

## Thermal Shock Testing Chamber

Model: IN-TS-50 / 100 / 150 / 200 / 300 / 600

### Working principles:

Storing up the cold and heat of low temperature and high temperature, according to the action, quickly move the basket into the cold and hot grooves, thus achieving a rapid temperature shock effect. Using the BTC system and the special designs of air circulation system, controlling the SSR by P.I.D. and making the heating capacity of the system be equal to the heat loss and ensure long-time stable using.

### Purpose:

Thermal shock test machine can be used to test the structure of materials or to test the tolerance level of composite materials at the moment of extremely high temperature and extremely low temperature continuous environment to test its chemical changes or physical damages caused by heat-expansion and cold-contraction in the shortest possible time. The applicable materials include metal, plastic, rubber, electronics and so on which can be used as a basis or reference for improving its products.

### Standard:

GB/T 2423.1-2001

GB/T 2423.2-2001

GB/T2423.22-2002

GJB/150.3-1986

GJB-150.4-1986

GJB/150.5-1986

IEC 60 068-2-14. Environmental testing-Part 2-14:Tests-Test N: Change of temperature,IDT.

### Feature:

- External material: imported rushed stainless steel SUS304#, internal material: imported matte stainless steel SUS304#.
- Continually measure the heat required during the pre-cooling and pre-heating process in energy-saving operation mode to calculate the shortest operation time of these processes. This function can further reduce the power consumption according to the preliminary test, and eliminate the inaccuracy and annoyance caused by the adjustment. When testing, energy saving can be achieved with reproducibility and reliability.
- Mobile platform management APP (iOS) can be equipped to realize remote monitoring and control.
- Ethernet network management can be equipped to realize the test data cloud storage, USB data download and other functions.
- Load power supply 6 ON/OFF output control can be equipped to protect the safety of equipment and products to be tested.
- The network video monitoring function can be equipped to synchronize with the tests.
- Defrost components can be equipped to achieve 15-minute exposure test without interruption being continuously operated for 500 cycles.
- Finishing tests, cold and hot test chamber return to the normal temperature to improve the operation safety and protect products to be tested.
- Independent sensors are equipped to protect sample, which conforms to the standard NE60519-2.1993.
- 2 pieces of 304# stainless steel sample holders are equipped.

**Specification:**

Model	IN-TS-50	IN-TS-100	IN-TS-150	IN-TS-200	IN-TS-300	IN-TS-600
Preheating Temp-range	0°C~−78°C					
Precooling Temp-range	+60°C~+200°C					
Temp shocking range	High temp: +60°C~+150°C, Low temp: A type: −10°C~−40°C; B type: −10°C~−55°C; C type: −10°C~−65°C;					
Temp-accuracy	±3°C					
Temp-change time	5 min					
Time for cooling down	70min for +20°C~−40°C, 80min for +20°C~−55°C, 90min for +20°C~−65°C					
Time for heating up	40min for +20°C~+150°C					
Test room/WxHxD cm	35x40x36	50x40x40	60x50x50	65x50x62	90x50x67	100x80x75
Dimension/WxHxD cm	135x175x137	140x180x137	150x185x150	150x185x165	180x185x170	200x220x185
Interior material	Stainless steel 304 (bright surface)					
Exterior material	Stainless steel 304 (coated surface)					
Thermal Insulation material	Rigid polyfoam (To use glass wool at 150°C)					
Cooling system	Cascade refrigeration system					
Accessories	Freely adjustable shaft for 2 layer, test hole for 1pcs at $\varnothing$ 50mm					
Weight	150Kg	250Kg	300Kg	400Kg	600Kg	700Kg
Power supply	AC380V 20KW Or specified	AC380V 22KW Or specified	AC380V 25KW Or specified	AC380V 35KW Or specified	AC380V 50KW Or specified	AC380V 65KW Or specified

**Appearance:**

