Aplus[⊕]

Digital Radiography / Direct Radiography (DR)

Digital radiography or direct radiography (DR) is the next evolution in inspection of inservice systems with minimal downtime or preparation. DR has the ability to inspect pipelines during operation without having to remove insulation and with no temperature restrictions. This is a filmless radiographic technique that requires no processing, is wireless and yields results instantaneously. 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.

Direct radiography can minimise downtime, increase workflow, yield quantitative results and further a company's mechanical-integrity programme.

Target customers

Direct Radiography (DR) has a number of applications within the industry. DR can be used to profile in-service piping to determine the presence of corrosion under insulation (CUI), flow-accelerated corrosion (FAC) or remaining wall thicknesses.

DR has been employed in several industries and for a variety of inspection types, such as:

- Petrochemical
- Nuclear
- Fossil



- Chemical
- Military
- Aerospace
- Foundries
- New construction
- Post-construction
- Corrosion monitoring

Direct 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 direct 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