Strong Workmate for Non Destructive Testing (RT)

A guide to industrial X-ray inspection
Munition

Components testing

Energy and power line

Automotive, railway, marine and aerospace

Oil, gas, petrochemicals and water

Components testing

Munition
Applications RT
Industries, applications, materials

- Structural statics
- Jewelry industry
- Arts, archeology and geology
- Insurance investigation
- Custom manufacturers
OR Technology is your local partner for innovative X-ray systems and tailor-made solutions for mobile and stationary radiographic testing - proven worldwide thousands of times over.
Many excellent reasons
to place your trust in OR Technology

Experience since 1991
... as a manufacturer of digital X-ray technology and developer of image management systems. The highly professional solutions for digital stationary and mobile X-rays, image management (DICONDE) and cloud-based archive solutions for industry, security and medicine are used in more than 100 countries.

Comprehensive know-how
... based on decades of experience developing software for digital image processing in combination with specialised expertise in X-ray technologies. A close dialogue with experts and universities is an important part of innovation activity.

Made in Germany
... means excellent quality and first-rate service for hardware and software.

Exceptional image quality
... with in-house developed acquisition and control software with excellent image optimisation and the experience from several thousand installed digital X-ray systems.

Best service
... for customers and distribution partners. OR Technology does not rely on external call centres. A support team with over 20 employees offers multilingual information and assistance (e.g., in Arabic, English, French and Spanish).

Easy operation of the system
... even for radiologically less trained personnel. The modern graphical user interface (GUI) is intuitive to use and offers an optimal workflow with customisation.

Low maintenance
... because there are no mechanical parts in the X-ray system that require regular upkeep (system dependent).

Needs-based
... for all possible uses, whether mobile applications in material or quality testing, for material testing with compact stationary individual X-ray systems, or DR upgrade kits for digitising your existing X-ray system. OR Technology offer the widest range of products on the market.

Tried and trusted
... worldwide. OR Technology's X-ray systems and software meet highest international quality standards.

Corporate sustainability
... with equal emphasis on environmental, social and economic aspects. Every day we rise to the challenge of developing our company in a sustainable manner and creating a positive working environment for our employees. We continuously strive to minimize our ecological footprint.
1. Product solutions
Our stationary and mobile X-ray systems allow for fast and professional radiographic examinations, cost saving work, as well as constant and excellent image quality.

The individual Amadeo NDT systems include all necessary components and functions for digital X-ray imaging without cassettes, up to special storage systems (e.g., pipe manipulator for automated turning of pipes). These systems are available both as a conventional variant for operating with a CR system and as a fully integrated digital version with fixed or wireless X-ray detectors.

The very lightweight Leonardo DR suitcase and backpack solutions are a digital and space-saving addition to portable X-ray equipment, as well as the solution for switching from CR to direct digital X-ray. All necessary components incl. cables are stored in a suitcase or backpack to save space.

At the heart of each system is the ORinspect X-ray acquisition and control software developed by OR Technology. This software takes over the complete control of X-ray generators and X-ray systems from different manufacturers, thus enabling an orderly and optimal workflow. An intuitive and user-friendly interface via touchscreen or mouse control completes the system.

See detailed description of software beginning on page 25.
Portable, highly functional X-ray suitcase

Leonardo DR mini II - robust, digital suitcase solution for mobile radiographic examination

The Leonardo DR mini II is a portable, digital X-ray system for outdoor use. With its approx. 8.9 kg, it is one of the lightest X-ray suitcase systems in the world. This system can be used for X-raying outdoors and in confined spaces; it requires only a few simple steps to set up on site and be ready for use.

The handy case with the shock-absorbing, dirt-repellent plastic coating comes with an included shoulder strap for easy transport.

