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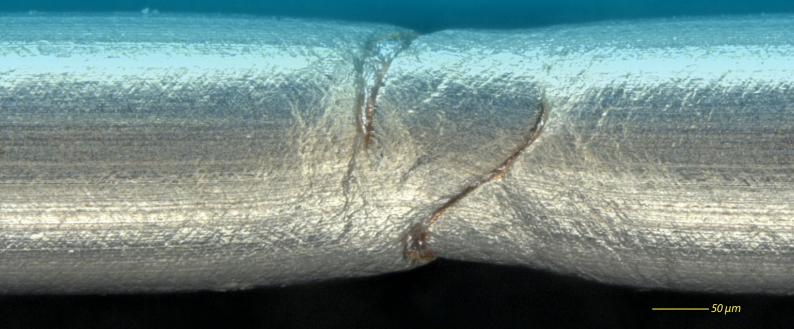
Micro-mechanical test facility



🖂 materials@nlr.nl

"THINKING IN MICRO-SCALE"

Are you interested in the local deformation of your component and you want to know what is happening on a micro-scale in your component, then this facility provides you with answers. The micro-mechanical test facility provides you with information during mechanical testing and the first stages of defect formation and/or cracking.



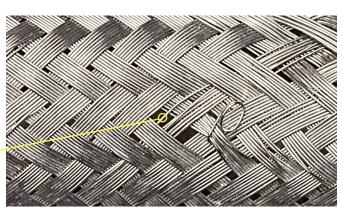


"EMINENCE IN FINDING SMALL DETAILS"

Test data on single fibers or wires

The technical data about single fibers or wires and their behaviour under loading is not always present; therefore we provide you the tool to get this data from a simple test.

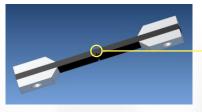


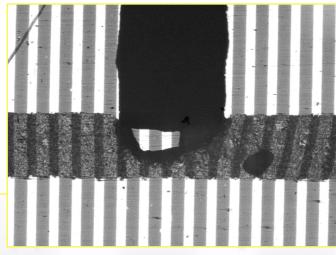


Shielding material of a cable assembly

Determination of the weakest link

Adhesive bonding is a well-known technique for connecting material. However it is also a weak link in a structure. With micro-mechanical tests we can help you to understand the failure mechanism of bonded structures and thereby improve their reliability.





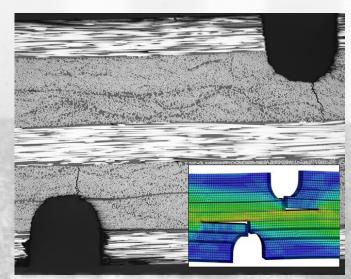
Specimen with a lithographic applied raster for measuring the local deformation

Detection of small defect

Validation of FEM models and engineering data is essential for designing and/or manufacturing of components. Without validation it remains an assumption. With the results of micro-mechanical testing we can guide you to validation.

Features

- Tensile, compression and three/four point bending
- Flexible specimen geometry and sample design
- Flexible in use under binoculair, light microscope and in the Scanning Electron Microscope
- Micro-mechanical specimen design
- Delivers input for local displacement into Aramis



Validation of the FEM model with micro-mechanical testing



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