

Multi-Layer Insulation

RALSpace has several years' heritage in the manufacture of Multi-Layer Insulation, and has an excellent reputation in the manufacture of bespoke insulation for complex geometries for space instruments, satellites and ground based test facilities.

All MLI activities are undertaken within an accredited ISO9001 framework, with approved ISO9001 procedures for each stage of the work.



James Webb Space Telescope MIRI FM



Credit: Urthecast Ltd

Our ability to design MLI for challenging geometries is demonstrated by the MLI we designed and developed for the James Webb Space Telescope Mid-InfraRed Instrument; our unique cryogenic MLI allows the instrument to operate at 6 K.

Supported by strong thermal engineering and mechanical design teams, we can provide a full service from initial conceptual design, to manufacture and integration.

As part of the UK's largest publicly funded research facility, based on the Harwell Oxford Campus in Oxfordshire, we enjoy unique access to world leading engineering expertise and test facilities. This allows us to provide a tailored package of additional engineering support to suit each customer, and to complement our work with a full suite of MLI test facilities.

For further information contact:

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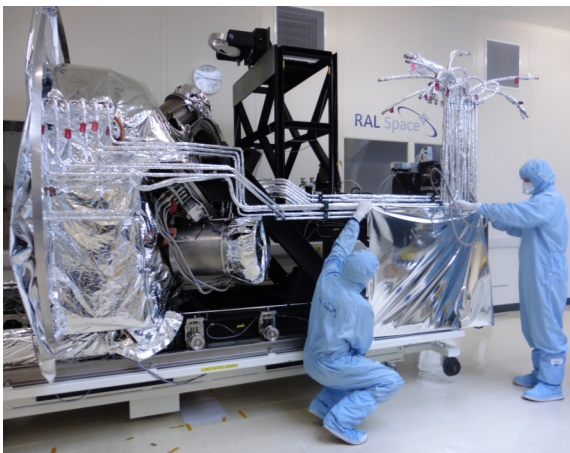
Dedicated Facilities

The new RAL Space Development and Integration Facility will provide the very best services for MLI manufacture.

- A dedicated 85 m² ISO Class 6 temperature and humidity controlled cleanroom for MLI manufacture
- Access to twelve thermal vacuum chambers ranging from 0.5 m to 5 m diameter for vacuum bakeout and thermal testing of MLI blankets.
- Four-stage hands-off CFC free cleaning system for consistent controlled cleaning of space hardware.
- Dedicated Durkopp-Adler 867-190020 single needle flatbed sewing machine .
- Devices & Services instruments to make emissivity and solar reflectivity measurements to verify MLI material thermo-optical properties



RAL Space Development and Integration Facility



Our staff have extensive experience of integrating MLI on spacecraft instruments and ground-based test facilities.

We are able to provide a tailored integration service to suit each customer's requirements, and frequently work closely with the customer's engineering teams to complete the integration onsite within the customer's facilities.

