

Durr NDT HD-CR 35 NDT / CR 35 NDT Computed Radiography Systems

Versatile and Dependable Systems for Every CR Application

There are 2 models available:

- HD-CR 35 NDT
- CR 35 NDT



HD-CR 35 NDT



CR 35 NDT

Whether for a portable application in the field or as part of the production process, with the HD-CR 35 NDT you have peace of mind, now and in the future. This is in part due to its unique TreFoc Technology, allowing the widest range of applications and the highest resolution of all CR scanners. The CR 35 NDT without TreFoc Technology is ideal for erosion and corrosion inspections and any general NDT inspections you might have with high resolution.

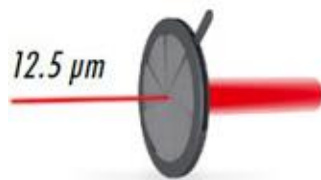
HD-CR 35 NDT

TreFoc Technology

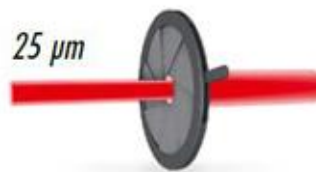
TreFoc Technology is laser focusing technology developed by Durr NDT, that adjusts the laser beam size in-order-to provide the optimum image result with the highest signal-to-noise-ratio for the specific task at hand.

Inside the laser tube, an iris diaphragm adjusts the laser beam diameter. Since the perfect laser beam diameter can be selected for each object and image type, optimum results for any particular application can be easily achieved.

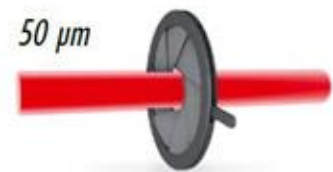
Regardless of the application – high resolution image or low exposure corrosion measurement – TreFoc technology gives the perfect image results with the best SNR every time. The principle of changing the laser beam diameter takes into consideration the maximum resolution of the Imaging Plates available, achieving the best image with the lowest noise.



*Weld inspection, aerospace,
composite materials*



*Weld inspection, metal casting,
isotope applications*



*Corrosion measurements, overview
radiographs, isotope applications*



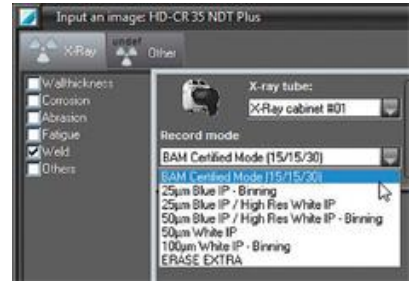
Standard Operation Workflow



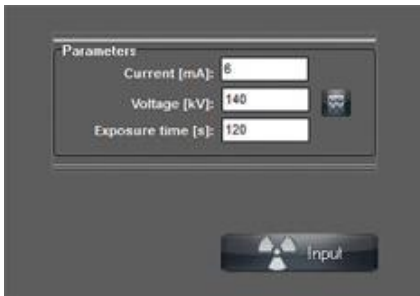
1. Position imaging plate(s) and expose



2. Select an existing project or create a new one



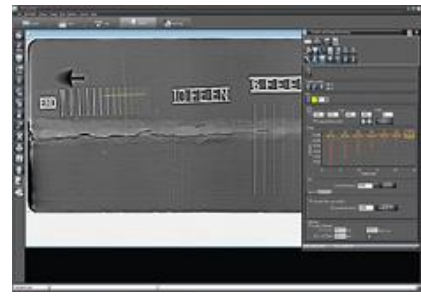
3. Select the desired application and scan mode



4. Enter X-ray parameters (recommended) and start the scan



5. Feed in the imaging plate(s) – intake then starts automatically



6. Examine the image(s) or forward them for examination

Mobile Operation Workflow



Remote Operation without PC

Scan Process

After the object type has been selected, the scanner sets all scan parameters perfectly so that an optimal image result can always be expected.



Add Information

If required, various predefined fields may be filled with additional information like kV, mA and exposure time. In order to distinguish different sites or tasks, those may be added too. If no additional information is required, skip this step.



