



Non-destructive materials testing Computed Radiography

The difference to conventional radiographic inspection is that instead of the traditional X-ray film, an image plate is exposed and a digital image is generated by scanning. Due to significantly reduced exposure times, compared to conventional technology, new application possibilities arise, e.g. shadow and wall thickness measurement on pipelines in insulated condition during operation. Digital technology reduces film costs, or the cost of imaging plates, the number of exposures is reduced due to the high dynamic range of imaging plates and the environment is protected by the development chemicals no longer required. Computer Radiography is inexpensive, allows immediate evaluation and minimizes production losses due to waiting times.

Services

- Weld seam tests according to EN ISO 17636-2
- Pipe tests according to ISO 10893-7
- Corrosion tests according to EN16407-1+2
- · Shadow photographs and wall thickness measurements
- Mobile digital radiography and evaluation on site
- On-site reporting on request
- Delivery of the recordings on data carrier or according to customer request

Weld seam tests

The values obtained with the imaging plate system meet the requirements of the test standard EN ISO 17636-2. A great advantage of the digital systems is the high dynamic (high number of grey values) of the digital detectors. This means that a larger wall thickness range can be imaged and incorrect exposures occur hardly or no longer at all. Furthermore, the images can be viewed on the computer, digitally enlarged and displays or wall thicknesses can be dimensioned directly in the image



Corrosion and wall thickness measurements

Computed radiography allows the inspection of pipes for corrosion / erosion up to DN200 even in insulated condition. By means of the grey value difference measurable in the digital image, the remaining wall thickness (measuring accuracy +/- 0.3 mm) can be determined in addition to the external visible wall thickness.



Computed radiography in the field of district heating / MSWI

The laying of district heating pipes is subject to great time pressure. The welds of the pipes are inspected randomly or up to 100% by Xray. Due to the possibility

of computed radiography, which delivers results in real time, this technology makes a major contribution to minimising waiting times on construction sites. In addition, Qualitech also carries out dye penetrant or magnetic particle crack testing on site.



Shadow photograph with wall thickness measurement on insulated cable

Reduce inspection costs

X-ray storage films, as used in computed radiography, have a higher sensitivity to radiation than conventional film. This property shortens the exposure time considerably and allows a higher throughput. There are no high reject costs due to incorrectly exposed film material. The convincing advantages of digital technology allow an efficient workflow of the inspection work and lead to a significant cost reduction.

Flexible operating times

Qualitech AG offers a unique service and also agrees inspection times with its customers 24 hours a day, 365 days a year. The short distances from our four locations ensure the highest possible flexibility and cost optimization.

Everything from one source

In addition to computer radiography, Qualitech AG offers additional services that are unique in this breadth. Our offer includes water analysis, welding courses and tests, isometry courses, computer tomography, damage and material analysis, welding engineering and the calibration of measuring equipment.

Qualitech AG Accredited test centre

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