A built-in 17" premium notebook with touchscreen and high screen resolution as well as the integrated acquisition and control software ORinspect guarantee an excellent image display. → See page 25-29 for a detailed description of the software.
Highlighted features

**Basic information**
- Total weight of 8.9 kg
- Dimensions 39.5 cm x 49 cm x 18.5 cm
- Convertible 2-in-1 premium notebook with large monitor, newest 8th generation Intel® Core™ i7 processor, 16 GB RAM, 17.3” full HD touchscreen monitor, keyboard with background lighting, disk 128 GB + hard disk 1 TB
- Shoulder strap
- Built in room for accessories

**Hardware highlights and features**
- Fully battery-operated
- Easy charge of the complete system
- Long operation lifetime
- Very robust and suitable for all terrain and weather
- Visible and audible: Software status display via large 4-colour LEDs on the corners of the suitcase and audio output on status change.
- 17” laptop can easily be removed from its secured location within the case and can be used as a tablet during presentations
- Special designed protection cases and bags for the detectors
- Support of various detectors of all sizes (12” x 10”, 14” x 17”, 17” x 17”)

**Scope of delivery**
- Leonardo mini II suitcase
- Professional ORinspect acquisition software
- Convertible notebook
- Detector 12” x 10” or 14” x 17” or 17” x 17”
- Shoulder Strap
- Special protection case for the detector

For more detailed information please see: [www.or-technology.com](http://www.or-technology.com)
Further information about Leonardo DR nano is available here:

Leonardo DR nano - one of the world's lightest portable X-ray solutions for RT

The Leonardo DR nano consists of only two components, a wireless X-ray detector and a laptop with integrated acquisition and control software.

See page 25-29 for all details

With about 8 kg (fully packed, backpack incl. laptop, accessories and X-ray detector), the system is one of the world's lightest portable X-ray solutions. The X-ray system enables users to perform mobile digital material testing at almost any location at any time. Restricted freedom of movement and tangled cables are now a thing of the past. Comfortable use is ensured even in confined spaces.

The system is stored in a well-thought-out, sturdy backpack. Easy transport is possible to any location, even in rough terrain.
Highlighted features

**Basic information**
- Total weight of 8 kg
- Dimensions 50 cm x 49 cm x 12 cm
- Panasonic Toughpad or notebook
- Shoulder strap (backpack can be turned into a handle bag → The shoulder straps can be hidden quickly and easily)
- Built in room for accessories

**Hardware Highlights and Features**
- Fully battery-operated
- Long operation lifetime
- Very robust and suitable for all terrain and weather
  → Framing robust insulation offers shock protection for the notebook
  → Flat panel detector is stored securely in a separate well-padded compartment
- Specially designed protection cases for the detectors and bags for accessories
- Support of various detectors of all sizes (12" x 10", 14" x 17")

**Scope of Delivery**
- **Leonardo DR nano** backpack
- Professional ORinspect acquisition software
- Panasonic Toughpad or notebook
- Detector 12" x 10" or 14" x 17"
- Special protection case for the detector
- Optional additional bag for accessories

For more detailed information please see: [www.or-technology.com](http://www.or-technology.com)
Further information about Amadeo NDT is available here:

Amadeo NDT - individual X-ray systems for testing welding joints and individual workpieces

The Amadeo NDT system enables non-destructive testing of welds on pipes and plates as well as X-raying individual workpieces of various materials (e.g., iron, aluminum, titanium, copper, plastics, and much more). The system includes all the necessary components and functions for digital X-ray imaging: a high-performance generator and tube combination, up to three digital X-ray detectors, special storage systems (e.g., pipe manipulator) to the ORinspect software with optimised workflow and special evaluation tools for the assessment of the radiographic images. → See page 25-29 for all details

A special pipe manipulator for automated turning of pipes and automated joining (stitching) of individual images accelerates the process of welding seam inspection on pipes.
Excellent image quality
A selection of high-quality digital detectors – ranging from small, extremely high-resolution CCD sensors (<20LP/mm) to large, high-resolution detectors with small pixels (100 μm) for X-ray devices up to 1.5 MeV – guarantees a high degree of detail.

User-friendly
The professional ORinspect software is designed specifically for non-destructive testing, and has a straightforward and modern graphical user interface. All X-ray parameters can be automatically transferred to the generator. Adjoining images are automatically stitched. X-ray images can be analysed at the monitor with aid of easy-to-use software tools.

Quick
An efficient cooling system allows the X-ray tube to be continuously operated at high power. The customised device control (e.g. of tube manipulators) automatically positions each test object. There is no need for manual adjustments.

