

冷熱衝擊試驗機/高低溫衝擊試驗機 Thermal Shock Test chamber



用途：

溫度衝擊試驗機，用來測試材料結構或複合材料，在瞬間下經極高溫及極低溫的連續環境下所能忍受的程度，藉以在最短時間內試驗其熱脹冷縮所引起的化學變化或物理傷害。適用的對象包括金屬，塑料，橡膠，電子等材料，可作為其產品改進的依據或參考。

Application:

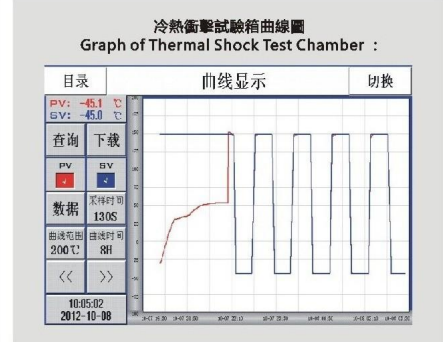
Thermal shock test chamber is used to test the capability of material structure or composite materials to withstand the continuous environmental changes between extremely high temperature and low temperature during a short period, and therefore understand the chemical changes or physical damages caused 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.

特點：

- 三箱式溫度衝擊箱分為高溫區，低溫區、測試區三部分；樣品置於測試區內，衝擊時高溫區或低溫區的溫度通過高壓氣缸驅動進入測試區內進行溫度衝擊，從而達到溫度劇烈變化的目的。測試產品為靜態式。
- 採用觸控式圖控操作介面，操作簡易。
- 衝擊方式應用風路切換方式將溫度導入測試區，做冷熱衝擊測試。
- 高溫衝擊或低溫衝擊時，最大時間可達999H，最大循環週期可達9999次。
- 系統可做自動循環衝擊或手動選擇性衝擊。
- 冷卻採用二元冷凍系統，降溫效果快速，冷卻方式為水冷式。
- 可以常溫導入，有RS232和RS485通訊介面

Features:

- Temperature shock test chamber is divided into three boxes: high temperature, low temperature, and the testing area, testing products placed on the testing area; when testing, the valve, which drove by cylinder, lead the high temperature or low temperatures into the testing area. The test sample is in static mode.
- Using touch-control graph control as operation interface, easy to operate.
- Applying wind route conversation 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.
- Adopt binary cooling system, with quick cooling effect. Cooling method is water cooling.
- Can entering normal temperature.RS232 and RS485 communication interface.



技術參數 Technical Parameters:

型號 Model	TS-49(A~C)	TS-80(A~C)	TS-150(A~C)	TS-252(A~C)	TS-450(A~C)	TS-900(A~C)
內部尺寸 WxHxD (mm) Internal Dimension WxHxD (mm)	400x350x350	500x400x400	600x500x500	700x600x600	800x750x750	1000x900x900
外部尺寸 WxHxD (mm) External Dimension WxHxD (mm)	1400x1800x1400	1550x1950x1550	1600x2000x1700	1700x2100x1750	1800x2200x1900	2100x2400x2200
測試室溫度範圍 Temperature Range of Testing zone	A 型: -40°C ~ +150°C (200°C 為特殊規格) Type A: -40°C ~ +150°C (200°C is Optional)		B 型: -55°C ~ +150°C (200°C 為特殊規格) Type B: -55°C ~ +150°C (200°C is Optional)		C 型: -65°C ~ +150°C (200°C 為特殊規格) Type C: -65°C ~ +150°C (200°C is Optional)	
高低溫暴露時間 Exposure Time of High/Low Temperature	高溫暴露時間: +60°C ~ +150°C (200°C 為特殊規格) 30分鐘 Exposure Time of High Temperature: +60°C ~ +150°C (200°C is Optional) 30Mins 低溫暴露時間: -10°C ~ (A 型 -40°C)、(B 型: -55°C)、(C 型 -65°C) 為 30 分鐘 Exposure Time of Low Temperature (Type A: -10 ~ -40°C; Type B: -10 ~ -55°C; Type C: -10 ~ -65°C) 30mins					
蓄熱槽溫度/升溫時間 Temperature of Heat-storing Slot/Heating Time	RT ~ 200°C / 約需 45mins RT ~ 200°C / About 45mins					
蓄冷槽溫度/降溫時間 Temperature of Cool-storing Slot/Cooling Time	RT ~ -75°C / 約需 100mins RT ~ -75°C / About 100mins					
溫度回復時間/轉換時間 Recovery Time/Conversion Time	≤ 5min / ≤ 5sec					
溫度控制精度/分布精度 Precision Temperature Control/Distribution Accuracy	± 0.5°C / ± 2°C					
內、外部材質 Internal and External Material	內箱材質為 SUS 304# 不銹鋼，外箱材質為不銹鋼或 SEE 冷軋鋼加烤漆 Material of the inner box is SUS 304# stainless steel, of the outer box is stainless steel or SEE cold-rolled steel with paint coated.					
保溫材質 Insulation Material	耐高溫高密度氯基甲酸乙酯泡沫絕緣體材料 High temperature resistant, high density, formate chlorine, ethyl acetum foam insulation materials					
機械工作原理 Mechanics	P.I.D+S.S.R+ 微電腦平衡調溫控制系統 P.I.D+S.S.R+ Micro-computer balanced temperature control system					
冷卻系統 Cooling System	半密閉式雙段壓縮機 (水冷式) / 全密閉式雙段壓縮機 (風冷式) Semi-hermetic double-stage compressor (water-cooled type) / Hermetic double-stage compressor (air-cooled type)					
安全保護裝置 Security Protection Devices	無熔絲開關，壓縮機高低壓保護開關，故障警告系統，電子警報器 Non-fuse breaker, high and low pressure protective switch of the compressor, refrigerator high-pressure protective switch, failure warning system, electronic alarm					
配件 / Accessories	觀窗 (特殊選購型) Viewing window (special optional)					
壓縮機 / Compressor	法國“泰康”牌、德國“比則爾” French “Tecumseh” Brand, Germany “Bizer” Brand					
電源 / Power	AC380V, 3φ 5線, 50/60HZ AC380V, 3φ 5 lines, 50/60HZ					
重量(大約) / Weight (Approx)	450	600	750	900	1300	1500