



## CHAMBER *TYPHOON 2.5*

The Typhoon 2.5 is Qualmark's most popular chamber. With a 30" x 30" vibration table, it is just the right size for the vast majority of Highly Accelerated Life Testing (HALT) applications, and many Highly Accelerated Stress Screening (HASS) applications. The table can be mounted in an upper or lower position, to suite your product and ergonomic needs.

PART NUMBER: 971- 4026

### CONFIGURABLE FEATURES

MAIN SUPPLY VOLTAGE  
VIBRATION TABLE  
COMPUTER  
SOFTWARE

### WORK SPACE

UPPER TABLE POSITION  
44.1" w x 45" d x 25" h  
(1120 x 1143 x 635mm)  
LOWER TABLE POSITION  
44.1" w x 45" d x 35" h  
(1120 x 1143 x 889mm)

### OUTER DIMENSIONS

55.9" w x 69.2" d x 84.0" h  
(1420 x 1758 x 2134mm)

### TEMP RANGE

+ 200°C to -100°C

### 8 ACTUATORS

### TABLE SIZE

30" x 30"  
(762 x 762mm)

### ACCELERATION

Over 50 G

### POWER REQUIREMENTS

380V, 400V, 440V, 480V  
3Φ  
50/60Hz,  
80A

## ACCESSORIES

CE KIT (INTERNATIONAL)

HALT FIXTURE KIT

MULTIPLE DEWAR KIT

CALIBRATION KIT

OXYGEN SENSORS

ELEVATION STAND

CABLE NOTCHES

Q-LINK SOFTWARE

AIR PURGE DOOR LOCK KIT

DUAL WINDOW PORT ADAPTOR

QUALMARK SPECTRUM ANALYZER

REDUNDANT VIBRATION ACCELEROMETER 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 CLAMP & WITHOUT CLAMP

## Typhoon-2.5 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
- Table Control Accelerometer and Cable
- 2 Thermocouples Provided
- 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



### Vibration Features

Table Top	30" x 30" (762mm x 762mm)
Table Top Hardware	(64) threaded holes 3/8-16 on 4" centers
Actuators	8 pneumatic, impulse-type actuators
Vibration	Six degree of freedom, random, Onmi-Axial™ broadband excitation
Modulation	ASX Actuators (145kg)
Table Product Capacity	Recommended 320 lbs. (145kg) Maximum* 640lbs (290.3kg) *may require custom options
Vibration Range	50 Grms (10Hz to 5kHz) 60 Grms (10 HZ to 1kHz)
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	table in lower position: 44.1" w x 45" d x 35" h (1120mm x 1143mm x 889mm) table in upper position: 44.1" w x 45" d x 25" h (1120mm x 1143mm x 635mm)
Interior Construction	304 Stainless Steel
Side Plenum	Adjustable airflow to direct the air to the product
Lighting	Recessed ceiling lights

### Exterior Features

Exterior Dimensions	55.9w" x 69.2" x 84.0" (1420mm x 1758mm x 2134mm)
Doors	(2) doors, one each side, doors open 95°
External Construction	Painted stainless steel construction with stainless steel trim
Windows	(2) 19" x 19" (482mm x 482mm) multi-pane windows (1 in each door) (1) 11" x 17" (280mm x 432mm) multi-pane window in the front wall
Access Ports	(2) 4" round ports (102mm) with phenolic cover in the front wall (1) 6" (152mm) round port with phenolic cover in the front wall
Door Interlocks	Prohibit thermal and vibration system when any door is ajar
Electrical Requirements	380V, 400V, 440V, 480V, 3Φ, 50/60 Hz, 80A
Air Requirements	60 SCFM Max @ 80 PSI (1.70 m3/min at 5.52 Bar)
Sound Level	Nominally 73 dB (A) at 1 meter

### Control

Thermocouples	Additional 6 Auxiliary Thermocouples input channels
Vibration/Temperature Control	PLC based, PC Controller
User Interface	OVS Manager
Operating System	Microsoft Windows
Safety	Eurotherm Temperature