



XPRESS-SCAN

DR system for automatic inspection of pipeline welds

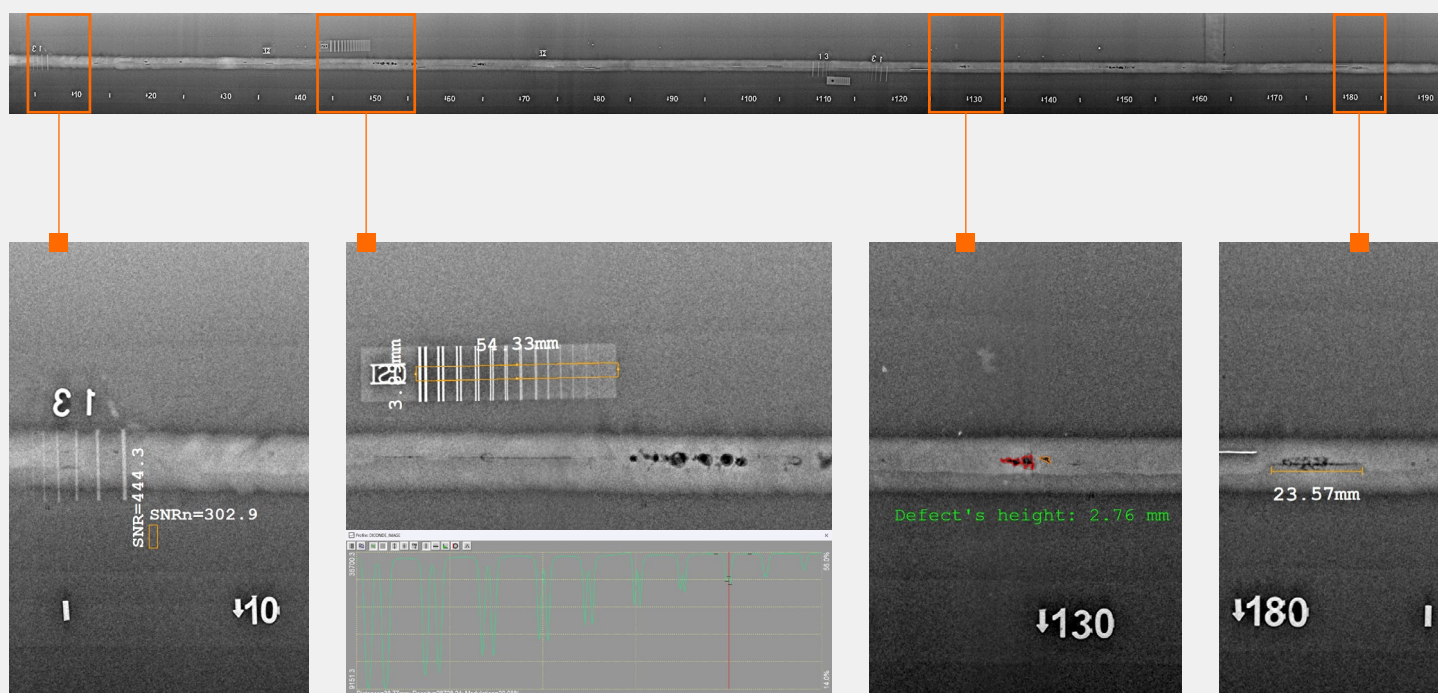


XPRESS-SCAN is a unique mobile digital radiography system featuring advanced proprietary technology, designed for automatic single- or double-wall inspection of pipe girth welds with diameters of 159 mm (6 inches) and above in pipeline construction, maintenance and repair.

The complex aims to drastically enhance the speed of non-destructive testing, streamline operations and reduce the risk of human mistakes. Inspection can be conducted immediately after welding, and instant results enable prompt adjustments to welding equipment settings should any defects be detected, ensuring they are not repeated in subsequent joints and thereby preventing project delays.

Resulting image

The entire girth weld is automatically tested in a single pass and displayed as a single continuous image.

