



Digital Radiography

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Introduction

Digital Radiography or DR is an advancement of traditional Radiography. This technique utilizes DDAs (Digital Detector Arrays) instead of Film or CR (Computed Radiography) in order to create an instant Image. The Radiation reaches the DDA, which has passed through the object, converted by a Scintillator into visible light and then translated into a digital Image. The physics (Angles, Penetration, technique etc) remain similar and only mild changes are required to make the transition to Digital Radiography.



How it works

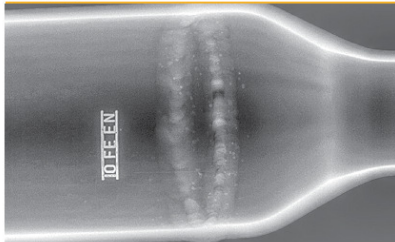
The Digital Radiography involves using a source of X-ray or gamma rays. The source sends the rays through the test piece. A DDA panel (detector) that is sensitive to these rays is placed behind the object. The test piece absorbs part of the radiation. Areas with higher density or thickness absorb more of the rays resulting in an image on the DDA. Detector is sending the digital image to Tablet or PC, and operator can see the resulted mage on screen immediately.

Digital RT is good tool for Corrosion monitoring (even trough insulated, covered pipelines), for weld inspection (looking for Cracks, Gas inclusions, Porosity, lack of penetration, etc.), and for Wall thinning (profiling).

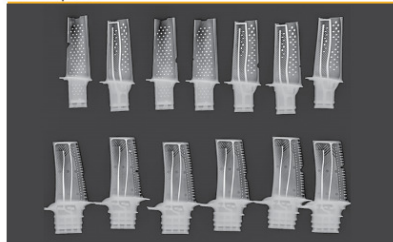


Applications

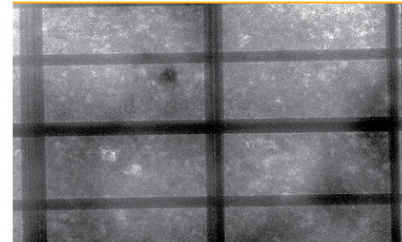
Oil & Gas



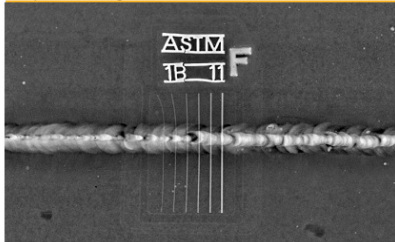
Aerospace



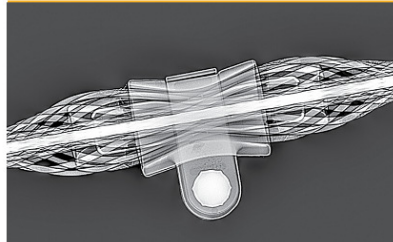
Concrete



Ship Building



Power Line



Munition

