

HIGH-RES & WIRELESS **D-DR 3643 NDT** *DIGITAL X-RAY DETECTOR BUNDLE*



Digital Intelligence - Ready to Change.
www.duerr-ndt.com



D-DR 3643 NDT

RUGGED AND RELIABLE FOR INDUSTRIAL APPLICATIONS

Large size detector designed for portability and the harsh conditions of industrial radiography. Perfectly suited for profile images and large objects.

- ✓ 99 µm pixel pitch (5.0 lp/mm)
- ✓ 351 x 427 mm active area
- ✓ Suitable for X-ray and gamma sources
- ✓ Equipped with internal shielding for use up to 450 kV
- ✓ Light-weight full size detector
- ✓ Extremely robust non-glass TFT sensor
- ✓ Hot-swap function enables battery change during operation
- ✓ Built-in wireless access point
- ✓ Connector for Gigabit Ethernet and power
- ✓ Aluminum housing with adjustable brackets for mounting and holes for a VESA mount (100x100)
- ✓ 1 meter drop test pass
- ✓ Dust-tight and waterproof



The bundle includes everything you need to start right away

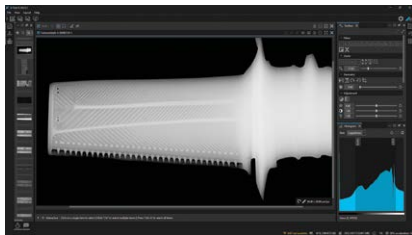


Waterproof hard case for easy transportation

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.

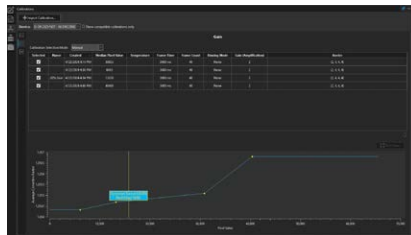
With a comprehensive set of features, D-Tect X is fast, intuitive and easy-to-learn. DICONDE file format support ensures that images can be viewed and processed by any other DICONDE compatible system. Interfaces to instaNDT PACS and DRIVE NDT management software ensure seamless integration into an efficient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



Ethernet cable (15 m) with TP-TP coupling RJ45 (Cat 6)



System Control Unit (SCU) mini



Cable reel (empty)



Rugged notebook (14") with D-Tect X



Battery set with charger



Ethernet adapter cable (7 m)



Carabiners twistlock (10 x 110 mm)

Tension straps (2 m)



Elastic straps (1.15 m)



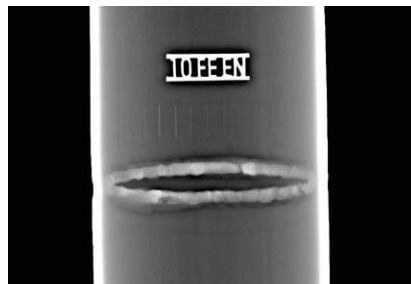
Technical data

D-DR 3643 NDT Bundle

Active area	351 mm x 427 mm (13.8" x 16.8")
Dimensions detector / incl. aluminum (AL) housing (H x W x D)	384 mm x 460 mm x 15 mm 460 mm x 537 mm x 25 mm
Weight detector / incl. aluminum (AL) housing	4.1 kg (9 lbs) 7.5 kg (16.5 lbs)
Number of pixels	3548 x 4316
Frame time	0.5 s to 180 s
Image transfer time (wired/wireless)	3.5 s / 5 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), 160 µm (Plus)
Scintillator options	GOS Fine, GOS Standard, GOS Plus
ADC	16-bit
Interface	Gigabit Ethernet, WLAN: 2.4 GHz (802.11n) / 5 GHz (802.11ac)
Battery	2 x 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 with aluminum housing, transport case, rugged notebook (14"), D-Tect X software, Connection Unit, Connection Unit cable (5 m), 4 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, 2 tension straps (2 m), 2 elastic straps (1.1 m), 2 carabiners twistlock (10x110 mm), cable reel (empty)



Optional heat isolation mat (60 x 52 cm), suitable for temperatures up to 250 °C, e.g. for radiographic testing of pipes during operation.



Double wall examination, DN 86 mm, $t = 3.6$ mm, X-ray, Elliptic technique (ISO 17636-2 Figure 11)