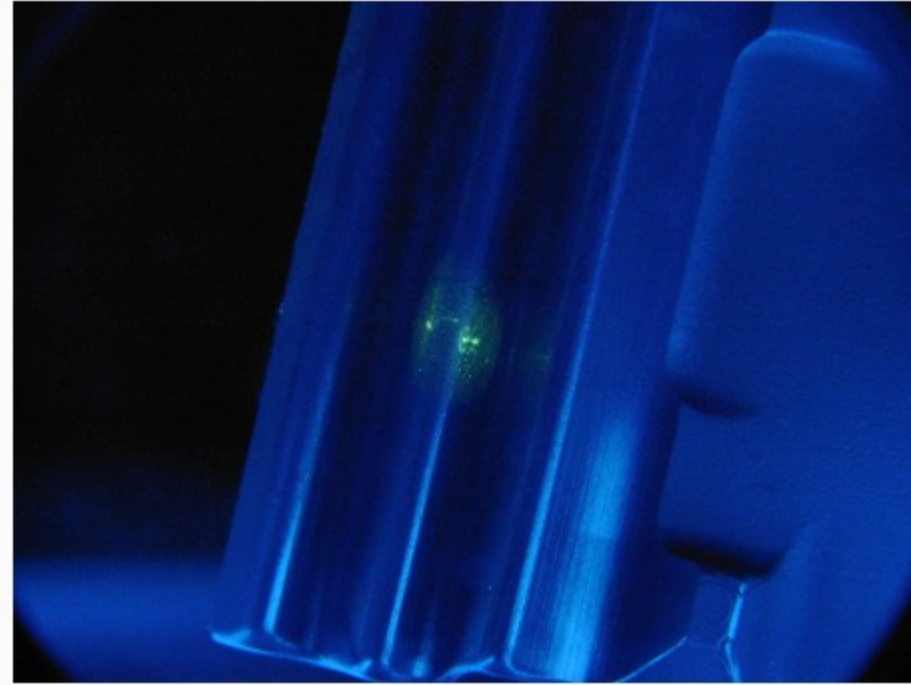


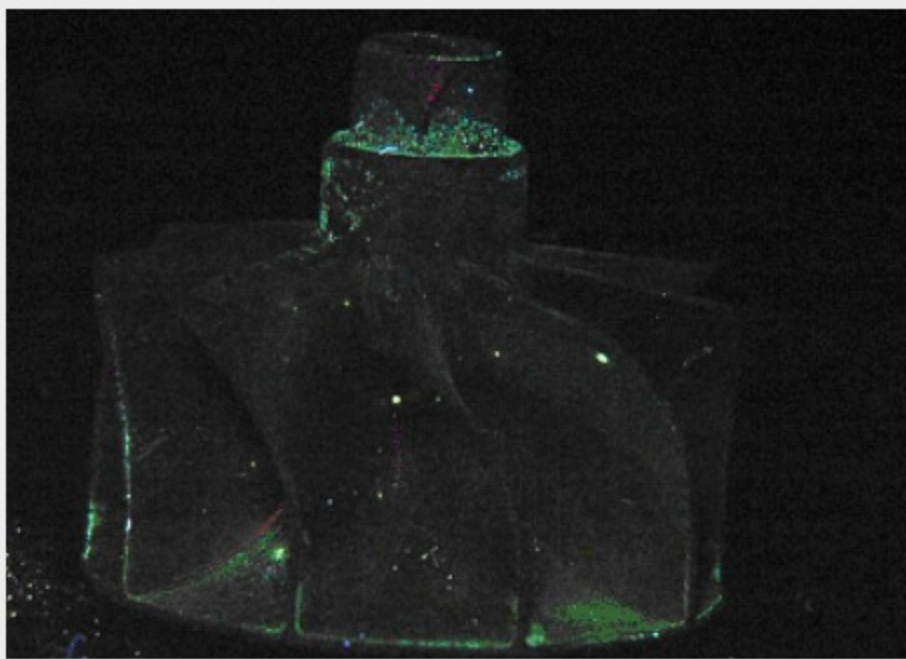
## DYE PENETRANT INSPECTION

In the case of non-magnetic materials, the colour penetration test (according to EN ISO 3059) is used as a display amplifier for crack detection. Typical fields of application are highly stressed turbine, engine or brake components and other safety-relevant components such as the wheel suspension and the chassis. These test procedures are summarized under the standard (ASTM E 1417/ ISO 3452-2).



*Pores at the foot of an engine turbine blade, captured with UV LED flash*

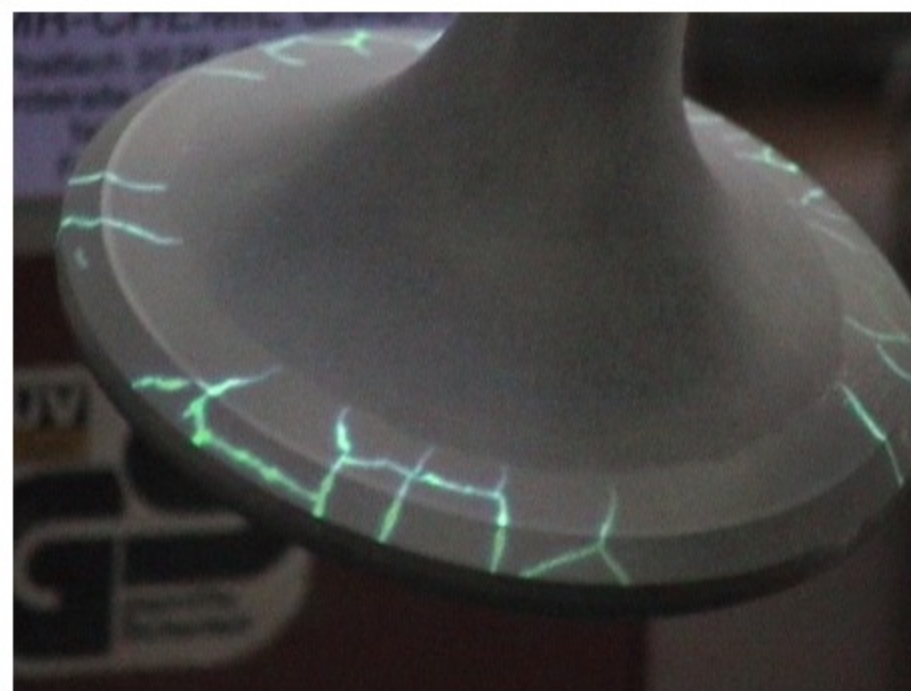
## AUTOMATIC INSPECTION SOFTWARE



*Isolated pores on a turbocharger*

The software of the image processing system realized on a PC platform recognizes and measures a wide variety of linear displays, pores and shrinkage cavities that stand out from their surroundings through their shape and intensity.

The intensity as well as the geometric form of the displays are evaluated. The software recognizes such shapes and can distinguish them from objects of other shapes (artefacts) even at lower intensity. Each display is classified according to length, width, intensity, direction, location and contour, measured and archived with an image in a database.



*Cracks in a valve disc*

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