TRANSPORT CONTAINER THERMAL SURVEY PROCEDURE

Design Approval	D W Rogers D W Rogers (signature) date: 20/03/07
Quality System Approval	B S Patel B Patel (signature) date: 23 March 2007
Date implemented	13 APR 2007
Controlled file number	

1.0 PURPOSE AND SCOPE

The purpose of this procedure is to survey the temperature profile of a transport container with an internal heat load. The results may be used to validate a thermal model or calculations.

2.0 EQUIPMENT

2.1 INSTRUMENTATION

- Thermometer and/or temperature recorder.
- Ambient air thermometer.

2.2 OTHER EQUIPMENT

- Transport container and capsule basket.
- Thermocouples and appropriate adhesive(s), as required.
- Thermocoupled capsules, as required.
- Spacers, as required, to allow exit of thermocouple leads.
- Internal heat load of nominal 50% of maximum licensed capacity in normal form.

3.0 PROCEDURE

3.1 SAFETY

Ensure all operations do not conflict with your local safety rules and procedures.

3.2 CHECKLIST

To ensure all operations are adequately planned it is recommended that a checklist be used. This is normally provided by the Design Authority and should contain all key instructions together with the data logging requirements and space for observations.

3.3 PROCEDURE

- Complete checklist as the test progresses.
- Record all pertinent observations, if necessary taking photographs.
- Site the container in a clear area at least twice as wide and free from continuous drafts.
- Use sufficient thermocouples to measure the axial and radial temperature distribution and the temperature at critical points such as fasteners or known hot spots. On large containers use duplicate, evenly spaced sensors to average key readings.
- Load basket to loading plan.
- Record temperatures when rise is less than 0.25% per hour.
- Ensure completed report is reviewed and countersigned by either a test witness or your supervisor.
- Unless otherwise specified send report to Design Authority.