Computed Radiography CR

Computed radiography (CR) is a filmless process that is used to create digital, 2-dimensional radiographs. CR provides the ability to view radiographic images from a computer using the same conventional radiography exposure equipment. It eliminates the need for chemical processing, uses lower source strength, enables smaller boundaries and yields quicker results. Images have greater definition and higher resolution, allowing for greater detail in evaluation. Data storage and retrieval could not be simpler and information can be shared via the internet.

THE Applus+ SOLUTION

Applus+ leads the field in advanced technology with its own RandD laboratories, worldwide resources and geographical coverage. We work closely with industry leaders and subject experts. This technology complies with the requirements of various industry standards (ASME, API, DNV, EN-ISO). Computed radiography can minimise downtime and increase production at the same time as providing higher sensitivity and better overall definition to identify and evaluate indications.

Target customers

Computed Radiography (CR) has a number of applications within the industry. CR can be used to verify weld quality or to profile in-service piping to determine the presence of corrosion under insulation (CUI), flow-accelerated corrosion (FAC) or remaining wall thicknesses. CR has been employed in several industries and for a variety of inspection types, including:

- Petrochemical
- Nuclear
Computed radiography provides significant advantages over conventional radiography. These include remote-viewing capabilities and advanced software capabilities such as measuring tools, zoom, window levelling, etc.

Key customer benefits

There are several advantages to using computed radiography:

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