QFusion™300

FUSING BURN-IN AND HASS/HASA – A MULTI-CAPABLE SYSTEM
ESPEC's *patented* Qualmark QFusion* represents the latest in accelerated stress test technology – specifically addressing the reliability testing needs during production. This system is designed to perform HASS/HASA (Highly Accelerated Stress Screen/Highly Accelerated Stress Audit) and/or Burn-In on product to locate failure modes that may have been inadvertantly introduced during manufacturing. QFusion technology provides maximum performance for driving out process-induced faults and detecting inferior component substitutions that could otherwise turn up in the field as costly failures. QFusion's combined environment (thermal and random shock vibration) and 6 table configuration accelerates process verification and for less cost than with traditional equipment.

Part Number: 971-7000

Standard Features

High Rate, High Flow Thermal System

xLF2 Vibration Tables

Vacuum Jacketed Manifold

PLC Control

Desktop PC with Monitor

QF Manager Software

Work Space	6 tables; Work space per table 27"w x 19.2"d x 11.3"h (686 mm x 486 mm x 286 mm)
Outer Dimensions	81.5"w x 38.4"d x 102.3"h (2070 mm x 976 mm x 2598 mm)
Table Size (Quantity-6)	23.6" x 15.6" / table (599 mm x 396 mm)
Actuators	12 Actuators; 2/table Lubricant-free
Table Capacity	6 tables; 100 lb (45 kg)/table
Acceleration[1]	5 – 40 gRMS
Temp Range	+120˚C to -60˚C
Thermal Ramp Rate[2]	60˚C/min
Power Requirements	380V, 400V | 3Φ | 50/60Hz | 100A (Service Rating) 440V, 480V | 3Φ | 50/60Hz | 100A (Service Rating)

**QFusion – Patented design. Since ESPEC continually improves product and service offerings, specifications are subject to change without notice. Please check with ESPEC to ensure you have the latest specification.*

QFusion 300 includes:

- One (1) year warranty
- Operations & Maintenance manual
- System start-up by a Qualmark certified service engineer
- System and software orientation
- One (1) Accelerometer for table control
- One (1) 20' (6.1 m) Accelerometer cable
- Six (6) Auxiliary accelerometer input channels
- Two (2) 72" (1.8 m) High temperature thermocouples - (1) product, (1) air
- Six (6) Auxiliary thermocouple input channels
- Six (6) Solid State User Relays (USR)
- Status light tower
- Control PC with Windows operating system and monitor

Vibration Features	Table Top	Quantity 6; each 23.6" x15.6" (599 mm x 396 mm)
	Table Top Hardware	Per table; 24 threaded 3/8-16 holes on 4" centers; M10-1.5 thread optional
	Actuators	12 pneumatic, impulse-type, lubricant-free actuators (2/table)
	Vibration	Six degree of freedom, random, OmniAxial™ broadband excitation
	Table Product Capacity	100 lb (45 kg)/table
	Vibration Range[1]	5 - 40 gRMS (10Hz to 5000 Hz)
Thermal Features	Heating System	Open-element nichrome type
	Cooling System	Vacuum jacketed liquid nitrogen injection
	Temperature Range	+120°C to -60°C (+248°F to -76°F)
	Thermal Ramp Rate[2]	60°C /minute
Internal Features	Interior Dimension	27"w x 19.2"d x 11.3"h (686 mm x 486 mm x 286 mm) per table
	Interior Construction	Stainless steel
Exterior Features	Exterior Dimensions	81.5"w x 38.4"d x 102.3"h (2070 mm x 976 mm x 2598 mm)
	Doors	2; each door opens 135°
	External Construction	Painted steel construction with stainless steel trim
	Windows	(6) 19" x 9" viewing/window (483 mm x 229 mm), (3) in each door
	Access Ports	12 total on back/2 per table; 4.5" w x 9" h (114 mm x 229 mm)
	Sound	73 dBA at 30 gRMS (at 1 meter)
	Status Light Tower	4 indicator lights; green=run, yellow=standby, white=door warning, red=alarm
Control	Vibration/Temperature	PLC based, PC
	Interface	QF Manager
	Operating System	Microsoft Windows
Utilities	Electrical	380V, 400V, 3Φ , 50/60Hz, 100A | 440V, 480V, 3Φ, 50/60 Hz, 100A (Service rating)
	Air	96 SCFM Max at 100 PSI (2.7 m^3/min at 6.9 bar)

1. *Measured on bare table.*
2. *Measured as the average rate between -40°C and 80°C in open air 3" above table center (in an empty chamber); levels vary by make and model.*

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