

INNOVATIVE TECHNOLOGIES
IN X-RAY NON-DESTRUCTIVE
TESTING



DIGITAL RADIOGRAPHY SYSTEM

ITSM*

* ITSM — Improving of Testing Sensitivity in Motion technology developed in our research laboratories. The Technology based on dynamic integration combined with real time deconvolution that allows sufficient noise reduction preserving impressive spatial resolution



ITSM Digital Radiography system

- Fits DNV Class B SWSI at speed up 4 meters per minute
- Compatibility with different DDA of major producers
- Effective real time math processing (filtering)
- Object motion control
- Increased signal to noise ratio
- High performance

We work on Digital Radiography projects for more than 20 years. The experience we have gained during these years enabled us to design a conceptually new digital radiography system. The system is based on the advanced technology which has never been used before.

The system is developed to test longitudinal and circumferential welds in motion.

We have managed to obtain high-contrast X- ray images of moving objects (less than 1% of contrast sensitivity) at the speed of 4 m/min. How have we done it? Due to up-to-date components and technologies we have used and a new graphic accelerator for real time image processing we have developed.

The mechanical part of the system is robust and reliable; the system is easy to install and maintain. System's interface is user-friendly and foolproof.

Users have already estimated the system highly and positively – more than 10 systems now operate at users' premises with a great success.



Pipe speed 4 m/min. Wall thickness 17 mm with 5 mm weld reinforcement. Contrast sensitivity 1%



Still image. Accumulation 30 seconds. Wall thickness 40 mm. Contrast sensitivity 0.4%



Still image. Accumulation 1 second. Wall thickness 18 mm.