



# DR 1400HD pipe weld CR/PSP/DIP NDT digital radiography system

## Introduction

DR1400-HD system provides an alternative NDT pipe weld radiographic inspection technology that replaces the conventional film with digital CR technology. The DR1400-HD35CR has been developed for narrow bore nuclear and Oil & gas pipelines Pipework, based upon DWSI, DWDI & SWSI inspection methods.

Pipe specifications that can be inspected are as follows:

- From 12.5 mm (0.5") OD to 154 mm (6") OD pipe diameters
- Material Wall thickness from 6 mm (0.24") to 105 mm (4")
- Material type can be
  - Plastics, GRP, aluminum, titanium, steel and
  - Stainless steel type
- Different weld types can be inspected inclusive of inner duplex steel clad pipes



The technology lends itself to the various types of applications:

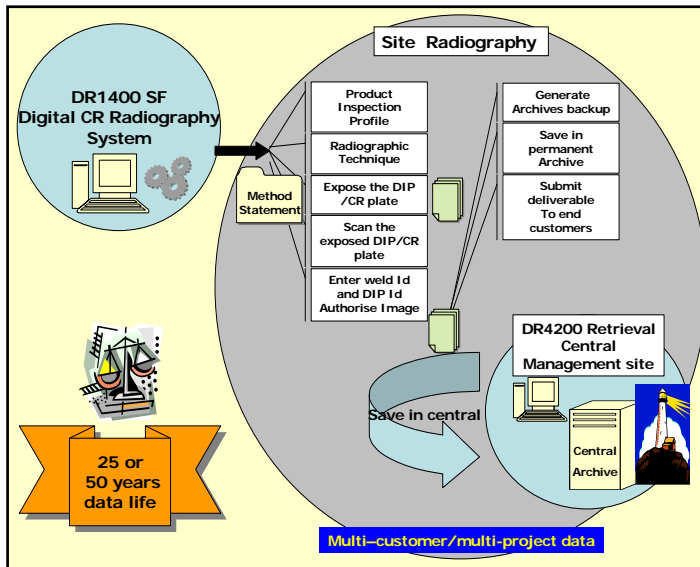
- Offshore lay barge type applications suitable for pipe lay.
- Onshore land pipelines – Pipeline and Pipe work
- Cross Country Pipeline
- Sub sea pipeline and pipe work as well.
- Pressure vessels applications
- Nuclear



The NDT radiography inspection technology provides a radiographic quality that replaces conventional methods with the major difference that in this case the deliverables are electronic digital radiography images and the reported results.

The main commercial benefits are reduced costs of ownership within the entire operation, which can save up to 30 to 35% of existing resources.

## Radiographic Process

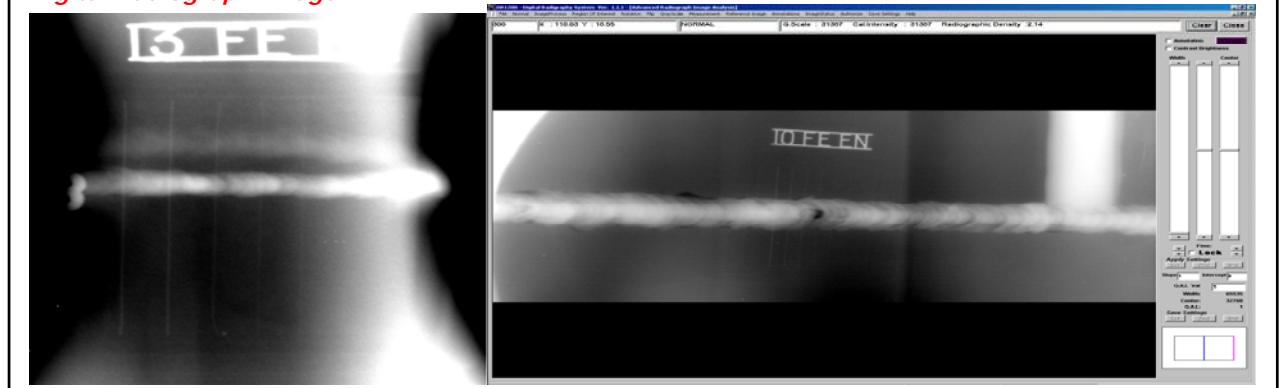


- Cost efficient management of electronic data
- Better practice and utilization of human resources
- Rapide & Active information retrieval

