**VERSATILE AND DEPENDABLE**
**HIGH-TECH MADE IN GERMANY**

**Intuitive software**
The DICONDE compliant D-Tect software assists you in image evaluation, thus maximizing your workflow.

**Highest resolution**
DÜRR NDT is the only manufacturer worldwide to offer 3D micro basic spatial resolution (SRb), BAM certified.

**Flexible formats**
Able to process imaging plates of all sizes and quality grades as well as shapes specific to a workpiece.

**Universal**
Perfectly suited to the diverse tasks of radiographic inspection, including to ISO, ASTM and ASME standards.

**Extremely low maintenance**
Only minor servicing required every 2 years even if used in dirty and dusty environments.

**Portable & compact**
At just 17.5 kg, is the lightest and most compact full-format scanner (27.5 kg incl. transport case).

**High throughput**
Several imaging plates can be scanned simultaneously.

**Advantages of CR**
- Substantial cost savings as imaging plates are reusable up to 1000 times (or more, depending on the application)
- Considerable reductions in exposure time
- Software-based evaluation and reporting
- Digital archiving
- More details visible and analyzable
- No darkroom or chemicals needed
- Safer for operators and the environment

**How does CR work?**
1. Instead of film, an imaging plate is exposed to X-ray or gamma radiation.
2. The plate is digitized by the scanner and then erased for immediate reuse.
3. The digital image is then displayed on a computer monitor for evaluation.

**Computed radiography (CR) is the digital replacement of conventional X-ray film radiography and offers enormous advantages for inspection tasks – the use of consumables is virtually eliminated and the time to produce an image is drastically shorter.**

**No darkroom needed**
Special imaging plate accessories are available to protect from light when used in daylight conditions.

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SYSTEMS FOR EVERY CR APPLICATION
DEVELOPED FOR THE HIGHEST QUALITY DEMANDS

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 because its unique TreFoc Technology allows the widest range of applications and the highest resolution of all CR scanners. While the CR 35 NDT without TreFoc is more than capable of performing erosion and corrosion inspections.

TreFoc Technology
Developed by DÜRR NDT, this technology 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.

Future-proofed with the highest resolution
With certified 30-micron basic spatial resolution, even the tiniest defects are easily identified. At the same time you are also equipped for the more exacting requirements of the future.

Individually adjustable
The pre-configured scan modes can be easily modified or new ones added to suit your particular application.

High efficiency
Scanning several image plates simultaneously with automatic cropping and saving makes it possible to increase throughput.

Diverse range of applications
- Oil & gas
- Aerospace
- Automotive
- Power stations
- Research and testing
- Military
- Museums
- Special applications

Imaging plate compatibility
It is possible to scan imaging plates of all sizes and quality grades, even with shapes specific to a workpiece, from 2 cm in width and up to 100 cm in length.

Robust and durable
The scanning system is tried and tested with over 100,000 sold to-date. Further peace of mind is provided by the 5-Year Guarantee.

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.

Expertise
The scanner not only provides you with a CR system, but also a solution to your specific inspection problem. Providing you with presales expert advice and assisting you until you achieve the perfect workflow is just as important to us and our partners as giving you fast and professional service support. At our Training Academy we also make sure that our customers are able to fully exploit the potential and advantages of our systems.

1 HD-CR 35 NDT, 2 see guarantee conditions at www.duerr-ndt.com
THE PERFECT SOFTWARE SOLUTION
IDENTIFY RISKS QUICKLY WITH DÜRR NDT D-TECT

D-Tect allows you to achieve an 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.

Despite its comprehensive set of features, D-Tect is fast, intuitive and easy-to-learn. Support for the DICONDE standard ensures that images can be viewed and processed by any other DICONDE compatible system. The D-Tect Enterprise integration solution also provides the possibility to interface with nearly any third-party software or system.

Key functions
- 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

Other features
- Region of interest (ROI) histogram
- SNR and CNR calculation
- SRb 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 display
- Report generation

Network integration
In additional 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.

