Manufacturing
Dedicated environmental test facility

We provide a **trusted** and innovative total manufacturing capability for highly complex electronic integrated systems, sub-systems, modules and printed electronic circuit assemblies where quality is paramount. Our ethos is to add value through our **people**, scale, capability and engineering know-how, allowing us to provide a vital advantage to our **customers** where it counts.
To meet the environmental testing and screening requirements for the Broad Oak production unit, the Environmental Systems Department maintains and supports a dedicated Environmental Test facility.

The department has 30 thermal liquid nitrogen cooled chambers, 12 of which are combined with vibration systems. Internal dimensions up to 1.2m x 1.2m x 1.2m are available. We also have one small compressor-driven humidity chamber. The thermal performance scope is up to 100°C/minute over a +200°C to -100°C range.

In addition to the dedicated facility, Broad Oak has 27 modern high performance liquid nitrogen cooled chambers in the production line engaged in active test regimes.

There are 20 vibration systems, ranging from the LDS VP35/1.5kw to the Ling Electronics 335/DPA48kw with 16800 lbf output, equipped with a slip table.

The vibration inventory includes 12 combined liquid nitrogen cooled thermal/vibration facilities.

To complement these there are several state of the art vibration control systems coupled with a large selection of accelerometers and charge amplifiers.

We can provide advice on and the application of:

**Thermal**
- Rapid thermal stress screening (including screen development and definition), thermal shock and burn-in.

**Vibration**
- Random vibration, random vibration stress screening (including screen development and definition), sine on random, random on random, sine vibration (fixed frequency and swept), and shock testing (limited to capability of our electro-dynamics vibrators max displacement < 2.0" pk to pk).

**Combined**
- Temperature cycling combined with any of the above vibration capabilities.

For detailed information please contact us with your testing requirements.

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