## Portable version of DR1400 Digital Radiographic system Facility



## Digital Radiograph Image



Manufacturer of the World's Most Advanced Imaging, Digital Radiography, Enterprise Computer and Archive Systems

## Technical Specifications

### Radiography Applications for

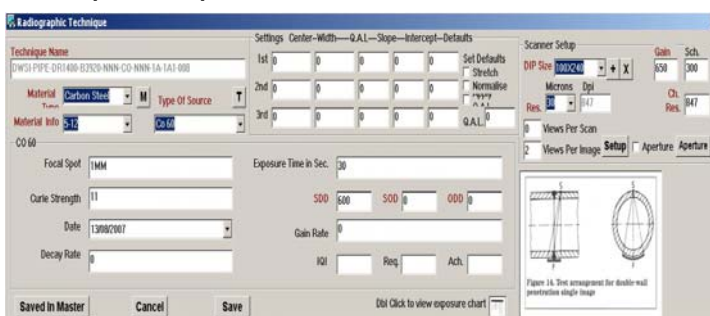
- DWSI/SWSI/DWDI methods
- Thin/medium/thick material wall pipe weld radiography
- Inspect austenitic steel, mild steel, aluminium, alloys, magnesium, non-metallic carbon fibres etc
- Works with Iridium, Se75, Ytb169, Co60, X-ray, pulse-CP, Linace, **neutron radiography**



### International Standards complied

- ASME V Article II on digitised radiograph films
- ASME V Article VIII on phosphor imaging retrieval of digital radiographs
- NUREG 1452 radiograph digitisation retrieval
- Nuclear NAS 160/AES 6001/BS2633, CEN 1435
- CEN 472/473 radiographic training system requirements
- API1104 ASNT and ASTM 7002, 2033, 7020 technical working and practice inspection data retrieval

### Technique Set-up



### DR1400-CR Digital Radiography System

#### Radiograph Acquire Laptop

- Display type: 17." [approx.]
- Display resolution: 1920 (V) x 1200 (H) pixels
- Pixel pitch: 260 micron (0.260 mm)
- Feature: colour /high bright
- BluRay Drive

#### DR Scanning unit- Options

**Laser spot size: 12.5µm OR 30µm**

- Spatial resolution: from 12.5 20, 30, 40, 50, 60, 70, 100 & 150 microns
- Handles various sizes of plates from
- Width 0.5" to 14"; Length up-to 1m
- Integrated erasure Unit

#### CIT Digital radiographic application Software

A dedicated digital computed radiography software is provided that enables acquisition, storage, and analysis to be carried out.. The information is saved as permanent archiving in the customised product profile, radiographic technique and authorisation process.

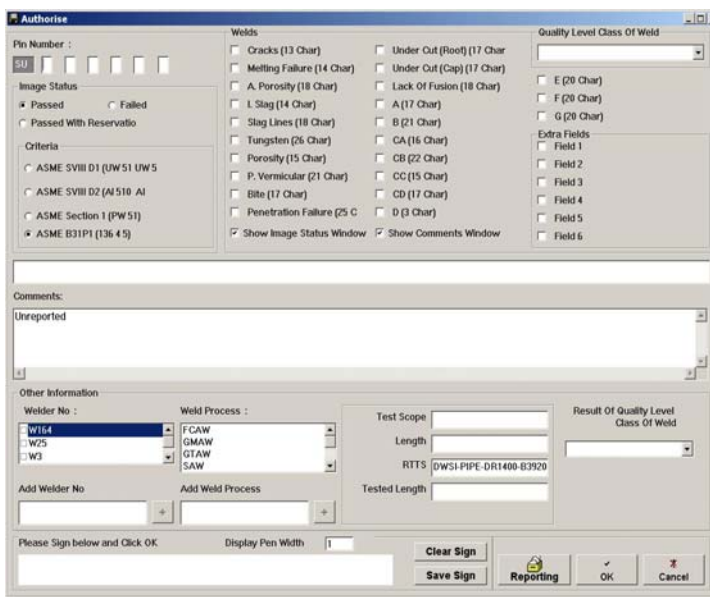
#### Options of software

- **Basic software**
- **Advanced radiograph Image Analysis**

#### Facility Parameter

- Mains supply
- 110/240 Volts 50/60Hz mains
- 1100 VA
- Line stabilization recommended UPS with battery time of at least 60 minutes
- Office environment with unimpaired light and air conditioner

### Authorisation



### System compatibility

- DR3000 Radiograph film digitisation system
- DR1400, DR1200, DR1000 digital radiography
- Dr4200 Central Data Management System