Example
- Scanner
- Image generation
- D-Tect database
- Evaluation
- DICONDE PACS
- Report
- Cloud
- Customer A
- Customer B
- Customer C
- Follow-up check

Basic spatial resolution (SRb)
After loading an image, the SRb is automatically determined according to ISO 17636-2 and ASTM E 2446 by drawing a line over a duplex wire (IQI).

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 three clicks it is possible to save optimum evaluation settings for use with subsequent images.

Wall thickness measurement
This optional tool measures the thickness 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.

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**Technical data**

<table>
<thead>
<tr>
<th></th>
<th>HD-CR 35 NDT</th>
<th>CR 35 NDT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser spot size</td>
<td>12.5 – 25 – 50 µm, TreFoc Technology</td>
<td>50 µm</td>
</tr>
<tr>
<td>SR&lt;sub&gt;b&lt;/sub&gt; (basic spatial resolution)</td>
<td>30 µm, BAM certified*</td>
<td>80 µm</td>
</tr>
<tr>
<td>Grayscale resolution</td>
<td>16-bit (65,536 gray levels)</td>
<td></td>
</tr>
<tr>
<td>Min./Max. imaging plate size</td>
<td>2 to 35 cm x 3 to 100 cm</td>
<td>0.8 to 14' x 1.2 to 40'</td>
</tr>
<tr>
<td>Dimensions (H x W x D)</td>
<td>40 x 37 x 47 cm</td>
<td>15.8 x 14.6 x 18.5'</td>
</tr>
<tr>
<td>Weight</td>
<td>17.5 kg (38.6 lbs)</td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>100 – 240 VAC / 50 – 60 Hz, &lt; 140 W</td>
<td></td>
</tr>
<tr>
<td>Operating conditions</td>
<td>10 to 35°C (50 to 95°F)</td>
<td></td>
</tr>
<tr>
<td>Noise level</td>
<td>&lt; 39 dB(A)</td>
<td></td>
</tr>
<tr>
<td>Interfaces</td>
<td>Ethernet, WLAN</td>
<td></td>
</tr>
<tr>
<td>Touchscreen</td>
<td>4.3” TFT, 800 x 480 px</td>
<td></td>
</tr>
<tr>
<td>Internal storage</td>
<td>SDHC, max. 32 GB</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>DÜRR NDT D-Tect (DICONDE compliant to ASTM 2339)</td>
<td></td>
</tr>
<tr>
<td>Imaging plates</td>
<td>High sensitivity, regular definition, high resolution, ultra-high resolution</td>
<td></td>
</tr>
<tr>
<td>Standard formats</td>
<td>6 x 24 cm, 6 x 48 cm, 10 x 24 cm, 10 x 48 cm, 18 x 24 cm, 24 x 30 cm, 30 x 40 cm, 35 x 43 cm, 4.5 x 10”, 4.5 x 17”, 5 x 7”, 8 x 10”, further formats and individual shapes available by request</td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>Transport case, DÜRR NDT CR-Phantom, Mobile Power Adapter, feed guides, protectors for imaging plates, and more</td>
<td></td>
</tr>
</tbody>
</table>

*according to ISO 16371-1, ASTM E 2445, ASTM E 2446

**Applications**

<table>
<thead>
<tr>
<th></th>
<th>HD-CR 35 NDT</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Weld inspection¹</td>
<td>★★★★★</td>
<td>★★★★★★</td>
</tr>
<tr>
<td>Erosion and corrosion inspection²</td>
<td>★★★★☆</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Metal casting³</td>
<td>★★★★★</td>
<td>★★★★★☆</td>
</tr>
<tr>
<td>Metal precision casting³</td>
<td>★★★★★</td>
<td>☆☆☆☆☆</td>
</tr>
<tr>
<td>Composites</td>
<td>★★★★★</td>
<td>☆☆☆☆☆</td>
</tr>
<tr>
<td>Arts</td>
<td>★★★★★</td>
<td>★★★★★☆</td>
</tr>
</tbody>
</table>
| Concrete inspection   | ★★★★★☆ | ★★★★★ |}

Also suitable for inspections according to ¹ ISO 17636-2, ASME V, ² EN 16407-1, EN 16407-1, ³ ISO 16371-2