

Case Study

**Economic HALT & HASS tests for everyone.
The entry-level solution.**

WHY

Flexible solution for vibration testing combined with or without temperature. Limited floor space and utilities, no highly complex chamber needed.

HOW

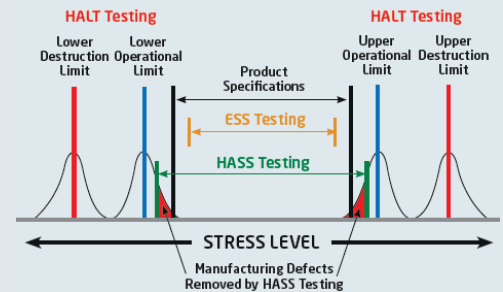
Use of vibration table alone or separating the electrical console and lid and placing the stainless table base inside temperature chamber.

WHAT

Benchtop vibration table with optional TempEvent test space of 480 liters or larger for combined vibration/temperature testing.

WHY - The challenge.

Many customers have small components that can be fixed to a small table for HALT and HASS testing. A chamber's footprint is always a key deciding factor in acquiring new equipment. The goal of this solution is to provide a compact vibration table for vibration testing or combined with a temperature chamber allowing for both vibration and thermal HALT and HASS testing to be performed without the need for expensive LN2 infrastructure. A full HALT & HASS chamber utilizes LN2, and requires a more substantial investment. This offers a simple solution for the customer.



HOW - The idea.

Utilizing random vibration technology combined with an environmental chamber, provides an economical method to perform combined temperature/vibration testing.

Equipped with an all-axis vibration system, the benchtop vibration table utilizes four pneumatically-actuated vibration hammers providing 6 dof, random vibration with x,y,z axis and roll, pitch and yaw rotation. The table includes with two accelerometers, one for control and one vibration monitor with a range of 1 to 60 GRMs without random frequency range.



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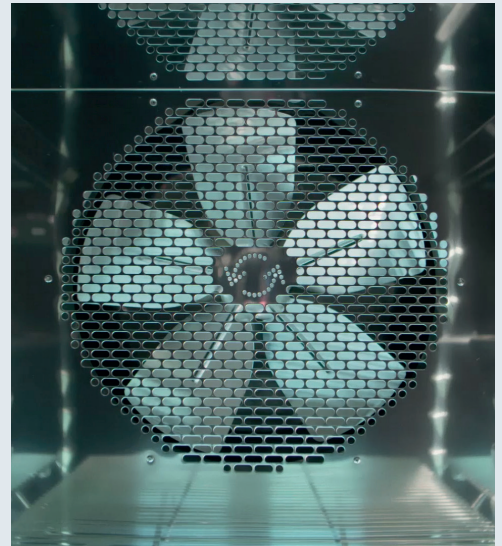
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WHAT - The solution.

Combining vibration with temperature can help Design Engineers find product flaws faster and make the product more robust and reliable before it is released to the market.

Selected Product: Benchtop Vibration Table alone or combined with Temperature chamber 480L or larger.

Dual-purpose design allows for use as benchtop vibration chamber or with temperature chamber for combined temperature & vibration testing. Design includes a removable lid easy-lift off control console to allow the table base to be placed inside a typical 16 cu. ft. (480L) or larger environmental chamber.



Implemented modifications

- 40 cm (1.3 ft) table for labs with limited floor space
- 6 dof vibration table for vibration testing controlled from 1 to 60 GRMS
- Table base placed inside an temperature chamber 480 liters or larger for combined vibration & temperature testing to be used in conjunction with environmental chamber.
- Easy installation of the machine unit - no liquid nitrogen required
- Use for HALT & HASS testing