Customised and reliable
Amadeo NDT systems are customised to meet your individual needs in non-destructive testing. A wide selection of detectors, a specially designed sample manipulation system with both drive and support rollers, as well as customised hardware and software solutions guarantee consistent high quality over the long term, even under high usage.

Diverse applications
Objects made from a wide range of materials such as various metals, alloys and plastics, between 1-50 cm in length and weighing up to 50 kg, can be tested using Amadeo NDT. The diameter of the work pieces depends on the material.
2. RT components/accessories
Components and X-ray equipment for individual requirements of industrial X-ray inspections

Mobile and stationary X-ray equipment for material and quality testing are subject to the need to perform the X-ray process easily, quickly, and safely. In addition, the systems should allow for comfortable working.

Different material types and thicknesses place special demands on an X-ray system. All offered components and the vast assortment of accessories have proven themselves in the NDT sector and meet the highest quality requirements.

We have developed and produced some components for which there were no solutions to meet our requirements in the market: Made in Germany.

You can choose from a wide selection of variants and systems for different indoor and outdoor radiological applications.

The components and X-ray accessories offered by OR Technology can be combined with all DR and CR systems from the OR Technology product range as well as the software solutions.
X-ray detectors for the **Leonardo** product family

Reliable and intelligent wireless and tethered solutions for quality control

The very light X-ray detectors deliver high-resolution image quality with reduced X-radiation and usually have an extended range of functions, such as internal image storage and a magnetic docking port.

The detectors are robust and ergonomically designed. Features such as automatic exposure detection, on-board corrections, and wireless access point mode enable fast and easy system integration.

Our X-ray detectors allow for efficient and conclusive examination results with reduced inspection times. High-performance image processing processes of the ORinspect acquisition software included in the system enable material- and application-specific optimisation.
### Specifications for the Leonardo DRw wireless1210 detector:

<table>
<thead>
<tr>
<th>Detector model</th>
<th>GadOx 12&quot; x 10&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specification</strong></td>
<td></td>
</tr>
<tr>
<td>High dose compatible up to 270 kV</td>
<td></td>
</tr>
<tr>
<td>Fast exchanging and charging of battery</td>
<td></td>
</tr>
<tr>
<td>Wireless &amp; tethered operation</td>
<td></td>
</tr>
<tr>
<td>Magnetic cable connector</td>
<td></td>
</tr>
<tr>
<td>16 Bit latest generation</td>
<td></td>
</tr>
<tr>
<td>OLED display with Wi-Fi, LAN, battery</td>
<td></td>
</tr>
<tr>
<td>Drop tested 70 cm</td>
<td></td>
</tr>
<tr>
<td><strong>Scintillator</strong></td>
<td>Gd2O2S : Tb</td>
</tr>
<tr>
<td><strong>Detector Imaging Area</strong></td>
<td>248 mm × 297.6 mm</td>
</tr>
<tr>
<td><strong>Pixel Pitch</strong></td>
<td>100 ( \mu ) m</td>
</tr>
<tr>
<td><strong>A/D Conversion</strong></td>
<td>16 bits</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>GigE, trigger and power via docking connector</td>
</tr>
<tr>
<td></td>
<td>802.11n Wi-Fi standard at 5 GHz</td>
</tr>
<tr>
<td><strong>External Dimensions</strong></td>
<td>282 mm × 332 mm × 15.5 mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>1.8 kg (4 lbs)</td>
</tr>
</tbody>
</table>

