Ultrasonic testing systems | 100 MHz | PHAsisNEO

PHAsisNEO, for fast, simple use in production – reliable testing without profound ultrasonic knowledge.

PHasis NEO picture own

Ultrasonic inspection device for the fast and precise inspection of welded joints in production, especially spot welds and short weld seams

Advantages

- Key Visualization: C/D scans illuminate the weld, providing clarity and precise detail.
- High Resolution: More than 700 measuring points ensure superior resolution for pinpoint welding lens diameter accuracy.
- Easy assessment: Automatic image-based suggestions for reliable inspection without the need for ultrasound expertise.
- Inspection speed: Accelerated inspection thanks to simultaneous scanning of large areas.
- Versatile Probes: Universal probes eliminate the need to change equipment for different sample types.

Benefits

• Imaged display: direct visualization of weld beads via C/D scans for simplified quality assessment.

- High resolution: more than 700 measuring points for precise determination of the welding lens diameter.
- Automatic assessment: assessment suggestions based on predefined parameters, facilitating inspections without ultrasonic expertise.
- Fast inspection: Reduced inspection times thanks to simultaneous scanning of a large area.
- Probe universality: No need to change probes for different samples, simplifying the inspection process.

Related industries

At your service

Need help in selecting the right product?

Need more information?

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• PDF

- Technical Info
- Drawings
- 3D

PHAsisNEO

Dimensions 350 x 280 x 90 mm

Weight 4.950 kg

Display 13" Touchscreen, replaceable

PC Board Intel Pentium QuadCore @ 2,5 GHz, 8 GB

RAM, 512 GB SSD

PHAsisNEO

Interfaces 2x USB 2.0, 1x USB 3.0, HDMI

Protection class IP 64, restricted

Battery 2x Lithium-Ion, min. runtime > 7 Std

Phased Array test

channels

128, 16 thereof parallel

Digitization rate 100 MHz

Communication LAN 1GBit/s, WLAN, Bluetooth 4.2

Max. IFF 20 KHz

Max. pulse amplitude +/- 100 V (neg. square pulse)

Band width (-3dB) 0.5 - 25 MHz

Pulse width ? 5 ns

Focal Laws > 700 (virtual probes)

Power supply 100 - 240 VAC 50 Hz - 60 Hz

Operation

temperature

0°C - 40°C

Relative Humidity 80%, non-condensing

Cooling passive (no fan)

Housing IP 64 (restricted), shock protection, passive

cooling, swiveling handle

Standard Probe

Type Phased Array 2D Matrix

Number of elements 11 x 11 arranged in square

Cable Long-Life 2.5 m; 5 m for robot

applications

Nominal frequency 12 MHz 20 MHz

Inspection area 9 x 9 mm 11.7 x 11.7 mm

Physical resolution more

precise than

0.35 mm

0.45 mm

Software

Administration and communication:

- Access rights and user management
- Test equipment monitoring and management of inspection devices
- Management of plate pairing and materials
- Various interfaces such as test plan import, result export or communication interface for automated testing

Inspection:

- "Inspection according to test plan" mode: secures testing with 100% fulfillment and enables safe testing with minimal training
- Improved setup of inspection plans and easy to go inspection according to proven standards of conventional ultrasonic inspection
- "Free testing" mode: fast testing without a test plan with instantly selectable standard or individual parameter setsManagement of plate pairing and materials
- Inspection mode for highly sound-attenuating materials or very rough surfaces
- Multiple modes for detection of cladding
- Access to all setting parameters at any time for the implementation of individual evaluations

Data management:

- Creation and administration of test plans and free testing
- Transfer of the results of the free testing into new test plans

- Management of plate pairings, evaluation and ultrasonic parameters
- Inspection plans on all devices by means of synchronization
- Individual color display of spot welds (D-Scan)
- Test reports can be exported as Word, Excel or PDF documents. Two different types of reports available: detailed and compressed
- Predefined, universal ready to go setups as well as the creation of individual advanced setups

Applications