Steps for the First Use of an Accelerated Stress Test:

Many companies are intrigued by the thought of gaining the time and information benefits of accelerated testing for their product development or warranty avoidance programs. The challenge is deciding where and how to begin:

Step 1: Identify a "Benchmark" Project

Step 2: Identify the Correct AST Method

Step 3: Conduct the Benchmark Test

Step 4: Analyze and Debrief

Step 5: Broader Application

Details

Step 1: Identify a "Benchmark" Project

The first step is to identify a project that can be used to benchmark the time and information benefits of AST. There are four types Benchmark projects, they are:

a) Current production with known warranty and reliability.
b) Current warranty Issue.
c) Concurrent design validation.
d) Comparison.

Step 2: Identify the Correct AST Method

There are several Accelerated Stress Testing methods available. HALT, FMVT, FSLT and Accelerated Reliability are some of the most common. Each one has strengths and weaknesses. Intertek test experts will assist in identifying the best method for the client's needs.

Step 3: Conduct the Benchmark Test

Conduct the testing at Intertek. Participating in the execution of the testing is highly encouraged. Having the design-responsible engineer and the biggest "skeptic" attend is usually very productive.

Step 4: Analyze and Debrief

Intertek staff will provide the report and help with the analysis of the results relative to the client's situation. A post-test meeting with the client will be conducted to compare the results of the test to the client's information to help identify the strengths and weaknesses of the AST method for the client.

Step 5: Broader Application

Based on the results of the first benchmark test, Intertek is confident there will be clear, obvious points of application for AST methods in the clients development process. Intertek staff will assist in identifying the most useful areas for these applications.