### Specifications for the Leonardo DRw wireless1417 detector:

<table>
<thead>
<tr>
<th>Detector model</th>
<th>GadOx 14&quot; x 17&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specification</strong></td>
<td></td>
</tr>
<tr>
<td>High dose compatible up to 270 kV</td>
<td></td>
</tr>
<tr>
<td>Fast exchanging and charging of battery</td>
<td></td>
</tr>
<tr>
<td>Wireless &amp; wired operation</td>
<td></td>
</tr>
<tr>
<td>Magnetic cable connector</td>
<td></td>
</tr>
<tr>
<td>16 Bit latest generation</td>
<td></td>
</tr>
<tr>
<td>OLED display with Wi-Fi, LAN, battery</td>
<td></td>
</tr>
<tr>
<td>Drop tested 70 cm</td>
<td></td>
</tr>
<tr>
<td><strong>Scintillator</strong></td>
<td>Gd2O2S : Tb</td>
</tr>
<tr>
<td><strong>Detector Imaging Area</strong></td>
<td>358 mm × 423 mm</td>
</tr>
<tr>
<td><strong>Pixel Pitch</strong></td>
<td>127 ( \mu ) m</td>
</tr>
<tr>
<td><strong>A/D Conversion</strong></td>
<td>14/16 bits</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>Wired : GigE</td>
</tr>
<tr>
<td></td>
<td>Wireless : 802.11 a/g/n</td>
</tr>
<tr>
<td></td>
<td>Wireless LAN</td>
</tr>
<tr>
<td><strong>External Dimensions</strong></td>
<td>399 mm × 475 mm × 18 mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>5.0 kg (11.02 lbs)</td>
</tr>
</tbody>
</table>

### Specifications for the Leonardo DRw wireless1417 detector:

<table>
<thead>
<tr>
<th>Detector model</th>
<th>GadOx 14&quot; x 17&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specification</strong></td>
<td></td>
</tr>
<tr>
<td>High dose compatible up to 270 kV</td>
<td></td>
</tr>
<tr>
<td>Fast exchanging and charging of battery</td>
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<tr>
<td>Wireless &amp; wired operation</td>
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</tr>
<tr>
<td>Magnetic cable connector</td>
<td></td>
</tr>
<tr>
<td>16 Bit latest generation</td>
<td></td>
</tr>
<tr>
<td>OLED display with Wi-Fi, LAN, battery</td>
<td></td>
</tr>
<tr>
<td>Drop tested 70 cm</td>
<td></td>
</tr>
<tr>
<td><strong>Scintillator</strong></td>
<td>Gd2O2S : Tb</td>
</tr>
<tr>
<td><strong>Detector Imaging Area</strong></td>
<td>350 mm × 426 mm</td>
</tr>
<tr>
<td><strong>Pixel Pitch</strong></td>
<td>100 ( \mu ) m</td>
</tr>
<tr>
<td><strong>A/D Conversion</strong></td>
<td>16 bits</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>GigE, trigger and power via docking connector</td>
</tr>
<tr>
<td></td>
<td>802.11n Wi-Fi standard at 5 GHz</td>
</tr>
<tr>
<td><strong>External Dimensions</strong></td>
<td>384 mm × 460 mm × 15.5 mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>3.1 kg (6.8 lbs)</td>
</tr>
</tbody>
</table>

For an offer with a tethered X-ray detector, please call us at +49 381 36600600 or write an e-mail to info@or-technology.com
Portable, battery-powered X-ray generators

Generators for radiological testing of various materials with connection to control software

The portable, battery-powered X-ray devices with and without pulse technology are suitable for the radiological examination of various materials. The combination of battery power and minimal weight guarantee excellent handling. The X-ray machines feature a robust housing.

Our ORinspect acquisition and control software has a full integration with Golden Engineering pulse X-ray sources as well various other manufacturer such as ICM.
- Fully integrated with ORinspect acquisition software to control generators by software
- Wireless and wired connection to the generators
- Lightweight generators for use in the field
- Optional carrying and protection cases for generators and accessories
**Golden Engineering**

**XR200**

- Voltage output type: pulsed potential
- Output voltage: 270 kVp
- Size (without battery, including handles): Height 5.83" (14.81 cm), Width 4.28" (10.82 cm), Length 14.20" (36.07 cm)
- Weight (including battery pack): 11.8 lb (5.3 kg)
- Pulse rate: 15 pulses per second
- Focal spot: 3.0 mm
- Temperature range: -10 to 120 degrees F (-23 to +50 °C)

**XRS-3**

- Voltage output type: pulsed potential
- Output voltage: 270 kVp
- Size (without battery, including handles): Height 5.83" (14.81 cm), Width 4.28" (10.87 cm), Length 14.20" (36.07 cm)
- Weight (including battery pack): 11.8 lb (5.3 kg)
- Pulse rate: 15 pulses per second
- Focal spot: 3.0 mm
- Temperature range: -10 to 120 degrees F (-23 to +50 °C)

