

Typhoon 8.0



Part Number: 971-4004

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 54" d x 54.1" h (2761 x 1372 x 1375mm) Upper Table Position 102.7" w x 54" d x 35.14" h (2661 x 1372 x 893mm)
Outer Dimensions	79.25" w x 123.71" d x 103.8" h (2093 x 3142 x 2618mm)
Table Size	100" x 48" (2540 x 1220mm)
Actuators	24 Actuators Lubricant-free
Table Capacity¹	1200 lbs (544 kg)
Acceleration²	5- 75 gRMS typical >100 gRMS special order
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:

- One (1) year warranty
- System Start-up by a Qualmark certified service engineer
- System and software orientation
- 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 1220mm)
	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 lbs. (544 kg)
	Vibration Range ²	5 - 75 gRMS (10 Hz to 5000 Hz) typical (>100 gRMS special order)

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 - 100°C /minute average

Internal Features	Interior Dimensions	Table in lower position: 108.7" w x 54" d x 54.1" h, (2761 x 1372 x 1375mm) Table in upper position: 102.7" w x 54" d x 35.14" h, (2661 x 1372 x 893mm)
	Interior Construction	Stainless steel
	Plenum Exit	Adjustable airflow to direct air to the product
	Lighting	4 recessed ceiling lights

Exterior Features	Exterior Dimensions	79.25" w x 123.71" d x 103.8" h (2093 x 3142 x 2618mm)
	Doors	4 automated locking doors, two on each side; each door opens 180°
	External Construction	Painted steel construction with stainless steel trim
	Windows	(4) 18" x 18" (457 x 457mm) multi-pane windows, 1 in each door
	Access Ports	(8) 6" (152mm) ports with phenolic covers, 4 on front, 4 on back
	Door Locks	Interlocking system prohibits system operation when any door is ajar
	Sound	Nominally 73 dB (A) at 1 meter

Control	Vibration/Temperature	PLC based, PC
	PLC Based, PC	Typhoon Manager
	Operating System	Microsoft Windows
	Safety	Eurotherm temperature (independent safety)

Utilities	Electrical	380V, 400V, 440V, 480V, 3Φ, 60 Hz, 50 Hz, 200A
	Air	192 SCFM max @ 80 PSI (4.53 m3/min. at 5.52 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.

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