

Typhoon 8.0+



Part Number: 971-4008

Standard Features

High Rate, High Flow
Typhoon Thermal System

xLF2 Vibration Table with
PSD Management

(2x) Vacuum Jacketed Manifold

Allen-Bradley PLC Control

Desktop PC with a 17" Monitor

Typhoon Manager Software

The Typhoon 8.0+ doubles the table size of our popular Typhoon 4.0 chamber. The thermal system in the Typhoon series has been carefully engineered to have superior thermal efficiency. Key design elements such as our patented blower technology, highly efficient air flow characteristics and careful choice of materials have combined to keep liquid nitrogen and electricity costs down without compromising our industry standard thermal performance. The Typhoon 8.0 has the largest vibration table available in a HALT/HASS chamber.

Work Space	Lower Table Position 108.7" w x 53.8" d x 53.6" h (2761 x 1366 x 1362mm) Upper Table Position 102.7" w x 53.8" d x 34.6" h (2661 x 1366 x 879mm)
Outer Dimensions	123.7" w x 79.1" d x 103.8" h (3143 x 2009 x 2618mm)
Table Size	100" x 48" (2540 x 1219mm)
Actuators	24 Actuators Lubricant-free
Table Capacity¹	1200 lb (544 kg)
Acceleration²	5 – 75 gRMS
Temp Range	+200°C to -100°C
Thermal Ramp Rate³	70°C – 100°C/min average
Power Requirements	380V, 400V, 440V, 480V 3Φ 50/60Hz, 200A (Service Rating)

See Qualmark product catalog for configuration options, accessories, and post warranty service and maintenance plans. All specifications are subject to change without notice.

Typhoon 8.0+ System includes:

- Two (2) year warranty
- Operations & Maintenance manual
- Two (2) accelerometers for table control provided;
Three (3) additional accelerometer input channels available
- Two (2) 72" thermocouples provided - one (1) for product, one (1) for air;
Four (4) additional thermocouple input channels available
- Two (2) 20 ft accelerometer cables
- Eight (8) User State Relays (USR)
- Control PC with Windows® operating system and 17" flat screen monitor



Vibration Features	Table Top	100" x 48" (2540 x 1219mm)
	Table Top Hardware	300 threaded holes 3/8-16 on 4" centers; M10 optional
	Actuators	24 pneumatic, impulse-type, lubricant-free actuators
	Vibration	Six degree of freedom, random, OmniAxial™ broadband excitation
	PSD Management	Monitor and reset to factory specification for Power Spectral Density (PSD)
	Table Product Capacity ¹	1200 lb (544 kg)
	Vibration Range ²	5 - 75 gRMS (10 Hz to 5000 Hz)
Thermal Features	Heating System	Open-element nichrome type
	Cooling System	Vacuum jacketed liquid nitrogen injection
	Temperature Range	+200°C to -100°C (+392°F to -148°F)
	Thermal Ramp Rate ³	70°C/min average
Internal Features	Interior Dimension	Table in Lower Position: 108.7" w x 53.8" d x 53.6" h, (2761 x 1366 x 1362mm) Table in Upper Position: 102.7" w x 53.8" d x 34.6" h, (2791 x 1366 x 879mm)
	Interior Construction	Stainless steel
	Plenum Exit	Adjustable airflow to direct air to the product
	Lighting	4 recessed ceiling lights
Exterior Features	Exterior Dimensions	123.7" w x 79.1" d x 108.4" h (3143 x 2009 x 2753mm)
	Doors	4 automated locking doors, two on each side; each door opens 180°
	External Construction	Painted steel construction with stainless steel trim
	Windows	(4) 17" x 17" (432 x 432mm) multi-pane windows, 1 in each door (2) 17" x 17" (432 x 432mm) multi-pane windows in the front wall
	Access Ports	(8) 6" (152mm) ports with phenolic covers, 4 on front, 4 on back
	Door Lock	Interlocking system prohibits system operation when any door is ajar
	Sound	Nominally 73 dBA at 1 meter
Control	Vibration/Temperature Interface	PLC based, PC
	Operating System	Typhoon Manager
	Safety	Microsoft Windows
		Eurotherm temperature (independent safety)
Utilities	Electrical	380V, 400V, 440V, 480V, 3Φ, 50/60 Hz, 200A
	Air	192 SCFM Max @ 85 psi (5.4 m ³ /min. at 5.9 bar)

1. Greater load capacities can be designed; contact Qualmark for custom options.
2. Measured on bare table; maximum gRMS level dependent on table configuration.
3. Measured -65°C to 85°C in open air 3" above table center; levels vary by make and model