

ST Series Thermal Shock Chamber

Tescor's Thermal Shock Chamber reveals the impact of rapid temperature change on test specimens as they move through hot and cold zones. Through the use of a test basket that is transferred between hot and cold zones by a motorized system connected by a screw rod, rapid temperature changes expose product design failures of the test specimen, including cracking of the material, mechanical failures, and permanent change in electrical performance. The Thermal Shock chamber shows consistent accuracy in temperature recovery and uniformity across multiple test cycles, providing test reproducibility and reliability characteristics of the chamber. The hot and cold zones are sealed with specially designed gaskets to minimize leakage between the two zones. The test basket features low thermal mass with a powerful temperature-conditioning unit, enabling the chamber to achieve faster recovery rates. The Thermal Shock chamber meets all major international test standards.

Test Basket	Polished stainless steel, grade AISI-304 insulated top and bottom frames with silicone extruded gasket
Mechanical Basket Movement	Motorized movement of test basket connected by a screw rod, ensures no vibration or shock is transferred to the test unit
Entry Ports	Movable tube for entry of cables and wires to the test basket, where the test specimen can be easily accessed for data acquisition and live testing
Defrosting System	Auto defrost of cold zone allows continuous operation for long term thermal shock tests



STANDARD CLIMATIC CHAMBERS

ST Series Thermal Shock Chamber *(continued)*

Specifications:

	Models			
	H-XST1 UL	H-XST2 UL	H-XST4 UL	H-XST12 UL
Inner Dimensions	9.5 x 9.5 x 15.5 in 240 x 240 x 390 mm	15.5 x 15.5 x 15.5 in 390 x 390 x 390 mm	21.5 x 21.5 x 15.5 in 550 x 550 x 390 mm	27.5 x 27.5 x 27.5 in 700 x 700 x 700 mm
Volume	.8 cu.ft. 23 ltrs	2.2 cu.ft. 61 ltrs	4.1 cu.ft. 117 ltrs	12 cu.ft. 340 ltrs
Hot Zone Temperature	122 to 392 °F 50 to 200°C			
Cold Zone Temperature	122 to -112°F 50 to -80°C			
Power Requirement	460 3ph 60Hz (Other options available upon request)			
Basket Transition	Vertical / Horizontal Movement <10 secs			
Basket temperature recovery time	<5 min			