

A1550 INTROVISOR

Ultrasonic Flaw Detector-Tomograph with an antenna array digitally focused to all points of visualized cross-section



The universal portable ultrasonic flaw detector-tomograph with DFA (Digitally Focused Array) visualize the internal structure of the object as real-time section imaging (B-Scan) making the results interpretation much easier than with a traditional flaw detector.

The tomograph uses various types of antenna arrays comparable by size with traditional transducers. Thanks to our special control algorithm the antenna array (AA) substitutes a whole kit of standard transducers traditionally used for testing.

A1550 IntroVisor operates basing on the principle of DFA virtual focusing to every point of the visualized section, providing high efficiency and best results for spatial resolution and sensitivity.

The A1550 IntroVisor tomograph is designed to meet the challenge of quick and efficient flaw detection at metal, plastic and composite objects with detailed documenting of the results.

Special software for 3D reconstruction of the welding joints

APPLICAZIONI

- Weld joints inspection;
- Locating corrosion, cracks, internal stratifications and other flaws;
- Locating and sizing up flaws (discontinuities and inhomogeneities) in metal and plastic objects;
- Thickness measurement;
- Real-time imaging of the object internal structure;
- Option to use various types of ultrasonic waves:
 - Shear waves to inspect welds overlapping angular range used by standard methods of ultrasonic testing;
 - Longitudinal waves to inspect base metal.
- Enhanced resolution and sensitivity. Possibility to measure discontinuity flaw size. High testing efficiency;
- Can operate as a tomograph (B-Scan) and as a traditional flaw detector (A-Scan);
- Weld joints scanning mode (C-Scan) with saving results to memory;
- Reflecting images of vertically oriented flaws. Size of image in pixels: 256 x 256;

TECHNICAL FEATURES

• Tomogram reconstruction interval:	0,1 – 2,0 mm
• Operation frequencies:	1,0; 1,8; 2,5; 4,0; 5,0; 7,5; 10,0 MHz
• Velocity range:	1.000 – 10.000 m/s
• Attenuator range:	0 – 100 dB
• Attenuator interval:	1 dB

• Display type:	TFT
• Display resolution:	640 x 480
• Power:	Lithium accumulator
• Rated power voltage:	11,1 V
• Operation time with the accumulator:	not less than 8 h
• Size of the electronic unit:	260x166x80 mm
• Weight of the electronic unit:	1,8 kg
• Operation temperature:	from -10 to +55 °C

ACCESSORIES

- Detachable Lithium accumulator;
- M9065 4.0V60R40x10CS antenna array;
- 9060 4.0V0R40X10CL antenna array;
- M9170 4.0V70R26X10CS antenna array;
- S3568 2.5A0D10CL transducer;
- S5182 2.5?65D12CS transducer;
- S5096 5.0?70D6CS transducer;
- LEMO 00 – LEMO 00 single cable 1,2 m;
- USB A – Mini B cable;
- Power adaptor with cable;
- Calibrating sample V2/25;
- Soft cover;
- Travel bag.