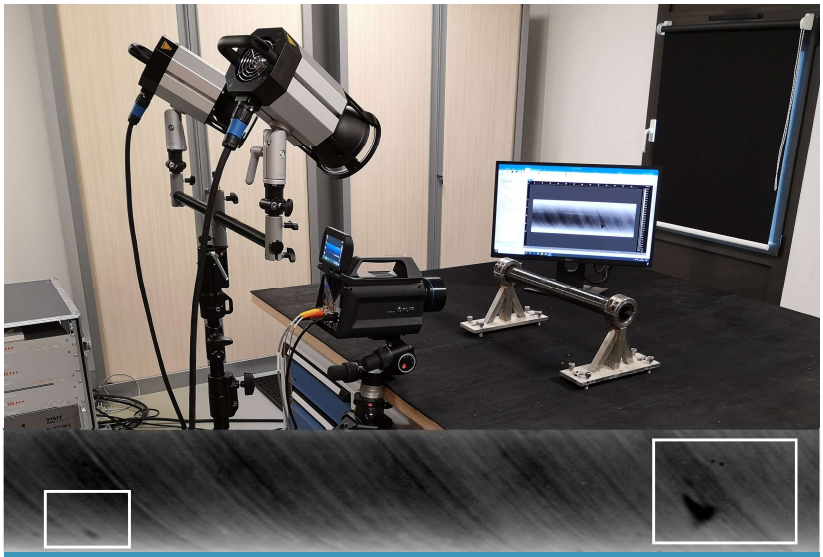
Where energies make tomorrow

Active infrared thermography

Advanced technology for the detection of surface and subsurface defects on composite and polymer materials



Subsurface defects detection on carbon-reinforced composite materials

Defectology

This technology is perfectly adapted to different materials, especially composites, and allows detection of:

- Inclusions, water, bad interplay welding
- Impregnation, lack or excess
- Delamination
- Cracks
- Porosities
- …

Dedicated equipment

A complete system integrating an X6520sc quantum infrared camera, a central acquisition and excitation management system, a lock-in and pulse thermography module, as well as a platform dedicated to thermal testing adapted for various controls:

- Coating debonding
- Honeycomb structures
- Composites, Polymers
- In-line process integration
- …

Our offer / Expertise

A multidisciplinary team composed of experts in composites and thermography

- Defectology and expertise
- Processes and mechanical tests followup
- On-line control (quality, process, manufacturing…)
- Decision support (Anomaly remedial actions, design, materials…)

Technology's Advantages

- Nondestructive testing
- Automatic detection and defects visualization
- Fast control in the thickness (on the first few millimetres)
- Nonintrusive
- Contactless without coupling
- Results digitalized and stored

Measurement by active infrared thermography

Based on the analysis of the heat flow emitted by the samples, this type of measurement saves time and reduces inspection costs on laboratory samples and large industrial parts. The method is fast and compatible with many materials without contact or chemicals for the detection of surface or subsurface defects.

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