

HIGH-RES & WIRELESS **D-DR 1043B NDT**

BENDABLE DIGITAL X-RAY DETECTOR BUNDLE



Digital Intelligence - Ready to Change.
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D-DR 1043B NDT

RUGGED AND RELIABLE FOR INDUSTRIAL APPLICATIONS

Bendable and high-resolution detector, perfectly suited for inspecting long circumferential weld seams on pipes with diameters of 300 mm and above.

- ✓ 99 µm pixel pitch (5.0 lp/mm)
- ✓ 97 x 427 mm active area
- ✓ Suitable for X-ray and gamma sources
- ✓ Scintillator options for high resolution and high sensitivity
- ✓ Equipped with internal shielding for use up to 450 kV
- ✓ Innovative bending mechanism to replace traditional film
- ✓ Connection Unit with built-in wireless access point and battery
- ✓ Cordura® (NY) cover with various mounting options
- ✓ Exposure possible on both sides of detector
- ✓ Dust-tight and waterproof



The bundle includes everything you need to start right away

Connection Unit cable (5 m)

Connection Unit

Belt

Belt extension

Cover magnets

Eyelet magnets with carabiners (6 x 60 mm)

Rubber fasteners

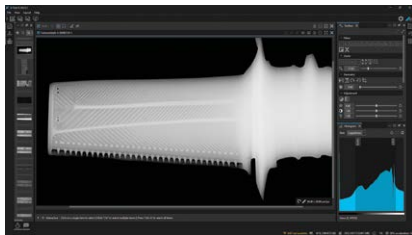
Waterproof hard case for easy transportation



D-Tect X

The included D-Tect X software provides an optimal and time-saving NDT inspection workflow: from calibration and image acquisition to image evaluation and data import and export, everything you need is included and easy to use.

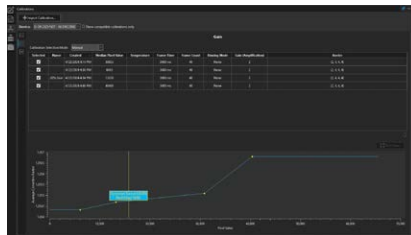
With a comprehensive set of features, D-Tect X is fast, intuitive and easy-to-learn. DICONDE file format support ensures that images can be viewed and processed by any other DICONDE compatible system. Interfaces to instaNDT PACS and DRIVE NDT management software ensure seamless integration into an efficient digital workflow.



Easy and reliable evaluation

Consistent quality and detection of the finest details are essential for NDT – specially designed filters and tools makes accurate and effective evaluation possible.

- Native DICONDE file format support
- Simultaneous reference image adjustment
- X-Filter: one-click image enhancement
- Image history: track all performed image operations and define presets
- Tools to assist with working with standards (ASME, ASTM, ISO)
- Unlimited image file size support
- Report generation via direct Excel export or DRIVE NDT



Multi-gain calibration

Multiple gain calibrations at various radiation doses can be applied during acquisition in order to achieve the best image quality possible.



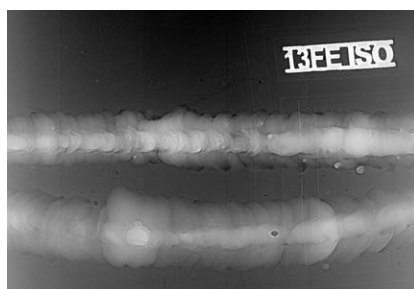
- Advanced histogram tools
- SNR/ SNR_N calculation
- Automatic duplex IQI detection and SR_b determination
- Advanced wall thickness analysis
- Image filters to assist with evaluation
- Length, area and angle measurement tools
- Image annotations with customizable detail information
- Line profile tool
- Panel calibration (offset, gain, bad pixel)
- Multi image editing/processing
- Unrestricted image zoom



Technical data

D-DR 1043B NDT Bundle

Active area	97 mm x 427 mm (3.82" x 16.8")
Bendable	Minimum pipe diameter 300 mm (12")
Dimensions detector / incl. Cordura® (NY) cover (H x W x D)	182 mm x 633 mm x 20 mm 210 mm x 640 mm x 40 mm
Weight detector / incl. Cordura® (NY) cover	1.5 kg (3.3 lbs) 2.4 kg (5.3 lbs)
Number of pixels	981 x 4309
Frame time	0.5 s to 180 s
Image transfer time (wired/wireless)	1.5 s / 3 s
Maximum energy	450 kV (for long life in typical applications), Isotopes (with typical in-field usage)
Pixel pitch	99 µm
Maximum SR_b (basic spatial resolution)	100 µm (Fine), 130 µm (Standard)
Scintillator options	GOS Fine, GOS Standard
ADC	16-bit
Interface	Gigabit Ethernet, WLAN: 2.4 GHz (802.11n) / 5 GHz (802.11ac)
Battery	Lithium-ion (11.55 V, 39.3 Wh)
Operating conditions	-20 to 50°C (-4 to 122°F), 10 to 90 % humidity
Protection level	IP67 (dust-tight and waterproof)
Software	DÜRR NDT D-Tect X
Scope of supply	Detector, transport case, rugged notebook (14"), D-Tect X software, Connection Unit, Cordura® cover set, bending limiter set, Connection Unit cable (5 m), 2 batteries, battery charger, power supply, 2 AC power cables (plug type F/B), Ethernet adapter cable (7 m), Ethernet cable (15 m), TP-TP coupling RJ45 (Cat 6), System Control Unit (SCU) mini, SCU interface cable, SCU power supply, 4 cover magnets, 2 eyelet magnets, 2 carabiners (6x60 mm), 2 rubber fasteners, 2 tension straps (2 m), 2 elastic straps (1.1 m), 2 carabiners twistlock (10x110 mm), cable reel (empty)



Example image: double wall examination, Ø 170 mm, t = 5 mm, X-ray, elliptic technique (ISO 17636-2 Figure 13a).

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