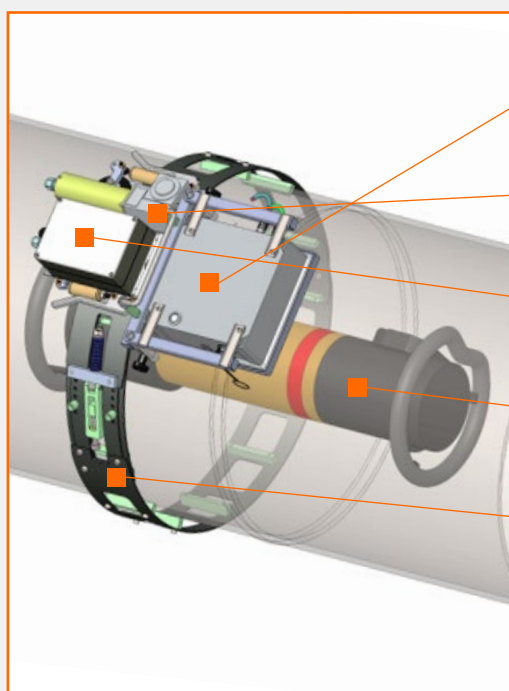


Key advantages

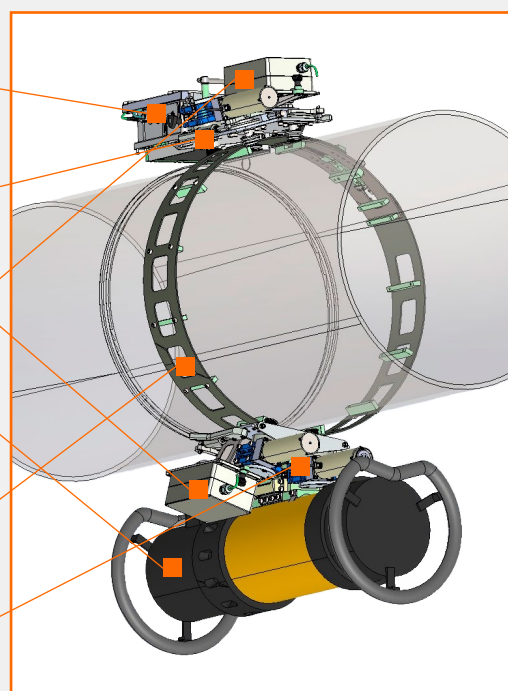
- Fully automatic testing of the entire weld in one go: the system performs radiographic inspection of the full girth weld without continuous operator involvement, minimizing dependency on personal skills, reducing human mistakes and ensuring stable, repeatable conditions across all joints.
- Fast and simple setup: installation on the weld takes only 1-2 minutes and does not require complex procedures or highly specialized skills, significantly reducing preparation time and allowing operators to focus on inspection rather than equipment setup.
- High compatibility and flexibility: the system can be used with a wide range of X-ray or gamma sources and various crawler types, allowing easy integration into existing NDT procedures and adaptation to specific project requirements without additional modifications.
- Secure and standardized data handling: all results are stored in protected DICOM format per ASTM E2339-21, including metadata such as exposure parameters and object details, ensuring full traceability and simplifying reporting, archiving and data retrieval.
- Battery-powered operation: independent from external power sources, the system ensures maximum mobility and uninterrupted performance even in remote or hard-to-access locations, supporting continuous operation in field conditions (the X-ray source may require a separate power supply).
- Real-time wireless data transfer with backup: images are instantly transferred to the operator's workstation via Wi-Fi for analysis, while internal carriage storage ensures that all obtained data is securely preserved even in case of unstable or lost connection.
- Complete ready-to-use solution: the system is supplied with a full set of accessories and is delivered in protective transportation cases, allowing immediate start of operations and eliminating the need for additional equipment procurement or preparation.
- High inspection speed with instant results: a complete digital image of the weld is obtained within minutes, enabling prompt on-site evaluation and decision-making, which is critical for maintaining workflow continuity and avoiding delays in pipeline construction.

Application configurations

Panoramic scheme



Double-wall scheme



Detector unit

Detector carriage

Battery

X-ray source

Pipe band

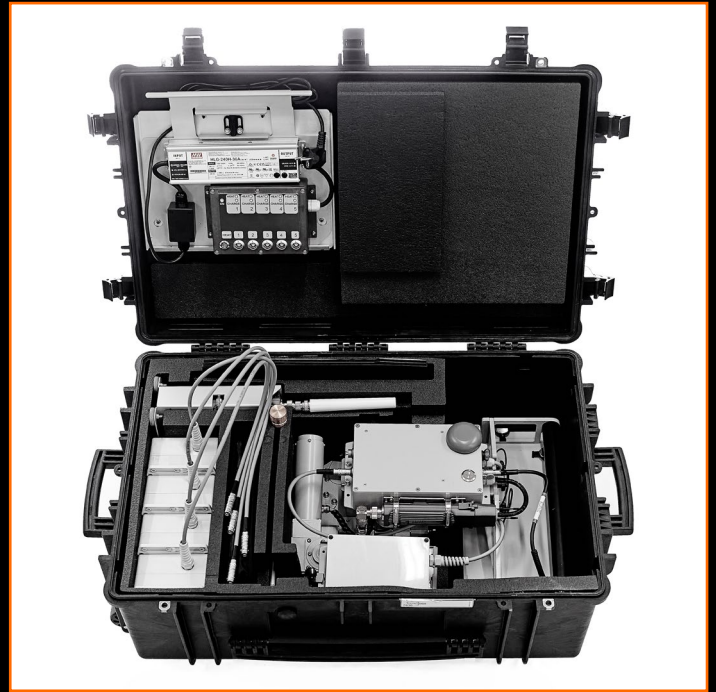
Source carriage

Specifications

PROPERTIES	XPRESS-SCAN	XPRESS-SCAN DW
Detector	SCANRAY 1230	
Pixel pitch, μm	124	
Image size, mm (inches)	127 × 317 (5.0 × 12.5)	
Productivity for pipe Ø 56" (1,420 mm), 21 mm wall thickness, min/weld	6	16
Maximum Wi-Fi range, m	300	
Data storage	Internal memory (in case of Wi-Fi connection failure, the exposure continues, and the data is secured)	
Image storage capacity, data files	200	
Power supply	5 Li-Ion batteries of high capacity (UN 38.3 certified)	
Battery life, h	5	
Dimensions of shipping cases, mm	860 × 560 × 360	
Quantity of shipping cases, pieces	1	2
Total weight, kg	42	81
Weight of titanium pipe band, kg	up to 7 (depends on diameter)	
Operating environment, °C	-20 to +55	
Dust and water resistance	IP67	

Scope of delivery

- Digital detector SCANRAY 1230 with detector carriage.
- Source carriage with holders.
- Wireless remote controller for carriages.
- Two titanium pipe bands in specified diameters.
- Set of 5 external battery packs with charger.
- Rugged laptop with the full license of DR-SOFT.
- Additional long-range Wi-Fi module.
- Calibration steel plate.
- Accessories kit for installation and operation.
- Transportation cases.



Field applications



DIGITAL RADIOGRAPHY SYSTEMS, SOFTWARE AND AI INSPECTION SOLUTIONS

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