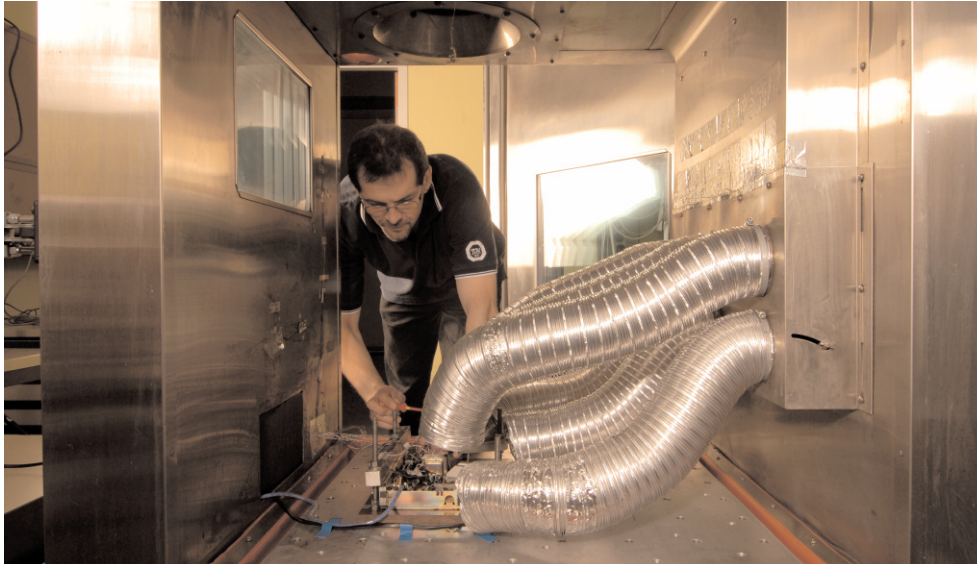




Product Service

Choose certainty.  
Add value.



## Highly Accelerated Life Testing (HALT)

Despite comprehensive testing using traditional techniques, products can exhibit unacceptable reliability, leading to a lack of customer confidence in the product and the brand. Making improvements to a product after receiving customer complaints is a wholly unsatisfactory product development technique which has the risk of product recalls and warranty claims.

### Put a HALT to costly field failures

Highly Accelerated Life Testing is the fastest way to ensure your products stay one step ahead of your competitors'. Ensuring a product is fully mature at the time of release, has long been a desirable objective, this is now possible through the use of HALT.

### What is HALT?

HALT is a process developed to uncover design defects and weaknesses in electronic and mechanical assemblies using a unique triaxial vibration system, combined with rapid high and low temperature changes. It is a technique that addresses reliability issues at an early stage in product development, offering significant advantages over traditional techniques.

### How can HALT benefit you?

By using HALT as your development tool you will:

- Significantly reduce field failures
- Minimise costly warranty claims
- Maintain your brand image
- Increase market share
- Reduce time to market
- Quickly discover design faults - HALT takes 3-5 days as opposed to traditional reliability growth techniques which require months to produce satisfactory results
- Be able to offer extended warranties - supplier confidence in the product allows longer warranties to be offered stimulating greater customer loyalty and confidence

Product failures on modules, subassemblies and finished equipment are stimulated by individual or combined stresses including:

- Extreme temperatures (max. temperature = +200°C, min. temperature = -100°C)
- Rapid rates of temperature changes (thermal ramp rate upto 60°C/min)
- Vibration (repetitive shock vibration) in each ≈ of three axes simultaneously, up to 50 grms
- Product specific stresses

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