

HALT – High Accelerated Lifetime Test – Highest function security over years

The result is linear displacement systems and sensors of the highest quality and reliability which will continue to perform with the same safety and precision for years to come. Their use increases equipment up time, prevents service and repair costs and achieves significantly greater efficiency.

Rapid temperature cycles from $-100\text{ }^{\circ}\text{C}$ to $+200\text{ }^{\circ}\text{C}$ and vibration loads between 10 and 50 g can simulate aging of a sensor. Using this procedure the products are tested for their specifications to determine the reliability, load capacity and life expectancy of the sensor.

The sample is intentionally destroyed so that we can immediately improve the first component to fail. In the HALT system both sensors and transducers can be tested.

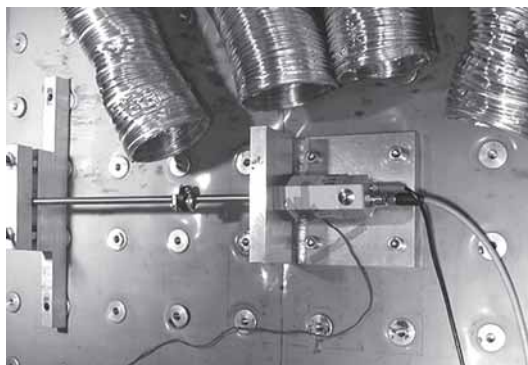
Technical Data

HALT System

Manufacturer	Thermotron Industries USA
Frequency Spectrum	2...10000 Hz
Acceleration	up to 50 g
Excitation	9 pneumatic cylinders, noise spectrum, 3-axis, 3 linear and 3 rotary degrees of freedom
Temperature Range	$-100\text{ }^{\circ}\text{C}$... $+200\text{ }^{\circ}\text{C}$
Temperature Gradient	70 K/min
Electrical Power	96 kW
Procedure	Electric heater, liquid nitrogen for cooling



Nitrogen tank for the cooling system



"Stress on the sample"



Multifunctional climate chamber