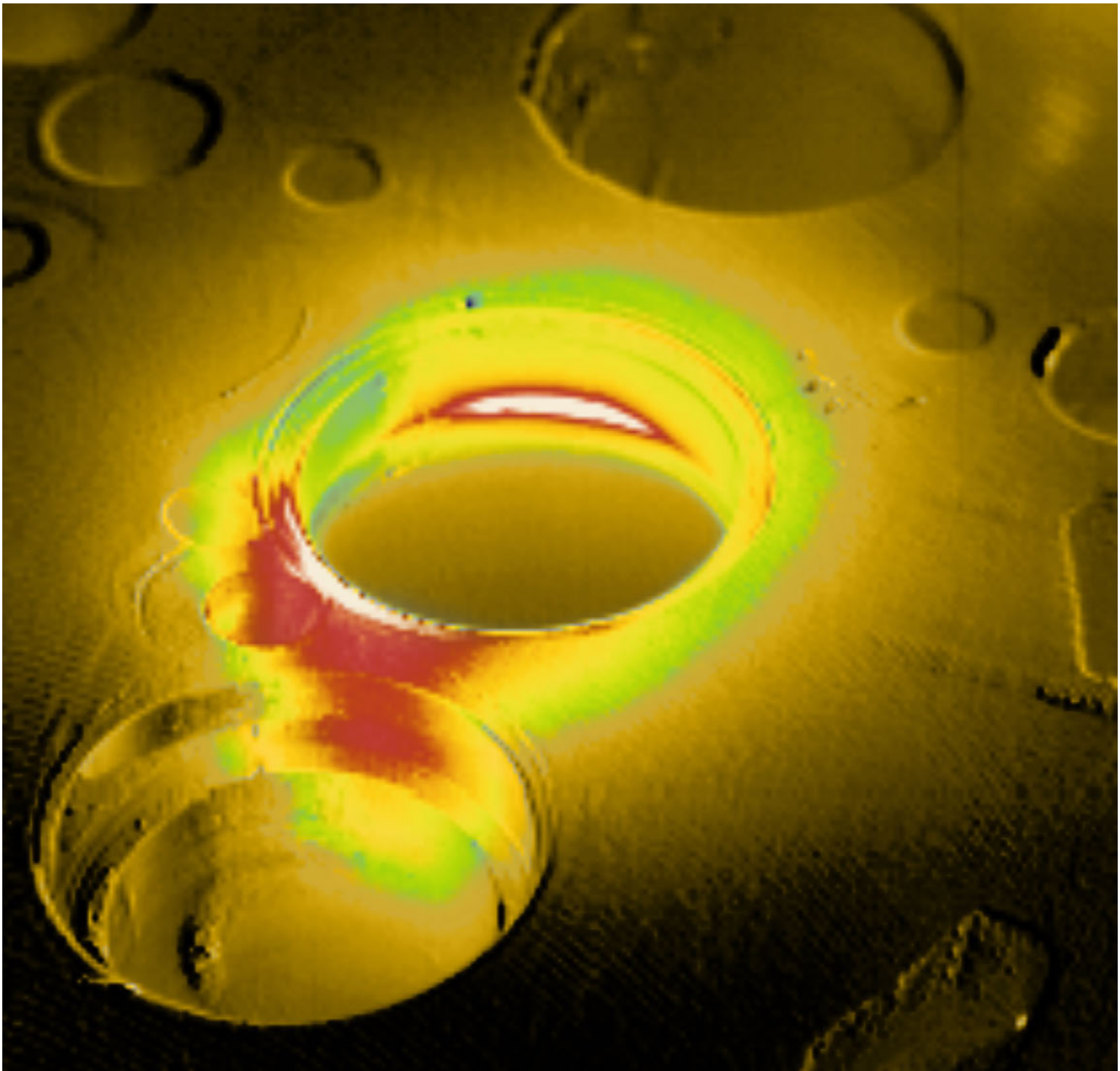
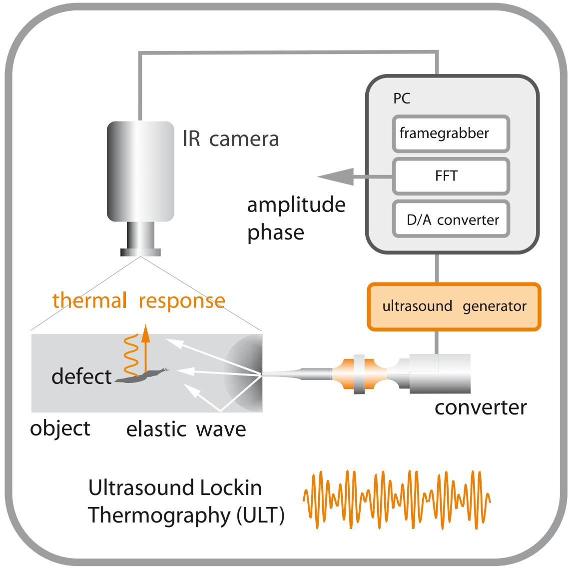


TEST AND MEASURING TECHNOLOGY

PHASE THERMOGRAPHY - NON-DESTRUCTIVE MATERIAL TESTING

Phase Thermography

cost reduction - quality enhancement - reduction of defective material



Principle

Active thermal measurement methods are based on the evaluation of a previously excited heat flow in the tested component and its disturbance by hidden defects. The heat flow is generated with a heat pulse or through sinusoidal modulation. The testing is carried out with a thermography camera followed by a mathematical analysis of the measured sequence to extract the necessary information.

