

AUTOMATIC INLINE CRACK DETECTION

NON DESTRUCTIVE TESTING BY THERMOGRAPHY

Especially at production based solidification and cooling down processes or after a mechanical forces cracks can be formed within the material. These cracks are often visually not visible or they are nearly reaching the surface. Subsequent executed crack evaluation processes mostly are time and resource consuming.

Quick and Easy Testing

With thermal crack detection cracks can be found comparatively quick and easy. Therefore the sample part will be heated in the way that heat flows through the crack. At the same time a thermal camera watches the surface temperature. After evaluation information about presence of cracks as well as exact crack position are provided.

The crack detection system will be dimensioned according to the cracks sought-after. Without pre knowledge about crack properties longer evaluation time is needed.

Technical Data

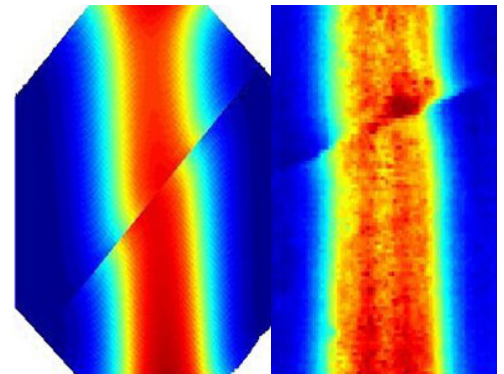
- inspection time: from 100ms
- inspection speed: up to 1m/s
- individual adaption for various materials and inspection quality possible

Your Benefits

- non destructive, non contact
- spatially resolved
- fully automatic and documented

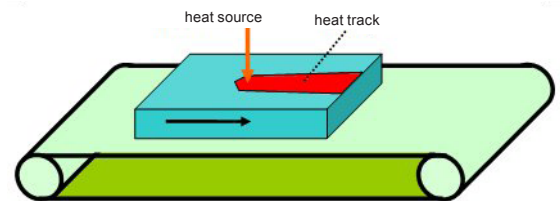
Our Solutions For You

- inline inspection solutions integrated within production line
- offline inspection systems
- measurements at own test laboratory
- technical specification preparation
- feasibility studies
- consulting



Left: simulation of surface temperature for sample with crack

Right: typical thermal image of automated inspection of sample with crack



Typical test setup for crack detection

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