Preview and Release

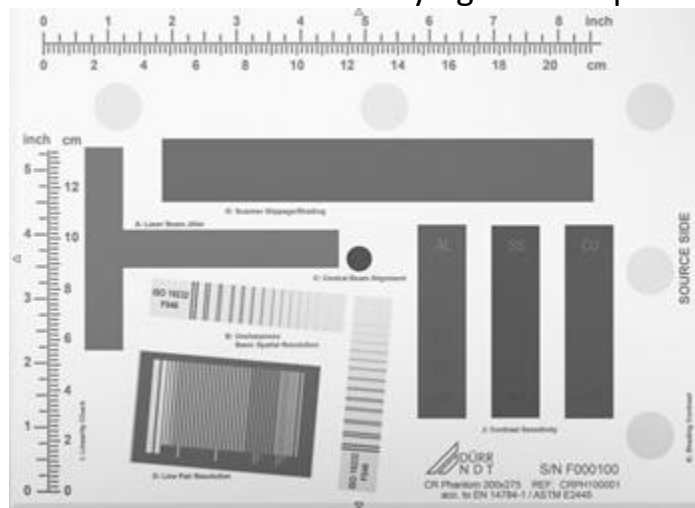
After the scan has been taken, the quality of the image can be checked on the built-in display and released for storing.



Features of HD-CR 35 NDT & CR 35 NDT:

- **Highest Resolution** – 30-micron basic spatial resolution (SR_b) BAM certified. Even the tiniest defects are easily identified.
- **Individually Adjustable** – The preconfigured scan modes can be easily modified, or new ones added to suit your particular application.
- **High Throughput** – Several imaging plates can be scanned simultaneously with automatic cropping and saving.

- **Flexible Formats** – Able to process imaging plates of all sizes and quality grades as well as shapes specific to a workpiece
- **Robust and Durable** – The scanning system is tried and tested with over 100,000 sold to date. The scanner works perfectly in dirty and dusty environments.
- **Extremely Low Maintenance** – Only minor servicing required every 2 years even if used in dirty and dusty environments
- **Consistent Image Quality** – Using a special imaging reference object, the system can be quickly qualified to the latest standards. The separately available CR Phantom also contains instructions for carrying out the qualification process.



- **Universal** – Perfectly suited to the diverse tasks of radiographic inspection, including ISO, ASTM and ASME standards
- **Portable & Compact** – At just 38.5 lbs. (17.5 kg), is the lightest and most compact full-format scanner (60.6 lbs. / 27.5 kg including transport case)
- **No Darkroom Needed** – Special imaging plate accessories are available to protect from light when used in daylight conditions.
- **Intuitive Software** – The DICONDE compliant D-Tect software assists you in image evaluation, maximizing workflow.

D-Tect Software

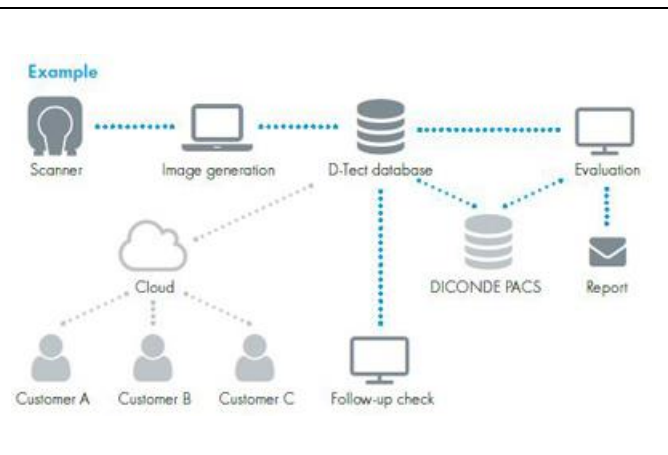
D-Tect allows you to achieve optimal and time-saving inspection workflow. All necessary functions are included from image capture, analysis and report generation to data import/export and database management.

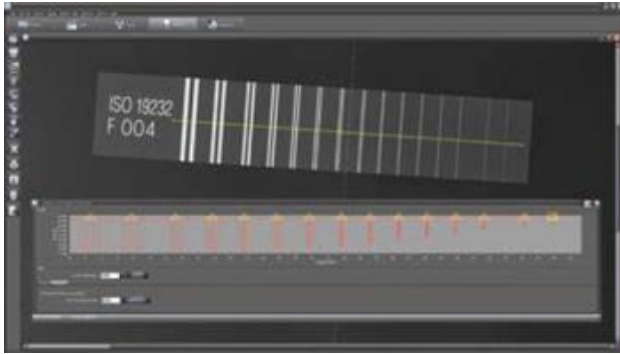
Key Features:

- DICONDE interface
- Automatic network database synchronization after field work
- Extensive export functions
- Simultaneous reference image adjustment
- Automatic DICONDE import
- Automatic filter settings for defined applications
- Region of Interest (ROI) selection
- SNR and CNR calculation
- SR_b determination
- Wall thickness measurement
- Image filters to assist with evaluation
- Radiographed material thickness
- Angle and length measurement
- Text and graphic elements
- Image comments/annotations
- Extensive cropping functionality
- Line profile presentation
- Report generation

