

INNOVATIVE TECHNOLOGIES

Slow Freeze Thaw Test Chamber

ToronSFTC-100



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The ToronSFTC-100 is **a fully automated freeze-thaw test chamber designed to evaluate the long-term durability and freeze-thaw resistance** of concrete, masonry, and ceramic materials. Ideal for research labs and quality control centers, it delivers precise slow-cycle testing under stable environmental conditions.

Featuring a durable stainless steel inner tank, external water reservoir, and intuitive touchscreen interface, the system simplifies operation while ensuring consistent results. Preloaded temperature curves and full programming flexibility allow users to run both standard and custom test protocols with ease.

With its combination of precision, durability, and user-friendly controls, the ToronSFTC-100 is an ideal solution for laboratories conducting long-term material performance testing under freeze-thaw cycles.



FEATURES/ADVANTAGES

► Optimized Freeze-Thaw Testing

Designed for slow-cycle freeze-thaw evaluation of concrete, bricks, ceramics, and various building materials.

► Durable Stainless Steel Chamber

Large-capacity chamber with excellent corrosion resistance ensures long-lasting, stable performance.

► Superior Thermal Insulation

High-efficiency polyurethane insulation provides excellent thermal retention for accurate test conditions.

► Intuitive PLC Control System

Microprocessor-based PLC with large color touchscreen offers simple operation and precise test control.

► Efficient Low-Temperature Compressor

Quiet, imported compressor delivers stable and efficient cooling performance throughout the testing cycle.

► Advanced Data Management

Built-in memory, remote monitoring software, and easy-maintenance water filtration support efficient operation.


TECHNICAL SPECIFICATIONS

SPECIFICATIONS	DETAILS
Internal Chamber Dimensions	1100 × 500 × 500 mm
Overall Equipment Dimensions	1800 × 850 × 1300 mm
Temperature Range	-35°C to +50°C
Temperature Uniformity	≤ ±1°C within the chamber
Cooling Rate	≤ 20°C per hour
Specimen Capacity	Up to 5 wall bricks (190 × 190 × 390 mm)
	Up to 54 concrete test cubes (100 × 100 × 100 mm)
	Up to 60 red bricks
Freezing Time Range	0–9999 hours (adjustable)
Thawing Time Range	0–9999 hours (adjustable)
Cycle Count Range	0–9999 cycles (adjustable)
Temperature Measurement Accuracy	±1°C
Control System	PLC + Touchscreen interface
Compressor	Low-temperature compressor with low noise
Voltage	220V (110V available upon request)
Weight	200 kg (440.92 lbs)




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