Thermal Shock Climatic Test Chamber

Model: SRCJ

Summary:

Thermal shock climatic test chamber can be used in testing composite material and material structure's result which under continuous environment with high temperature or low temperature shock in short time; It means this product can test the material's chemical change or physics change by expansion and contraction within short time. It's application to metal, plastic, rubber, electronic etc materials and can be used for product improvement's reference.

Applicable industries:

It applied to aviation, military, ships, electrical, electronics, instruments and meters; medical equipment; civilian nuclear energy; colleges and universities; research laboratories; commodity inspection, arbitration, and technical supervision departments; Building materials ceramic; petroleum and chemical products, for high and low temperature impact test.

Test standards:

- GB/T2423.1-1989 *low-temperature testing method*
- GB/T2423.2-1989 *high-temperature testing method*
- GB/T2423.22-1989 *temperature test*
- GJB150.5-86 *temperature impact test*
- GJB360.7-87 *temperature impact test*
- GJB367.2-87 405 *temperature impact test*

Features:

1.The thermal shock tester is divided into three sections: the high temperature chamber, the low temperature chamber and the testing chamber.

2. The color touch panel control system was made in Japan can display Chinese / English. The big size liquid-crystal LCD has been adopted.

3.High temperature shock or low temperature impact, the maximum time up to 999H, the maximum cycle up to 9999 times.

4. All equipment is fully automatic, and all process are precisely controlled with P.L.C.S.

5. Of any part of the malfunctions, the machine will automatically shuts down and a warning light switches on.

6. Machine can be shut down automatically in case of electrical power instabilities.

7. Can test the impact of RT,perform to meet the standards and test method: GJB150.5; GJB360.7; GB/2423.22

Specifications :

Model	DZCJ-50	DZCJ-80	DZCJ-150	DZCJ-225	DZCJ-408
Internal Dimension (cm)	36*35*40	50*40*40	60*50*50	50*75*60	60*85*80
Temperature range	-40℃～150℃				
Preheating temperature	RT~180℃				
Precooling temperature	RT～-70℃				
Temperature fluctuation	±0.5℃				
Temperature accuracy	±2.0℃				
Temperature recovering time	≤3～5min				

Mechanical Structure and materials	
Inner material	SUS#304 stainless steel
Outer material	SUS#304 stainless steel
Insulation material	High-precision glass wool + PU foam rubber
Air conditioning	Draught fan; Heater; Evaporator; Ventilation door; Temperature sensor
Standard configuration	Compartment frame 2; Levelers 4; Trundle 6; Power line (3m) 1
Refrigeration System	
Working mode	Compressor binary refrigerating
Refrigeration compressor	France Tecumseh compressor 2 pcs
Evaporator	Fin-speed heater
Condenser	Double-pipe heat interchanger
Throttling device	Original imported electromagnetic valve, dry filter, capillary
Evaporative condenser	Stainless steel welded plate heat exchanger
Refrigerator control mode	Control system PLC automatic adjust refrigerator and compressor
Refrigerant	R404a/R23

Heating and Air circulation system

1. Multi-wing centrifugal circulating fan is connected to the power saving motor made in Japan through the stainless steel long axis.
2. Air supply: horizontal diffusion curved vertical heat exchange loop.
3. SSR used for automatic temperature control.
4. Nichrome strip heater.

Electrical apparatus control system

1. Displayer: Adopt original color touch screen large LCD display.
2. Automatic circulation shock and manual selective shock are all available in this system.
3. Two area or three area shock are all available as well as forward or reverse start.
4. Maximum cycle up to 9999 times.
5. If the instrument fails to work, the instrument will be shut down automatically with warning signals.
6. If you wants to set high or low temperature individually, time control up to 999H59M is available.

Security protection system

1. Thermal Shock Test Chamber is equipped with no fuse protection switch.
2. Under-voltage protection and translation protection are available in the control system.
3. There is a over-temperature protection switch.
4. Overload protection device and high-and-low pressure protection switch are equipped in the refrigeration compressor.
5. The fan motor and air-duct gate motor are also in the overload protection.
6. The instrument is equipped with the self-detection function to find the failure point for easy maintenance.

We produce a series of environmental test chamber which mainly simulate UV light, sunlight, temperuate, humidity, and etc. Environmental.