

AGILENT HANDHELD FTIR ANALYZERS TRUE NON DESTRUCTIVE TESTING OF ADVANCED MATERIALS

The Measure of Confidence



A new means of carrying out non-destructive analysis of engineered materials.

* Interactive PDF - click on images or identified links for more information

[Click on the 4100 ExoScan to learn more...](#)

True non-destructive measurements require analyzer technology that eliminates the need to excise a sample to be sent to a lab for analysis. Now, Agilent provides that technology with its 4100 ExoScan and 4200 FlexScan handheld FTIR spectrometers. As examples, these NDT systems are used for analyzing:

Composites and Polymers [\(Click to access application note\)](#)



Measure incipient heat damage



Measure oxidative damage due to thermal, UV & chemical stresses



First Article Inspection



Measure and monitor the degree of cure



Detect and measure chemical contaminants

Coatings and Films [\(Click to access application note\)](#)



Measure surface contamination from silicone and other oils



Measure thickness and uniformity of paints, primers, adhesives



Ensure that anodized layers are uniform and correctly applied

Visit www.agilent.com/chem/nondestructivetesting



Visit Agilent.com to see the 4100 ExoScan handheld FTIR in action!

- ✓ Learn about surface analysis, composites and metal part analysis, paint, primers and adhesive analysis
- ✓ Experience a full demonstration of the system, PDA and data analysis

[Click here to access or visit www.agilent.com/chem/nondestructivetesting](http://www.agilent.com/chem/nondestructivetesting)



Agilent Technologies

Agilent Handheld FTIR analyzers provide new material analysis capabilities

For years, FTIR spectroscopy has been a lab technique for analyzing materials, but now handheld FTIR's such as the ExoScan and FlexScan systems enables true non-destructive testing where and when needed. Handheld FTIR analyzers enable:

- Non-destructive analysis of large, valuable or non-movable objects
- Targeted analysis: "Zoom-in", picking the area of interest by seeing result on the fly
- Mapping the distribution of specific components by scanning large areas
- Measurement of aging, weathering and other stresses in engineered materials.
- Monitoring performance and lifetime of engineered materials in use
- Non-destructive QA/QC of polymers, composites, elastomers and surface coatings
- Measuring results in "real-time" allowing actionable decisions to be made on-the-spot

Choice of analyzers

Agilent offers two distinct non-destructive FTIR analyzers: the 4100 ExoScan and 4200 FlexScan. These systems provide the same high quality answers. The 4100 ExoScan is the more versatile option; the ExoScan's docking station allows for easy method development paired with the flexibility to measure on-site, non-destructively. The interchangeable sample interfaces allow measurement of many different sample types. The 4200 FlexScan has a slightly smaller form factor, allowing it to be use in tight spaces for dedicated applications. Both are battery operated and controlled by a handheld computer allowing unrestricted use.



4100 ExoScan Docking Station

[Click on the images for more info](#)



4200 FlexScan Handheld FTIR

Easy to use software

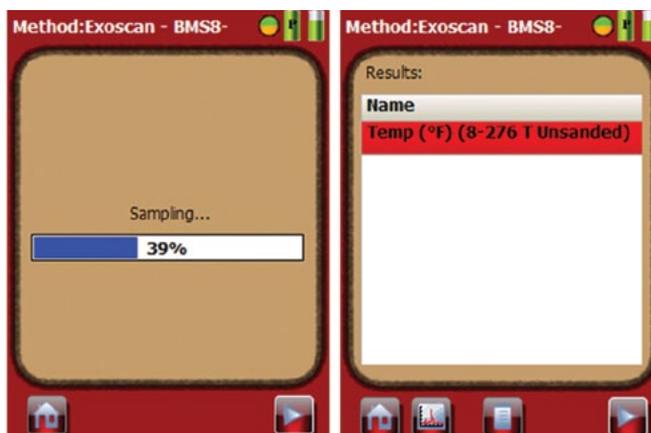


The PDA controlled FTIR analyzers feature easy-to-use software that rapidly and automatically provides answers, enabling users with varying experience levels to obtain reliable information.



Step 1: Ensure contact

Step 2: Name your sample



Step 3: 4100 ExoScan will sample area in contact

Step 4: Results are shown with the problem identified

www.agilent.com/chem/nondestructivetesting

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