Solution

According to your requirements, we offer you a adapted testing system and integrate this system into your running production process. Because of the low testing time (in seconds) a 100%-test is feasible. We offer complete systems for your production.

Field of Application

Through the combination of latest technology, the Phase Thermography can show you generally all thermal defects in materials.

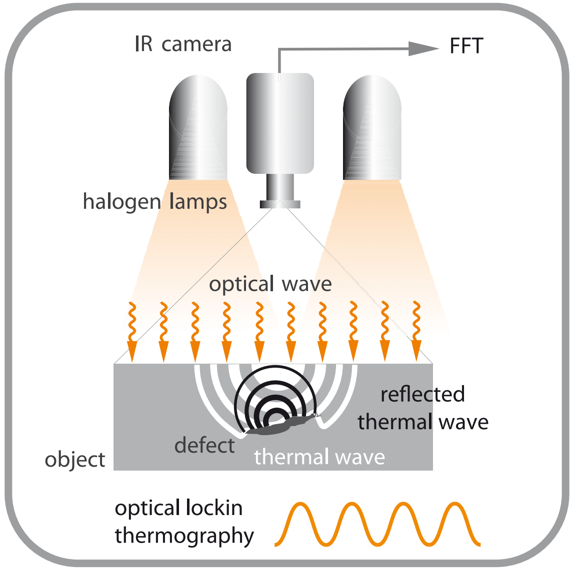
A few examples are:

- Detection of trapped air, pores, sinkhole and other defects
- Detection of cracks (visible and invisible from outside, independent of the orientation) not only in metals
- Detection of corrosion in metals and of slightest material differences

Specific Application

As well in random examination as in 100%-examination the Ultrasound Thermography and other system are already successful in use.

We would like to find out in a personnel conversation, which method of thermography could be used in your company.

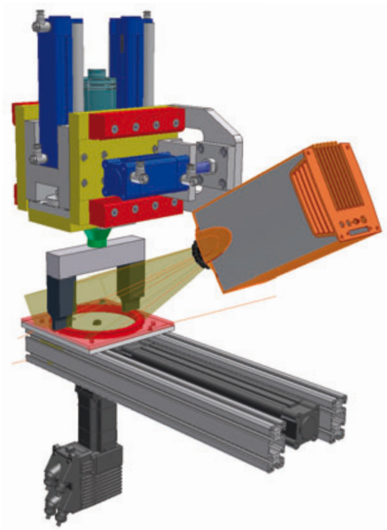


Quality tolerates no compromises

Your demand for highest quality bears no compromises. We offer you a simple and secure method of non-destructive material characterization. So that you still have the feeling of security in the future, to deliver products of highest quality.

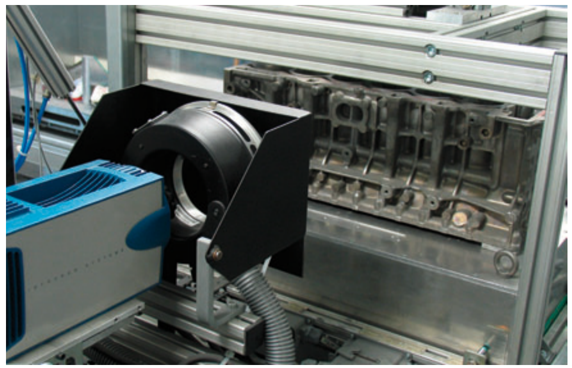
Task

Despite highest quality claims, an enormous cost pressure forces manufacturer, to lower the prices more and more. In order to keep the quality and reliability, testing sequences are required, which ensure a rapid and exact material inspection. A method which meets these requirements to an extremely high degree, is the active phase thermography.



Ultraschall-Lockin-Thermographie bei ZF Friedrichshafen

Characteristics
Non-destructive examination
3-D detection of hidden defects
High Sensitivity
Fully automates examination possible
Low teting time
Robust, imaging, non-contact



Ultraschall-Lockin-Thermographie bei BMW Landshut

SAR offers professional industrial and process automation since 1985. The headquarters is situated in Germany. With branches in the USA, South Africa, England, Switzerland, Slowenia and China the number of employees total to approximately 400.

Products and services in the main business segments including Automation, Environmental Technology, Test & Measuring Technology, IT Services, Surface Application Systems and Plastics Systems together with switchgear assembly, installation, training and after service are offered flexibly worldwide.

Our customers include well-known global operational industrial concerns, medium sized businesses and municipal associates.

Our partner for test systems:

e/de/vis GmbH
enhanced defect visualization

edevis GmbH
Nobelstr. 15
70569 Stuttgart
Germany
www.edevis.de

HEADQUARTERS

SAR Elektronic GmbH
Gobener Weg 31
84130 Dingolfing
Germany
Tel.: +49 8731 704-0
Fax: +49 8731 7740
info@sar.biz

www.sar.biz