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
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.

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.

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Published in USA, May 3, 2013
5991-2371EN