**XRS-4**

- Voltage output type: pulsed potential
- Output voltage: 370 kVp
- Size (without battery, including handles): Height 7.05" (17.91 cm), Width 4.80" (12.19 cm), Length 19.26" (48.92 cm)
- Weight (including battery pack): 18.3 lb (8.3 kg)
- Pulse rate: 9 pulses per second
- Focal spot: 3.0 mm
- Temperature range: -10 to 120 degrees F (-23 to +50 °C)

**ICM CP120B / CP160B**

- Voltage output type: constant potential
- Output voltage: 40 to 120 / 160 kVp
- Size (without battery, including handles): Height 22.7 / 22.7 cm, Width 15.5 / 15.5 cm, Length 44.0 / 49.0 cm
- Weight (including battery pack): 7.5 kg / 9.2 kg
- Pulse rate: 10 pulses per second
- Focal spot: 3.0 mm
- Temperature range: -13 to 122 degrees F (-25 to +50 °C)

Further generators of other manufacturers are available as well. For more information, please call us at +49 381 36600600 or write an e-mail to info@or-technology.com.
X-ray accessories for Non Destructive Testing (RT)

Wide range of accessories for applications in material testing or quality inspection

Our numerous functional accessories offer further advantages. Even little things can make a big difference.

Our NDT team has developed and compiled a wide range of accessories over the last few years to improve the efficiency of daily inspection and quality control work.

All accessories are optional modules that can be purchased and used in conjunction with an X-ray solution from OR Technology, but also as stand-alone solutions.

See for yourself!
Communication cable

Whenever it is not possible to work in WIFI mode:
- Operate the system wired and stay in safe distance
- Available in different length 50m, 100m, 150m or 200m
- Easy to handle and carry

Tripod mount with suitcases

- Sturdy and lightweight tripod with five different uses, maximum height of about 167 cm
- Can be converted into a table stand in just a few easy steps
- Rotatable center column for ground-level work
- Additional short center column
- Incl. high-quality ball head → allows free alignment and placement in the room
- Carrying case: extremely resistant, waterproof, unbreakable and dustproof with double-layer, soft-touch handle
- Case size (L / W / H): 910 x 351 x 133 mm

Detector stand with suitcase

- Compact, sturdy and lightweight tripod with 4 adjustable heights
- Divisible center column for low working height (17.5 cm), load capacity max. 8 kg, weight 1.325 kg
- Tripod head with spirit levels for vertical and horizontal alignment
- Incl. high-quality ball head → allows free orientation and placement in the room
- Carrying case: extremely resistant, waterproof, unbreakable and dustproof with double-layer, soft-touch handle
- Case size (L / W / H): 660 x 355 x 210 mm

For more detailed information please see: www.or-technology.com
Portable mounting system

You are well equipped with VersariX, the detector holder that weighs only 400 g and is quickly ready for use. The VersariX’s powder-coated bracket provides secure suspension from hooks, screws, branches and other suitable attachments for a safe hold. The in-house development from OR Technology can also be attached to almost all types of doors.

The stable hook, on which the X-ray detector is suspended, is almost infinitely height-adjustable. This means that even special images can be taken easily and professionally in confined spaces.

- Portable and versatile
- Weight: only 403 g
- Dimensions for transport: 20 x 15 x 8 cm
- Easy to clean and resistant to disinfectants
- Designed by OR Technology
- Three attachment options

Protection cases

Protection boxes protect flat panel detectors from external shocks and strong vibrations. The housing contains several protective layers to absorb shocks and increase the load capacity. It is also characterised by its robustness and low weight.

- Keep your detectors safe
- Patented positive locking to prevent the X-ray detector from falling out
- Simple one-handed operation
- Handle for a flexible use - can be mounted on either side (model dependent)
- Special cases for different tasks
Robot for testing welding seams

The rotation system for efficient tube weld inspection: The system comprises hardware and software components working together to automatically take multiple x-ray images of welded tubes of various diameters and subsequently stitch adjacent images.

