

5. Three-zone Thermal Shock Chambers

Application:

Thermal Shock Chamber is ideally designed for testing most commercial products to see how they withstand drastic temperature changes, a harsh condition that subject a product to the most extreme temperature conditions, instantly. Some times with liquid nitrogen cooling if request more strictly temperature. Thermal shock test is used as a vital method to 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. And the purpose of testing a product under these circumstances by a thermal shock chamber is to observe changes in the products characteristics and check for failure occurrence of different materials and thermal expansion coefficients. So be sure that these thermal shock chambers are prohibited to flammable explosive easily to volatile substances sample test or storage, corrosive substance sample testing or storage, biological sample test or storage, strong electromagnetic emission source sample test.



Thermal Shock Testing Chambers

Specifications

Model	MTS-50	MTS-100	MTS-150	MTS-200	MTS-300
Interior Volume	50L	100L	150L	200L	300L
Interior Dimension(cm)	35*40H*35	50*40H*50	60*50H*50	65*50H*62	90*50H*67
Temp Change Rate(with load)	5°C ~20°C/m(Standard); 30/°C/m(Liquid Nitrogen)				
Hot/Low Temp Range(Testing Zone)	+60°C~+150°C			-10°C~-65°C	
Hot/ Low Temp Range(Preheat-precool Zone)	+60°C~+200°C (Pre heating zone)			0°C~-78°C (Pre cooling zone)	
Preheating Time(m)	RT to 150°C	RT to 150°C	RT to 150°C	RT to 150°C	RT to 150°C
	30	40	40	40	40
Precooling Time(m)	-40, -55°C, -65°C	-40, -55°C, -65°C	-40, -55°C, -65°C	-40, -55°C, -65°C	-40, -55°C, -65°C
	70,80,90	70,80,90	70,80,90	70,80,90	70,80,90
Power (KW)	20,21,22	21,22,23	22,23,25	28,35,45	30,40,50
Temp Fluctuation	±0.5°C				
Temp Conversion Time	≤10 seconds				
Temp Recovery Time	≤5min				
Temp & Humidity Deviation	±1°C~±2°C		±3%RH(>75%RH);±5%RH(≤75%RH) (optional)		
Standard configurations	1 Window, 1 Cable port, 1 Lamp, 4 Casters, 1 Power cable, 2 Stainless steel shelves				
Standard Documentations	quality certification, test report ,user operation manual for machine & controller				
Safety devices	Electric leakage, fan overheat ,anti-dry ,compressor overheat & overpressure,power supply undercurrent,overheat, overcurrent, phase sequence, over-temperature protection devices				