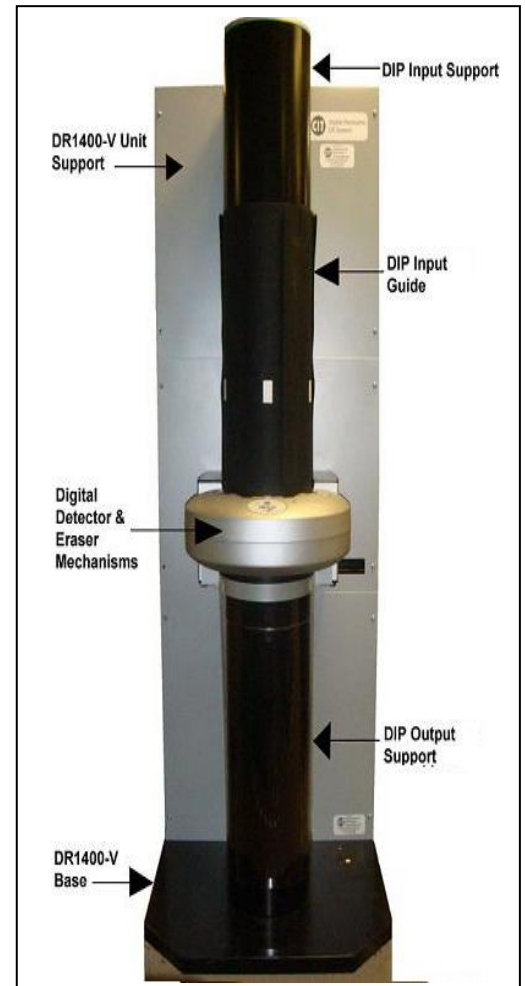


DR1400 V Digital Radiography Inspection System

CIT Part Code: CIT/Dr1400CR-V

The DR1400 system has been designed to replace conventional film radiography with digital radiography technology. Panoramic and directional NDT radiography can be conducted. This enables the radiography operator to take single image in single shot instead of taking multiple shots for getting weld image of whole circumference of pipe weld. The high-resolution radiographic images are captured and displayed on high-resolution, high brightness monochrome monitors.

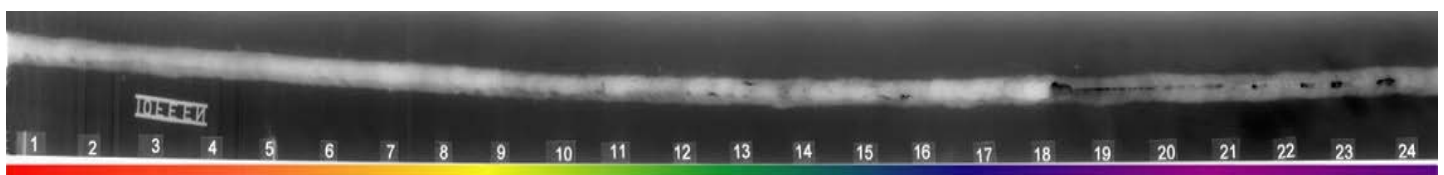


System Performance

- Supported radiographic resolution
 - 20, 40, 60, 80 and 100 microns. Resolution is scalable. Other resolutions can be customized
- 13th line pair of EN-462-5/ASTM 2002-98 duplex IQI
- Results within 5 minutes; dependent upon length of DIP
- Handles various sizes of DIPs from 0.5" to 14" up to 1 meters
- Radiation Isotope: X-rays, Se-75, Co 60 and Yb-169

Commercial benefits

- Reduces cost of inspection



Technical Specifications

1. Meets the following standards

- 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
- Flexible radiation shielding (Contact CIT)
- Portable battery powered CP120kv /CP 160kv X-ray

2. Digital Radiography Scanner

- Laser Spot Size: 12.5m or 30m
- Spatial Resolution: from 20, 30, 40, 50, 60, 70, 100 & 150 microns
- Handles various sizes of plates from Width 0.5" to 14"
- Handles long imaging plates for length up-to 1m
- Compatible for multiple feed
- Input and output guides
- Integrated erasure unit

3. Radiograph Computer Processor

- Industrial Standard Laptop, industrial ruggedised portable computer or High performance Work station with 4GB DDR2, 2T HD, BluRay Drive

4. CIT Digital Radiographic Application Software

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

5. Radiograph Display Options

View in monitors, High Brightness, Mono corm, with calibration software, Gradation display – 12-bit, contrast ration 600:1

- 3MP - 20.8" - 2048 x 1536 resolution
- 5MP - 21.3" - 2560 x 2048 resolution

6. Software Optional Modules:

- Corrosion & Condition Management
- Flaw Depth Measurement
- End Customer/user software from different workstation
 - CIT/DR Basic Viewer Software
 - CIT/DR Basic Viewer/Analysis Software
 - CIT/DR Advance Viewer/Analysis Software

7. aRTist or Moderato: To simulate the radiographic process and generate the radiographic technique or use for the radiographic training

The image displays three screenshots of the software interface:

- Image Acquisition:** Shows a radiograph of a 'MILD STEEL DEMO 8MM PLATE' with a 'TOFEEN' logo. The interface includes a toolbar and a scale at the bottom.
- Technique Setup:** A configuration window for 'Radiographic Technique' with fields for Material (Carbon Steel), X-Ray Type (MINIFOCUS), Specific (CONSTANT POTENTIAL), and various exposure parameters like kV, mA, and Exposure Time.
- Image Authorization:** A 'Welds' authorization window with a grid of checkboxes for various defect types (e.g., Cracks, Under Cut, Melting Failure) and a 'Quality Level Class Of Weld' dropdown menu.