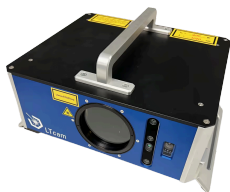


LTCAM

Scanning laser thermography for large-area crack inspection



Inspect large areas quickly and without contact. LTcam uses the flying-spot method, where a laser line scans across the component surface. The infrared camera monitors the heat flow before and after the moving excitation zone. Cracks, delaminations and other defects disturb the lateral heat flow and are visualized through software-based evaluation.

The system is particularly suitable for large or complex-shaped components and enables automated, non-contact inspection with high spatial resolution. Typical applications include crack inspection on turbine blades, welds and difficult-to-access components as well as inspection of metallic and non-metallic materials.

YOUR ADVANTAGES AT A GLANCE

Large-area inspection: Scanning laser excitation enables efficient testing of large component areas

High spatial resolution: Local heat flow variations reveal fine cracks and delaminations

Flexible geometries: Suitable for complex component shapes and difficult-to-access inspection areas

Non-contact inspection: Laser excitation and infrared detection are performed without direct contact with the component

Variable inspection optics: Adjustable laser lines and different focal lengths support adaptation to different inspection tasks

Automated evaluation: DisplayImg LTcam supports data acquisition, stitching, visualization and inspection reporting

TECHNICAL INFORMATION

INSPECTION METHOD:	Scanning laser thermography
EXCITATION:	Moving laser line / flying-spot method
LASER POWER:	Up to 200 W
LASER CLASS:	Class 4
LASER LINE LENGTH:	Adjustable from 30 to 90 mm
WORKING DISTANCE:	150 to 1500 mm
LASER OPTICS:	Customized
BEAM PROFILE:	Homogeneous laser line
DETECTION:	High-resolution infrared sensor
CAMERA OPTICS:	Various focal lengths available
VIS CAMERA:	Wide-angle camera for overview and area selection
SOFTWARE:	DisplayImg LTcam
SOFTWARE FUNCTIONS:	Project management, automated stitching, VIS/IR support and system control

ACCESSORIES



EDECAM

High-speed LWIR infrared camera for active thermography



DISPLAYIMG SOFTWARE

Modular software platform for thermography and automated inspection

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