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TECHNICAL FACILITIES AT THE MANCHESTER LABORATORY



The RA[®] Materials Technical department has excellent facilities for analysis, metallurgical examination and corrosion testing. Testing is carried out not only for companies within the Rolled Alloys Group, but also for external organisations requiring routine testing, positive material identification (PMI), failure analysis or materials advice. The experts within the department are frequently hired by external companies as consultants for problems on specific projects, involving a wide range of materials and environments.

Facilities include:

- Macro / microhardness.
- Metallography, including image capture and image analysis; also facilities for in-situ metallography.
- Positive material identification (PMI) by XRF technique. Fully portable.
- Scanning electron microscopy, with EDX analysis.
- Failure analysis
- Standard corrosion testing – e.g. ASTM G48, A262, etc.
- Electrochemical corrosion tests. Facilities to test up to four samples simultaneously at a constant or constantly changing temperature.
- Slow strain rate testing. Environmental chamber rated to 95°C with facilities for electrochemical control.
- Autoclave corrosion testing. Temperatures to 300°C and pressures to 200bar; excludes the use of H₂S, but other gas mixtures are available.
- Quality Assurance services.