Network Integration

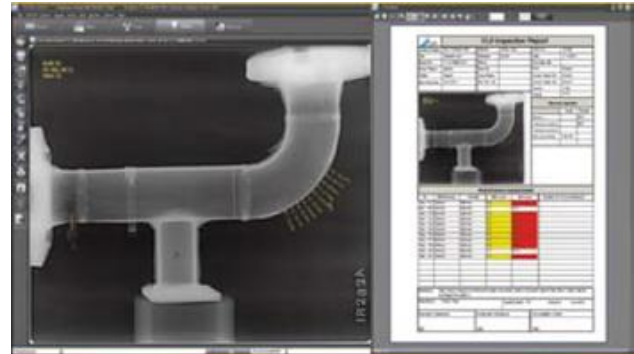
In addition to normal single workstation use, the software can be effortlessly integrated into a network if a collaborative workflow is required. It is also possible to interface with external cloud solutions.





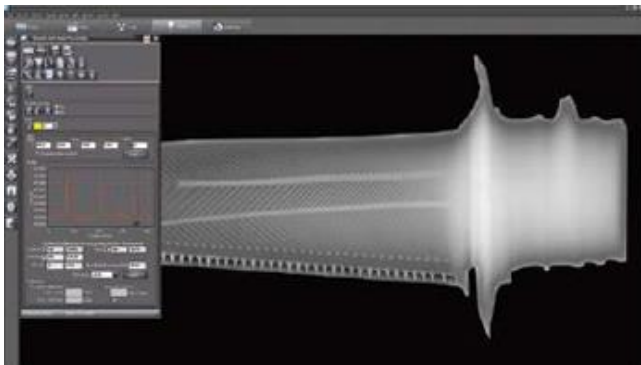
Basic spatial resolution (SR_b)

After loading an image, the SR_b is automatically determined by drawing a line over the duplex wire IQI according to ISO 17636-2 and ASTM E2446-2015.



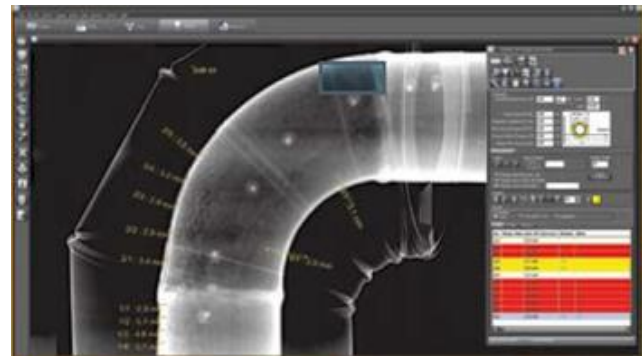
Report function

In a few easy steps, a comprehensive report can be generated from the project data. Custom templates can also be created.



Simple and reliable evaluation

Consistent quality and detection of the finest details are essential for NDT – specially designed filters and functions make simple and effective evaluation possible. With only 3 clicks, it is possible to save optimum evaluation settings for use with subsequent images.



Wall thickness measurement

This optional tool measures at one or more points along the straight or curved walls of a pipe. Limits can be defined so that warnings are shown when the wall thickness becomes critically thin. All the latest standards requirements are also taken into account.

NDT Supply.com

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Specifications	HD-CR 35 NDT	CR 35 NDT
Laser Spot Size:	12.5 – 25 – 50 μm , TreFoc Technology	50 μm
SR _b (basic spatial resolution):	30 μm , BAM certified	80 μm
Min./Max. Imaging Plate Size:	0.8" to 14" x 2" to 39" (2 to 35 cm x 3 to 100 cm)	
Dimensions:	15.8" x 14.6" x 18.5" (40 x 37 x 47 cm)	
Weight:	38.6 lbs. (17.5 kg)	
Power Supply:	100 – 240 VAC, 50 – 60 Hz, < 140 W	
Temperature Range:	50°F to 95°F (10°C to 35°C)	
Noise Level:	< 39 dB(A)	
Interfaces:	Ethernet (TCP-IP), WLAN	
Touchscreen:	4.3" TFT, 800 x 480 pixels	
Internal Storage:	SDHC, max. 32 GB	
Software:	Durr NDT D-Tect (DICONDE compliant to ASTM 2339)	
Imaging Plates:	High sensitivity, regular definition, high resolution, ultra-high resolution	
Standard Formats:	4.5" x 10", 4.5" x 17", 5" x 7", 8" x 10", 6 x 24cm, 6 x 48cm, 10 x 48cm, 18 x 24cm, 24 x 30cm, 30 x 40cm, 35 x 43cm, further formats and individual shapes available upon request.	
Accessories:	Transport Case, Durr NDT CR-Phantom, Mobile Power Adapters, feed guides, protectors for imaging plates and more.	