## HALT/HASS/MEOST Testing Services

**HALT - H**ighly **A**ccelerated **L**ife **T**esting is used to find product design weaknesses making your product more rugged.

### Why Choose DES for HALT?

- We have vast expertise in HALT/HASS methods.
- We have performed an extensive amount of HALT tests on a variety of products.
- We have experience performing HALT from the circuit board level to the complex system level.
- Our vast experience will help you through the entire HALT process.
- We have many types of existing fixtures that we use at no charge to our customers.
- We are experts at designing and making special custom fixtures.

# DES has Multiple HALT/HASS Chambers that Can Apply:

- Temperatures from -100°C to +200°C (-148°F to +392°F).
- Temperatures can be raised or lowered 60°C (140°F) per minute.
- Vibration input levels up to 60 Grms (measured with 5kHz bandwidth) with six degrees of freedom.
- Additional loads such as electrical, fluid pressure, etc. can be applied to parts inside the chamber simultaneously with temperature and vibration.

**HASS** - **H**ighly **A**ccelerated **S**tress **S**creening is used to find defects and flaws in production to monitor the quality and consistency of your manufacturing processes.

### Why Choose DES for HASS?

- We have experience working on many HASS projects.
- Manufacturers are currently subcontracting their HASS to DES with great success.
- We are capable of handling high volume projects.
- It may be more economical and efficient for DES to perform your HASS since we already have the specialized equipment and facilities in place.
- We can develop and manage the entire HASS process from Safety of Screen into production.
- We can provide total process and data management in production. We will conform to your quality and reporting requirements including supplying pass/fail certificates with every product.
- We are experts at designing and making production HASS fixtures.

### **MEOST Testing**

<u>M</u>ultiple <u>E</u>nvironment <u>O</u>ver <u>S</u>tress <u>T</u>esting (MEOST) is a test program that uses a combined environment of extreme stresses to quickly expose your product's design and manufacturing weaknesses. Typical stresses include temperature, vibration, electrical, and humidity. In MEOST, the durability of your product is tested for each individual stress, and also for the combined interaction of all stresses. By performing MEOST, you will be able to ensure that your product is rugged before it goes to the market.

**Delserro Engineering Solutions** provides engineering and testing support to a variety of industries including Military, Aerospace, Telecommunication, Transportation, Medical, Industrial, and Consumer on products ranging from artificial heart systems to complex military systems. We will customize our services to fit your needs and work closely with your personnel over the entire course of the project. Our goal is to exceed your expectations every step of the way. Every day we provide customers with value-added solutions that translate into competitive advantages and increased profits. Experience the difference DES can bring to your business today!

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