonding strength and flat crush strength of the boards.



●CZ-102

#### **Technical parameter**

Model	CZ-102
Capacity: 200kg	Ring crush sample: 152x22.7mm
Resolution: 1/10000	Platen: 100x100mm or, depend on the flat crush specimen diameter
Unit(Switchable): kg/N/Lb	Effective spacing: 150mm
Induction mode: Load cell	Volume: 4.5x3.5x6.7cm(WxDxH)
Test Speed: 12.7mm/min	Weight: About 92kg
Accuracy: 1%	Power: 1 / , 220V 1.5A(Follow GB or specify)



Vertical pressure clamps



Horizontal specimen cutter





Notching machine



Bonding strength test accessories



Ring crush sample cutter

### **Servo Carton Compression Tester**

#### Purose:

Meeting Standard: GB/T4857. 4、GB/T4857. 16、ISO2872、ASTMD642、GB/T16491、TAPPI-T804、JIS-ZO212 It s used for measuring the pressure strength of cartons, containers, etc. for inspecting the pressure-resistance and strike-endurance of packing materials during transportation or carry. The testing results are displayed by computer.



●CZ-6609

Model	CZ-6509	CZ-6609							
Capacity(optional)	20kN Optional 10k	kN、50kN、100kN							
Load Resolution	1/250,000	1/500,000							
Load Magnifying Rate	Section-less								
Test Space	Standard: 1000 x 1000 Designed: 1200 x 120 1500 x 150								
Test Speed	10–200mm/min 0.001–500mm/min								
Speed Accuracy	1%	0.5%							
Displacement Resolution	0.00125mm	0.0004mm							
Software	Standard control software	Closed-loop control softwar							
Test Item	Compression test	Compression test, continuous compression test, stacking test							
Motor	AC frequency control motor AAC servo motor								
Transmission Rod	High accuracy of ball screw								
Main Unit Dimension (WxDxH)	1400x1000x1715mm(20kN Below type )								
Power	AC220/50HZ or	specified by user							



### **Single Wing Drop Test Machine**



Meeting Standard: GB/T4857, 5-92, ISO02448-1972E, SATM-5276, JISZ0202 The product is specifically used to test the cartons. The physical packaging free falls from a height, observe whether the interior objects are damaged, in order to make improvements and purchase reference of packaging materials, and mainly meets the withstanding capability of packaging during transport. The instrument works stably, enabling edge, corner and face falling.

#### Technical parameter

Model	CZ-320
Height Range: 300~1500mm or2000mm	Testing machine dimension: 170x120x230cm
Specimen Weight: 100kg	Drop error: ±10
Specimen Size: 100x80x100cm	Drop plane error: ≤1°
Impact panel size: 170x120x5cm	Net weight: About 700kg
Motor power(KWA): 0.37	Driving mode: Electromagnetic

### **Double Wings Drop Test Machine**



Meeting Standard: GB/T4857, 5-92, ISO02448-1972E

The product is used to test the packaging during transport to improve and perfect the packaging design. During product handling or transport, it may fall and cause damage to internal product. To prevent damage, you can use the double-wing drop tester to test and obtain the best solution to minimize transit losses.

#### **Technical parameter**

Model	CZ-315
Height range: 40~150cm	Height debugging: Motor drive
Mono-wing area: 30x75cm(WxD)	Horsepower: 1/2P
Floor area: 120x140cm(WxD)	Volume: 120x140x210cm(about)
Test space: 87x74x40~160cm(WxDxH)	Weight: 400kg
Withstand capacity: 260kg(about )	Power: 1 / , AC220V, 50Hz

### **Pneumatic Drop Test Machine**



#### Purose:

Drop test machine used in toy,electron,electric equipment,communication,furniture,gift,ceramic and other packages for testing during the application and transportation, handling which will get the infection of droping and shocking. Except the flat droping, it is also can do arris or angle droping. The test can do completely performance evaluation of the package and product.

#### Applicable standard

GB/T4857.1、ISO2248-72(E)、JIS Z0202-87、IEC68-2-27

#### Technical parameter

Model	CZ-315 Q
Height Range:300~1500mm	Compressed Air :0.5-0.7Mpa
Specimen Weight:100 kg (Max)	Dimension :1500x1000x1850
Specimen Size :800x800x800mm	Weight:450kg
Drop Mode : Free Drop	Power: AC220/50HZ or specified by user

### Non-standard Machine







Walk In Rain Chamber

Walk In Chamber

Walk In Chamber







Walk In Chamber

Walk In Chamber

Walk In Chamber







Walk In Chamber

Walk In Chamber

Walk In Chamber







Walk In Chamber

Walk In Chamber

Walk In Chamber

●CZ-315Q