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CHAMBER TYPHOON 8.0

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

The Typhoon 8.0 doubles the size of our popular Typhoon-4.0 chamber. The thermal system in the Typhoon series has been carefully engineered to have superior thermal efficiency when compared to other chambers. 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 chamber.

PART NUMBER: 971-4004

CONFIGURABLE FEATURES

MAIN SUPPLY VOLTAGE
VIBRATION TABLE
LN_2 SYSTEM
COMPUTER
SOFTWARE

WORK SPACE

UPPER TABLE POSITION
110”w x 53.3”d x36”h
(2794 x 1353 x 914mm)
LOWER TABLE POSITION
110”w x 53.3”d x 55”h
(2794 x 1353 x 1397mm)

TABLE SIZE

100” x 48”
(2540 x 1220mm)

OUTER DIMENSIONS

121”w x 67.3”d x 108.7”h
(3081 x 1710 x 2760mm)

ACCELERATION

Over 50 G

TEMP RANGE

+ 200°C to -100° C

24 ACTUATORS

POWER REQUIREMENTS

380V, 400V, 480V
3Φ
50/60Hz,
200A

ACCESSORIES

CE KIT (INTERNATIONAL)
HALT FIXTURE KIT
MULTIPLE DEWAR KIT
CALIBRATION KIT
OXYGEN SENSORS
LAY-DOWN CRATING
Q-LINK SOFTWARE
AIR PURGE KIT
ACCESS PORTS AND OPTIONAL WINDOWS
VACUUM JACKETED MANIFOLD
QUALMARK SPECTRUM ANALYZER
REDUNDANT VIBRATION ACCLEROMETER KIT
SEISMIC HOLD DOWN CHANNEL KIT
AUXILIARY THERMOCOUPLES
GHI SPECTRUM & FATIGUE ANALYZER
KEEPFUL VACUUM INSULATED LIQUID LEVEL
PCBV ADHESIVE-MOUNT ACCELEROMETER KIT
PCA QUICK RELEASE FIXTURE

Typhoon-8.0 Features

Included

- 1 year warranty
- Start-up and check out of complete system by a factory trained field service engineer
- Customer training on using the PC control system
- Operations & Maintenance Manual
- (2)Table Control Accelerometer and Cable
- Product and air chamber control thermocouples
- (8) user controllable solid state relays
- (4) auxiliary thermocouple input channels
- (3) auxiliary vibration input channels
- Control PC with Windows operating system
- 17" Monitor

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Vibration Features

Table Top	48" x 100" (1220mm x 2540mm)
Table Top Hardware	threaded holes 3/8-16 on 4" centers
Actuators	24 pneumatic, impulse-type acuators
Vibration	Six degree of freedom, random, Omni-Axial™ broadband excitation
Modulation	ASX, ASX-L, and ASX-M Actuators
Table Product Capacity	Recommended 1000 lbs. (453.59kg) Maximum* 2000lbs (907.18kg) *may require custom options
Vibration Range	50 Grms (10Hz to 5kHz) 60 Grms (10 HZ to 1kHz)

Thermal Features

Heating System	Open-element NiChrome type
Cooling System	Liquid Nitrogen Injection
Temperature Range	+200◦C to design limit -100◦C to design limit (+392◦F to -148◦F)
Temperature Change Rate	200°C/min (max ramp rate 70°C/min from -50°C to +150°C (typical HALT range) 60°C/min from -50°C to +120°C (example range)

Internal Features

Interior Dimensions	110"w x 53.3"d x 36"h, upper position (2794mm x 1353mm x 914mm) 110"w x 53.3"d x 55"h, lower position (2794mm x 1353mm x 1397mm)
Interior Construction	304 Stainless Steel
Side Plenum	Adjustable airflow to direct the air to the product
Lighting	Recessed ceiling lights and a fiber-optic wand

Exterior Features

Exterior Dimensions	121"w x 67.3"d x 108.7"h (3081mm x 1710mm x 2761mm)
Doors	(4) automated locking doors two on each side, open 95° for easy access to product under stimulation
External Construction	Painted cold rolled steel construction with stainless steel trim
Windows	(4) 18" x 18" (457mm x 457mm) multi-pane windows in doors (one window in each door)
Access Ports	(8) 6" x 10" (152mm x 254mm) ports with phenolic covers (2 on front & 2 on side)
Door Interlocks	Inhibit thermal and vibration system when any door is ajar
Electrical Requirements	380V, 400V, 440V, 480V, 3Φ, 60 Hz, 50 Hz, 200A
Air Requirements	160 SCFM Max @ 80 PSI (4.53 m3/min. at 5.52 bar)
Sound Level	Nominally 73 dB (A) at 1 meter

Control

Vibration/Temperature Control	PLC based, PC driven controller
User Interface	OVS Manager
Operating System	Microsoft Windows
Safety	Eurotherm Temperature