

Quality is more than a word

ESPEC

Non-Nitrogen HALT System Portable/Lab Model



ESPEC NORTH AMERICA, INC.

Non-Nitrogen HALT System

Lab-sized HALT without using Liquid Nitrogen

This entry-level HALT system eliminates the need for liquid nitrogen, making basic HALT testing possible for customers and locations where traditional HALT systems just are not feasible. Whether liquid nitrogen is too difficult or costly to attain and maintain, or just not possible, this is your answer. (This system has an option for liquid nitrogen boost, by just using it during rapid thermal ramps, but can let the refrigeration take over for soak steps.)

The repetitive shock table creates a combined environment needed for full HALT testing. This all-in-one system brings together the proven, quality technologies from ESPEC and Qualmark product lines.

Standard Features

- All stainless steel construction
- P-300 touch screen controller
- Web controller for remote monitoring and control
- Left-hinged door with window and LED lighting
- Vibration table with six degree of freedom, repetitive shock, OmniAxial™ broadband. Uses four lubricant-free actuators
- Cascade refrigeration with scroll compressors and electronic expansion valve control
- Dry-air purge for dryness and positive pressure during cycling (nitrogen purge may be substituted)
- The xLF2 table improves the Power Spectral Density (PSD) stability, providing superior consistency and higher gRMS, and makes any adjustments for PSD drift easily manageable.

Included: Product Temperature Control

- Monitors product temperature
- Enables faster product change rates
- Shortens testing time

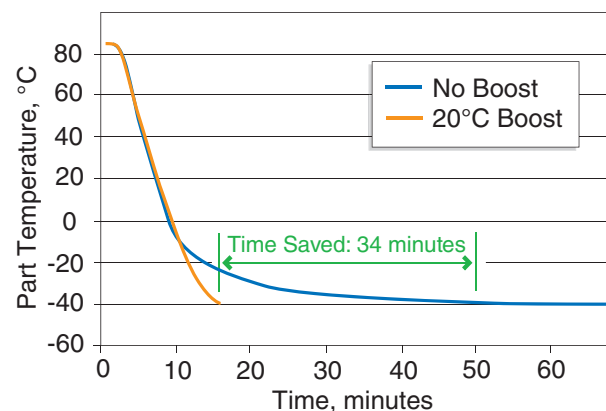
During normal cycling tests, product temperature can lag behind air temperatures up to 20 degrees. The product temperature control is a valuable feature for high performance testing. This feature drives faster change rates by directly monitoring product temperature and automatically boosting air-temperature setpoints until the sample approaches the desired temperature.



The vibration table is ready for your various testing requirements, with 25 threaded mounting holes and Power Spectral Density (PSD) management for uniform exposure.



The repetitive shock actuator is a pneumatic hammer that repeatedly impacts the table to create random vibration stress to your test sample.



Product temperature control generates faster ramp-rates for test samples, as well as significant time savings for soak periods.

Specifications

HALT System specification summary

	EQZ4-3NAL1.5
Interior Volume	4.1 cu. ft. (116 L)
Interior Dimensions (W x D x H)	21" x 21" x 16" (533 x 533 x 406 mm)
Exterior Dimensions (W x D x H)	52.7" x 35.2" x 76.5" (1339 x 894 x 1943 mm)
Power Supply	208/230V 1Ø 60Hz, 60 A
Compressed Air	85 psig (45 SCFM)
Thermal Ramp Rate	9°C/min.
Temperature	-70°C to 180°C
Table Size	18" x 18" table with 50 lb. capacity
Cooling	35,000 BTU/hr to the room
Actuators	4 lubricant-free actuators
Acceleration	5 - 60 gRMS

Ramp rate and gRMS are measured at the table with an empty chamber. Larger and/or faster models available, see EQGNZ27.



* Appearance, specs, and features subject to change; please check with ESPEC for the latest model information.

Options

- Liquid nitrogen injection for boost cooling
- GN₂ Purge (replaces Dry air purge) minimizes moisture in chamber user area
- High Temp range of -70°C to 200°C
- Six additional time signals
- Emergency stop button
- Cable ports in sizes: 2", 4", or 6" (one 4" port standard)
- HALT fixture kits for table fixturing
- PCA fixture kits for board-level
- QDaq with thermal and vibration input channels
- Product thermocouples
- Adhesive-mount accelerometers
- Seismic bracing



PCA fixture kits are cost-effective standard set of parts for mounting circuit board assemblies on ESPEC's repetitive shock vibration tables.

ESPEC P-300 Programmer/Controller:

The P-300 is a user interface that allows faster access to any screen. A standard USB and optional Ethernet interfaces makes programming and data acquisition much easier. Allows upload/download of test profiles. Downloaded data in secure format can be converted to CSV or displayed.

The standard, included Web Controller gives you remote access to the chamber via a web browser. Macros and RestFUL API expands the use even further, integrating with other test equipment.



ESPEC NORTH AMERICA, INC.

www.espec.com • sales@espec.com
4141 Central Parkway, Hudsonville, MI 49426, U.S.A.
Tel: 1-616-896-6100

Colorado Office

10390 E. 48th Ave, Denver, CO 80238, U.S.A.
Tel: +1 303-254-8800

ESPEC ENVIRONMENTAL EQUIPMENT (SHANGHAI) CO., LTD.

China
www.espec.cn
Tel :86-21-51036677

ESPEC EUROPE GmbH

Germany
www.espec.de • info@espec.de
Tel: 49-89-1893-9630

ESPEC ENGINEERING (THAILAND) CO. LTD.

Thailand
Tel: 66-3-810-9353

ESPEC CORP.

www.espec.co.jp/english
3-5-6, Tenjinbashi, Kita-ku, Osaka 530-8550, Japan
Tel: 81-6-6358-4741



DANGER

Not for use with specimens which are explosive or flammable, or which contain such substances. To do so could be hazardous, as this may lead to fire or an explosion.