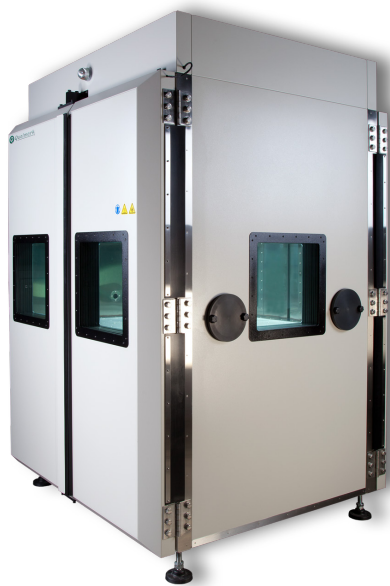


T4.0



Part Number: 971-4006

Standard Features

High Rate, High Flow
Typhoon Thermal System
xLF2 Vibration Table with
PSD Management
Vacuum Jacketed Manifold
PLC Control
Desktop PC with Monitor
Typhoon Manager Software

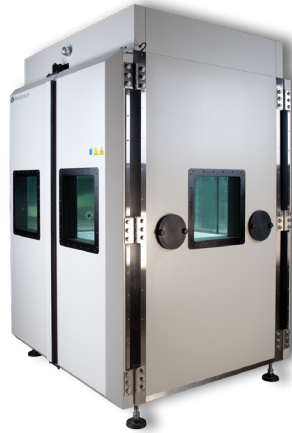
This system is designed specifically for the task of performing Highly Accelerated Stress Screening (HASS) and Highly Accelerated Life Test (HALT) on large products. Its 48" x 48" vibration table is capable of supporting hundreds of pounds of products, fixturing and mounts at two different heights. ESPEC's Qualmark T4.0 provides optimal thermal and vibration performance to drive out failures fast, yet is amazingly quiet.

Work Space	Lower Table Position 53.8" w x 54.0" d x 53.6" h (1367 mm x 1372 mm x 1362 mm) Upper Table Position 53.8" w x 54.0" d x 34.6" h (1367 mm x 1372 mm x 879 mm)
Outer Dimensions	69.8" w x 78.3" d x 108.4" h (1772 mm x 1989 mm x 2753 mm)
Table Size	48" x 48" (1219 mm x 1219 mm)
Actuators	12 Actuators Lubricant-free
Table Capacity¹	600 lb (272 kg)
Acceleration²	5 – 75 gRMS
Temp Range	+200°C to -100°C
Thermal Ramp Rate³	70°C/min
Power Requirements	380V, 400V, 440V, 480V 3Φ 50/60Hz, 100A (Service Rating)

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

T4.0 System includes:

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



Vibration Features	Table Top	48" x 48" (1219 mm x 1219 mm)
	Table Top Hardware	144 threaded holes 3/8-16 on 4" centers; M10 optional
	Actuators	12 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	600 lb (272 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 /minute
Internal Features	Interior Dimension	Table in Lower Position: 53.8" w x 54.0" d x 53.6" h (1367 mm x 1372 mm x 1362 mm) Table in Upper Position: 53.8" w x 54.0" d x 34.6" h (1367 mm x 1372 mm x 879 mm)
	Interior Construction	Stainless steel
	Plenum Exit	Flexible aluminum ducting directs air to the product
	Lighting	2 recessed ceiling lights; 1 optional fiber optic light
Exterior Features	Exterior Dimensions	69.8" w x 78.3" d x 108.4" h (1772 mm x 1989 mm x 2753 mm)
	Doors	4 automated locking doors, two on each side; each door opens 150°
	External Construction	Painted steel construction with stainless steel trim
	Windows	(4) 17" x 17" (432 mm x 432 mm) multi-pane windows, 1 in each door (1) 17" x 17" (432 mm x 432 mm) multi-pane window in the front wall
	Access Ports	(4) 6" (152 mm) round ports with phenolic covers, 2 in front and 2 in back
	Door Lock Sound	Interlocking system prohibits system operation when any door is ajar 73 dBA at 50 gRMS (at 1 meter)
Control	Vibration/Temperature Interface	PLC based, PC Typhoon Manager
	Operating System	Microsoft Windows
	Safety	Eurotherm temperature (independent safety)
Utilities	Electrical	380V, 400V, 440V, 480V, 3Φ, 60 Hz, 100A
	Air	96 SCFM Max @ 85 psi (2.7 m ³ /min at 5.9 bar)

1. Greater load capacities can be designed; contact ESPEC for custom options.
2. Measured on bare table; maximum gRMS level dependent on table configuration.
3. Measured as the average rate between -65°C and 85°C in open air 3" above table center (in an empty chamber); levels vary by make and model

920-0241_13