

Non-Destructive Evaluation (NDE) by Infrared Thermography

An innovative default detection technology

Principle of an IR Thermography measurement

- ✓ Thermal disturbance of an object by application of a brief and intense energy pulse,
- ✓ Observation of the resulting decreasing disturbance with an IR camera,
- ✓ Processing of obtained images by exclusive algorithms,
- ✓ Default visualization within the observed object.

Three technological platforms



Flash Bench

Active Infrared Thermography

Pulsed & Flash Lamp

Low cost, suited to large parts, default
characterization
(delamination, disbonding, porosity...)

Active Infrared Thermography

Flying Spot Laser

High accuracy, high speed
(anisotropy, delamination, disbonding, porosity...)



Flying Spot Bench



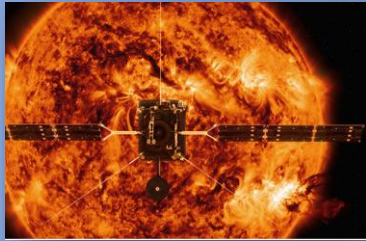
THz Bench

Augmented Infrared Thermography with TTC Module

Terahertz Bench

Enlarged spectral range analysis
(in-depth analysis, disbonding, porosity...)

Founded in 1992 to conduct studies in the space domain, EPSILON is distributed in Europe and Morocco at the convergence of physical, software and systems engineering.



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EPSILON MAIN ISSUE **SIMULATION FOR CONCEPTION / TESTS / EXPLOITATION**

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OUR EXPERTISE

Physics **Modeling, simulation, analysis, optimization, from component to complex systems, throughout the product life cycle**

IT **Software development for test benches driving, analysis, data exploitation and production monitoring**

Systems **Design and manufacturing of scientific set-ups, test benches and Non-Destructive Testing set-ups**



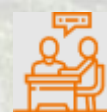
Physics



Digital



Systems



Consulting