

Flaw Detectors

UFD-50

Inhomogeneities and flaws identified quickly and safely

The UFD-50 is a lightweight, ergonomically ultrasonic flaw detector, which particularly is suitable for assessing and locating of material defects and flaws. It also can be used for measuring of wall thickness.



Ultrasonic Flaw Detector UFD-50

Non-destructive, fast and reliable material testing

Equipped with a color TFT screen with a resolution of 640x480 pixels, faster refresh rates and many other functions, this device is an ideal choice for the ultrasonic inspection in the field of searching and finding of material defects.

With the recent advances of digital electronics, the UFD-50 embodies a wealth of experience in the field of ultrasonic testing. It represents the new standard for the digital and modern equipment of the manual control and allows a high degree of accuracy to find flaws in tested workpieces reliably.

Welds, forgings, rods and tubes, tanks and large containers are examples of the wide range, which includes the UFD-50. The robust construction ensures the use not only in the laboratory but also in workshops and outdoors. The proven menu navigation allows quick access to all functions and settings of the transducer and device parameters. The measurement results can always be archived in the memory of the device.

Additionally, the supplied software "UdReport" allows the full documentation of the performed tests.

Features

- Display: Color TFT 135 x 100 mm (640 x 480 pixels)
- Power: Broadband 0.4 - 15 MHz
- TCG with a range of up to 70 dB, 12 dB / ms with the construction of the curve for the 32-m reference points
- DGS function with transducers database optionally
- Optical and acoustic signal of found defects

- The repetition frequency GI: to 800 Hz
- Zone control with two independent, individually defect detection logic
- Output signals in the form of A-, B- Scan
- Interface: USB
- Power: Li-ion battery or external power supply
- Operating time (battery): up to 8 hours

Specifications

- All SaluTron® gauges correspond to national (DIN) and international (ISO, BS, ASTM) norms and possess the CE-sign. Specifications are subject to change without prior notice.

Scan	min.: 0 - 4 mks max.: 0 - 1.000 mks adjustable in steps of 1 ms
Maximum length of tested material	to 3.000 mm (echo-mode)
Velocity range	1.000 - 9.999 m/s
The delay in the prism	0 - 100 ms in increments of 0.01 ms
Damping	25 Ohm / 50 Ohm / 1.000 Ohm
Input impedance	50 Ohm / 600 Ohm
Interrogator	RF pulse, amplitude of 50 or 200, with an adjustable number of half periods (1-10), with a variable duration of between 50 and 500 ns, 16 ns increments

Gain control range	110 dB in increments of 0.5, 1, 2, or 6 dB
Additional key + dB	0-40 dB programmable in steps of 0.5 dB
Temporary control gain (TCG)	range up to 90 dB, 12 dB / ms with the construction of the curve by 10 reference points manually entered or control reflectors
Distance-Amplitude-Curve (DAC)	building on the 10-point height adjustable two additional curves DAC 0- 12 dB from the base (0.5 dB increments)
Detection	positive or negative half-wave, full, radio (in all range scan), B-scan
Memory	100 settings with the A-signal 500 control protocols (signal envelope, the result of measurement, the parameters of the device, the date, time and name of the protocol)
External power supply	230V AC, 50Hz
Operating temperature range	from -20 °C to +50 °C
Dimensions (H x W x D)	200 mm x 225 mm x 80 mm
Weight	2 kg with batteries

Standard delivery range

- Device UFD-50
- 4 standard transducers
- 2 cabel lemo0-lemo0
- Evaluation and transfer software
- Data transmission cable to PC
- Battery
- Power supply 110 - 240 V
- User manual
- Carrying case

Optional accessory

- DGS function with transducers database
- Transducers for custom applications
- Test blocks
- Protection bag