



TYPHOON 8.0

The Typhoon 8.0 doubles the width 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.

Typhoon 8.0 shown with optional lower windows in doors; optional windows and lower access ports on front.

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

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

48" x 100"
(1220 x 2540mm)

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)

ACCESSORIES

ADDITIONAL ACCESS PORTS & WINDOWS

ADHESIVE-MOUNT ACCELEROMETER

AIR PURGE KIT

AUXILIARY THERMOCOUPLES

CALIBRATION KIT

CE KIT (INTERNATIONAL)

EXTENDED SERVICE PLAN

HALT FIXTURE KIT

LN2 KEEPFUL

OXYGEN SENSORS

PCA QUICK RELEASE FIXTURE CLAMPS

Q-LINK™ SOFTWARE

QUALVIEW™ SOFTWARE

REDUNDANT VIBRATION ACCELEROMETER KIT

SPECTRUM ANALYZER

Typhoon 8.0 Features



Included:

- 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 cable
- Eight (8) User State Relays (USR)
- Control PC with Windows operating system and a 17" flat screen monitor

Vibration Features

Table Top	48" X 100" (1220mm X 2540mm)
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 ⁴	+200°C to -100°C (+392°F to -148°F); Optional 250°C
Thermal Ramp Rate ³	70°C - 100°C /min average

Internal Features

Interior Dimensions	108.7" w X 54" d X 54.1" h, Table Lower Position (2761mm X 1372mm X 1375mm) 102.7" w X 54" d X 35.14" h, Table Upper Position (2661mm X 1372mm X 893mm)
Interior Construction	Stainless Steel
Plenum Exit	Adjustable Airflow To Direct The Air To The Product
Lighting	4 Recessed Ceiling Lights

Exterior Features

Exterior Dimensions	79.25" w X 123.71 X 103.8" h (2093mm X 3142mm 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" (457mm 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 m ³ /min. at 5.52 bar)

¹ Greater loads 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. All specifications are subject to change without notice