The tube manipulator has both drive and support rollers that can be custom installed on an x-ray table in order to handle tubes of varying diameters. Small detectors can be attached directly to the tubes whereas large detectors are installed under the table. A specialised sample manipulation system automatically positions samples in the correct orientation.

The system automatically triggers X-ray exposures and rotates tubes according to your specifications, minimizing the need for manual intervention. The software then automatically stitches adjacent images. Single, double and elliptical projections are available.

The tube manipulator can inspect objects made from a wide range of materials, between 1–50 cm in diameter and weighing up to 50 kg. Custom orders for special demands are possible.

A selection of high-quality digital detectors – ranging from small, extremely high-resolution CCD sensors (<20LP/mm) to large, high-resolution detectors with small pixels (100 μm) for X-ray devices up to 1.5 MeV – guarantees excellent image quality and a high degree of detail.
Configuration example I

**Wireless setup**

- **Protection box** (wireless X-ray detector inside)
- **Golden XRS-3 X-ray Sources**
- **2nd parallel display unit rugged tablet PC and acquisition software**
- **X-ray suitcase Leonardo DR mini II incl. tablet PC and acquisition software**
- **Tripod mount incl. ball head for free alignment in the room**
- **Extremely durable, waterproof and dustproof transport case for detector and tripod**
Configuration example II

Golden XRS-3 X-ray Sources

Sync box for GoldenEngeneering

Wireless X-ray detector (inside protection box) - wireless or tethered connection to PC

X-ray suitcase Leonardo DR mini II incl. tablet PC and acquisition software

Extremely durable, waterproof and dustproof transport case for detector and tripod

For more detailed information please see: www.or-technology.com
3. Software
Software and cloud solutions for acquisition and archiving of DICONDE images and controlling NDT X-ray systems

All offered software products were developed by OR Technology, based on decades of experience in digital image processing and special expertise in X-ray technology. Even the smallest features are programmed in-house at OR Technology. This means software entirely "Made in Germany." Close dialogue with professionals and academia from around the world is also an important part of our software development.

The three most important software products for complete coverage of the needs in industrial X-ray inspection incorporate the experience gained from several thousand installed digital X-ray systems:

ORinspect: The heart of every NDT system is the ORinspect X-ray acquisition and control software. The software takes over the complete control of the X-ray generator and X-ray system thus enabling an orderly and optimal workflow. An intuitive and user-friendly touchscreen or mouse control interface complete the system.

dicondePACS - The contemporary and sophisticated high-tech solution for intelligent image management: The software includes the processing, transfer, and archiving of image material.

ORCA (OR Technology Cloud Archiving) is a cloud-based platform designed for storing, viewing and sharing DICONDE images and documents. With ORCA Archive and ORCA Share, the cloud offers two attractive uses as an archiving solution and as a platform for communication with external partners.
The heart of each Leonardo NDT system is the ORinspect X-ray acquisition software developed by OR Technology:

- Intuitive and user-friendly GUI
- User interface can be customised according to the demands
- Full support for touchscreen control
- Available in many languages
- Full integration of various X-ray generators from different manufacturers
- Full integration of wide range of different detectors wired or wireless
- Automatically highest image quality due to ORinspect special image processing
- Support of various international standards
- Connection to ORCA® Cloud solution for image distribution worldwide
- Connection to any dicondePACS®
ORinspect provides pre-defined examinations that can be adapted to your recurrent inspection tasks. The software stores your individual examination/inspection values. Complex test procedures can be saved as macros.

ORinspect fully controls your Golden Engineering generator. The software allows easy setting of the pulses and triggering of the exposure. All values e.g. pulses are preconfigurable.

