R-TERIALS

World Class Expertise In Engineering Materials

R-TECH Materials provides UKAS and Nadcap accredited testing services for polymer and composite materials. With the majority of our testing being accredited, you can be assured of the accuracy and integrity of our testing services at all times.









Composite Materials



We carry out testing on a wide range of non-metallic materials including:

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- Polymers
- Fibre Composites (Glass, Carbon, Aramid and Basalt)
- Metal Matrix Composites
- Adhesives
- Core Materials (honeycombs and foam cores)

Capacity & Scope

With machine capacity from 10N to 1500kN, we can carry out testing on everything from fibres the thickness of a human hair to high strength components. We can carry out the following testing to ISO, ASTM and other standards as requested, with static testing between -70°C and +250°C:

- Tensile
- In-Plane Shear
- Compression
- Interlaminar Shear
- V-Notched Shear
- Fatigue
- Fibre Volume Fraction
- Density/Specific Gravity
- Heat deflection
 Temperature
- Lap Shear
- Peel
- Hardness

- Flexure
- Flatwise Tensile
- Edgewise compression
- Environmental
 Exposure
- Compressive Creep
- Liquid immersion

Award winning Research and Development

R-TECH Materials has taken part in a number of collaborative R&D projects to ensure we continue to provide cutting edge testing. Our R&D work has been recognised by JEC, who awarded us a JEC Asia innovation award for their testing work as part of a collaborative R&D project on carbon fibre hydrogen fuel cells tanks.

Material Preparation

Our Laboratory has the facilities and expertise to prepare laminates and test specimens to the tightest tolerances. With an in-house work shop, laminate manufacturing facilities, curing ovens, end tabbing and strain gauging facilities, we are a one stop shop for your composites testing needs.

Microscopy

Alongside our testing facilities, we also boast world class microscopy equipment, with staff highly trained in preparing micro sections. We have a state of the art digital microscope and SEM, and you can be sure of highly quality images of your composite materials.

Global Partners

R-TECH Materials is the laboratory partner for Lloyd's Register EMEA, providing testing services in the field of non-metallic materials and collaborating on common research themes for their global marine business.



