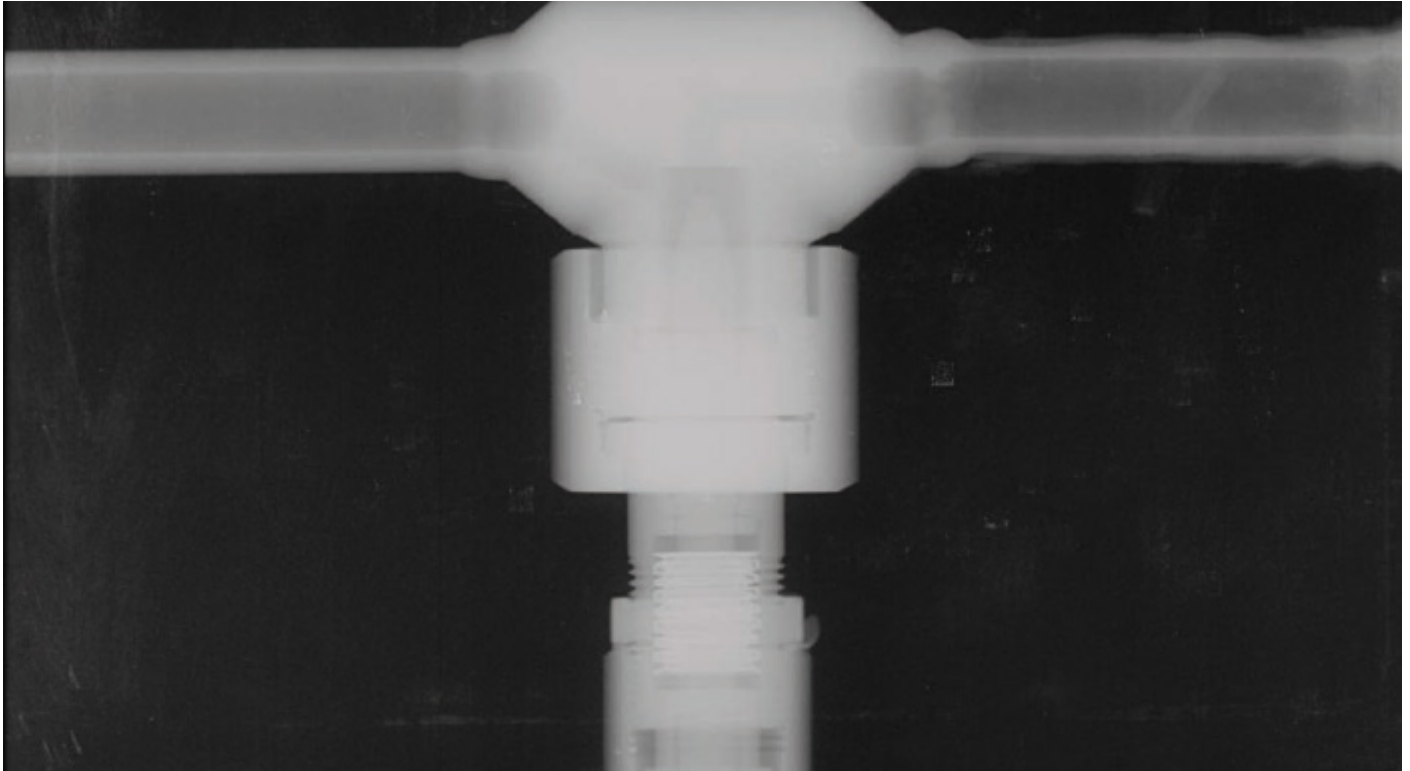


Computed Radiography

Experience From the Past Combined with Technology of the Future



Radiography, the technique by which RTD earned its share of the NDT market in the early days, is still one of the most reliable and most used NDT techniques. Combined with the latest digital technology, Computed Radiography is a powerful examination method.

Computed Radiography

This method uses phosphor imaging plates (IP's) instead of conventional film. These plates are exposed and then scanned by means of a laser to form a digital image on a computer screen. This means results are directly available after scanning on-site, without using chemicals or a darkroom.

Phosphor imaging plate

The IP is in fact only a medium to store the image until it is scanned. This process requires a significant lower radiation dose than conventional film but can reveal a lot more information because of the dynamic range of the digital images and the image enhancement possibilities.

Advantages

- Direct results after scanning on-site
- Large dynamic range
- Dose reduction (up to 90% in some cases)
- No use of chemicals or dark-rooms
- Use of image processing tools
- Digital archiving, reporting and transporting
- A lot less re-shoots
- Digital images

Applications

The method is ideal for the following applications:

- Wall thickness measurements
- Corrosions assessments (including CUI and FAC)
- Check on blockages
- Insulated pipes and objects
- Code Compliant Radiography Method of Inspection
- Inspection of Girth Welds

Computerised Interpretation

Since the image is transformed into a digital format interpretation can be done by means of a computer. By using image processing tools the images can be enhanced which leads to a better and easier interpretation.