ORinspect provides a quick preview image of the inspected object. Easy access to important software tools e.g. for verifying the exposure or entering the internal viewer.
Advanced functions for the NDT (Non-Destructive Testing) area and key features

- **Full generator control for all Golden Engineering, ICM and other manufacturers**
- **Image comparison**
- **Automatic stitching**
- **Pseudocoloring**
- **FFT - Fast Fourier analysis**
- **Grayscale profile across line**
- **Snapshot**
- **Image import into ORinspect via special file import**
- **Multi exposure (SNR improvements)**
- **Completely integrated viewer for image analysis (processing, manipulation, storage, export etc)**
- **Measurement of distances / thickness, angles, areas and densities**
- **Image annotations (arrows, ellipses, free text etc.)**
- **Highlight ROI**
- **Stepless zoom, PAN, magnifier, ROI, rotation, mirror, crop etc**
- **Adjustment of window / level options and gamma correction**, **Sharpening filter, high pass filter, noise suppression**
- **Advanced invers (black / white), colour LUT**
- **Printing of images both on Windows printers and laser imagers via DiCONDE Print**
- **Export of images to JPG, TIFF, BMP and DICOS / DICONDE formats**
- **Support for tablet PC**
- **Secure access to the software with login and password**
- **Organic detection**
- **Report and output in various formats like Word and PDF**
Full generator control for Golden engineering (all models), ICM and other manufactures

Image import stores photos in DICONDE/DICOM format within the inspection study and enable simple and effective documentation

Multi-exposure mode for every sensor - Acquires multi-frame images for SNR and CNR improvements

Completely integrated viewer for image analysis, image annotation, image manipulation etc.

Automatic and manual stitching mode e.g. for long welds, large paintings etc.

 Allows image export in various formats including JPG, TIFF, BMP, PNG and DICONDE / DICOM

Support for tablets and mobile devices

Report tool assists in easy creation of customised reports and inspection protocols
Digital image management for mobile X-ray

Digital Imaging and Communications software (DICONDE) in NDT sector for materials testing and quality inspection

\textit{dicondePACS\textsuperscript{®}} is a sophisticated, high-tech image management solution ideally suited for long-term archiving of images and reports. With \textit{dicondePACS\textsuperscript{®}}, all images generated by digital X-ray devices, as well as various kinds of documents and reports are stored in a digital DICONDE folder and readily accessible.

Reports can easily be shared with specialists via email and cloud services.

Our carefully designed archive and backup solutions guarantee quick access to all data and high security standards. Furthermore, the software can easily be integrated into all common DICONDE systems.
Highlighted features

- User friendly, well structured and highly usable
- The user interface can be customised according to the demands
- Common functions can be assigned to hot keys for greater efficiency
- Special features for NDT
- „Perfect memory“ - images retain all previous markings and settings, including zoom and alignments
- Storage of all images and documents exclusively according to international DICONDE standards
- Integration of dictation and speech recognition systems etc.
- Reports with images in Word and pdf
The DICONDE cloud for images and documents

Archive and share images and documents via cloud

ORCA® (OR Technology Cloud Archiving) is a secure cloud-based platform specifically designed for storing, viewing and sharing DICONDE images and documents. This web portal helps you to manage, track and monitor NDT projects in compliance with all rules and procedures that we can customise for you on a project basis.

With ORCA® you can easily exchange images and data; it is intuitive and optimised for mobile devices.

The ORCA® View viewer included in ORCA® is platform-independent and can be used in any browser. In addition to image viewing, it contains numerous options for image processing, image manipulation, and various measurement functions. To use ORCA® View, no installation is required.
**ORCA® Archive**

Cloud-based archiving of DICONDE images

**ORCA®** Archive transfers and stores image files from direct sources e.g. digital X-ray as well as from Picture Archiving and Communication Systems (dicondepACS®). **ORCA®** Archive can be used as a backup solution.

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**ORCA® Share**

Communication and monitoring platform

At the same time, **ORCA®** is a platform for sharing data with external partners. The application **ORCA® Share** facilitates exchanging images and findings with staff, colleagues and specialists. **ORCA® Share** can also be used to give access to DICONDE reports and images. Recipients are sent an access link to specific files via email. There is no need to install software locally.

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**Highlighted features**

- Online image archive
- Share images with other specialist or clients
- Images and reports are available from any PC
- Professional presentation of your results to end customer
- Straightforward and intuitive user interface
- Ideal for mobile workstyles
- Optimised for mobile devices

**Please get in touch with us if you would like to receive a demo access.**

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For more detailed information please see: www.or-technology.com
OR Technology
www.or-technology.com | X-perts in X-ray

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