



CORROSION MODULE

THROUGH COAT MEASUREMENT

OPTIONAL FLAW DETECTOR UPGRADE

IDEAL FOR ROPE ACCESS APPLICATIONS

COMPACT & POWERFUL FOR FIELD USE

ADVANCED ULTRASONIC A-/B-SCAN WALL THICKNESS GAGE

SONOWALL 70

FOR NONDESTRUCTIVE TESTING

MADE IN GERMANY

SONOTECH 
ULTRASONIC SOLUTIONS

AN EXTREMELY RELIABLE COMPANION IN ROUGH ENVIRONMENTS

The powerful SONOWALL 70 is perfect for a wide range of ultrasonic wall thickness measurement applications including standard testing of metals, glass and ceramics.

In high penetration mode high attenuating materials and structures become possible to measure such as composites, plastics, rubber, fiberglass or thick castings.

The SONOWALL 70 is capable of measuring rough materials, through coatings and even objects with multiple layers with separate measurements for each layer of different material.

The precision module of the device can measure very thin materials with a high resolution. Via time encoded B-scan you can display a detailed cross section of the tested specimen along one axis.

A wide selection of SONOTEC probes and the fact that other manufacturer's probes can be connected easily makes the SONOWALL 70 the most versatile wall thickness device on the market.



CORROSION MODULE FOR EFFICIENT MATRIX DATA ACQUISITION AND REPORTING

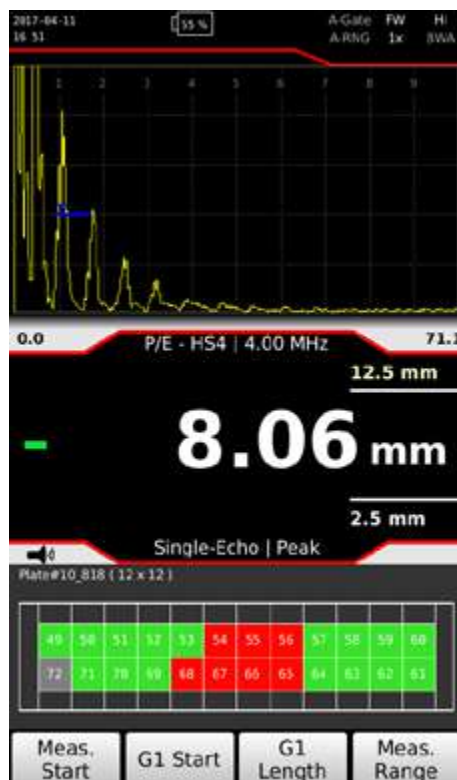
Corrosion surveys are one of the most popular applications for the thickness gaging in the industry. Most often those surveys are performed by certain grids in order to obtain a clear picture of corrosion in a certain area.

To help organize the readings and improve the visualization of the material condition SONOWALL 70 is therefore equipped with the corrosion module.

Threshold, measurement results and evaluation at a glance



Grid with color coded visualization of tested points



Features:

- Intuitive grid of the test path
- Save measured points by one click
- Automatic grid repetition after last measurement
- Color coded grid visualization according to selected limits
- Differential & percentage value of wall loss
- Fully customizable survey report in CSV

Benefits:

- Effective and accurate measurements
- Fast Data logging
- Clear visualization of all measuring points
- Avoiding mistakes: measured points are colored
- Points can be measured selectively anew
- Fast and convenient reporting

BEST IN CLASS PERFORMANCE



Rubber protection and grip

High resolution anti-glare 5" graphic display (800 x 480 px), color scheme selectable

Customizable display of measurement values

Rotary knob and 4 soft keys – for rapid, streamlined operation and easy access to all functions in left- and right-handed usage



Custom function soft key

2x LEMO-00

Wireless probe recognition SONO-ID



Mini USB port | microSD | Power supply

Largest A-scan presentation in its class:

Horizontal 34 x 63 mm
Landscape 43 x 100 mm
Full screen 110 x 66 mm

Comfortable reading with a selectable filled A-Scan

Robust aluminum housing

IP67 certified

Measurement context, tester and test object at a glance

Short cut function for fast access to all relevant settings

Drop tested according to EN 60068-2-31 (2008); 20 Drops



EVERYTHING YOU NEED

- Echo-echo & single-echo mode
- Corrosion modul
- Through-coat measurement
- High penetration and precision mode
- Multi-layer measurement
- Time encoded B-scan
- CSV report generation
- Video output
- Single & dual element probe operation
- Flaw detector upgrade

VIDEO TUTORIALS



Watch our SONOWALL 70 video tutorials and get to know more about its broad functions:



<https://www.youtube.com/SONOTECHGmbH>

OPTIONAL UPDATE TO FULL FUNCTION FLAW DETECTOR



The SONOWALL 70 can be used in two operating modes - wall thickness mode and flaw detector mode. Both software modes can easily be updated vice versa and include:

- DGS
- DAC with TCG
- AWS D1.1
- Backwall echo attenuation
- Automatic gates
- SONO-ID
- CSV reporting

ACCESSORIES

SONOWALL 70

- Handstrap for ergonomic single hand operation
- Desktop stand - ideal for inside use and calibrations
- Transport case including space for accessories
- 4-point working harness for longterm operation (sold separately)



APPLICATIONS: INDUSTRIES, MATERIALS AND STRUCTURES



AEROSPACE - OIL & GAS - MINING - FABRICATION - POWER GEN - MANY MORE

- Metals
- CFRP & GFRP
- Plastics
- Composites
- Rubber
- Corrosion monitoring
- Maintenance checks
- Abrasion monitoring
- Testing of castings and forgings
- Sound velocity measurement



Standards	DIN EN 15317, ASTM E 1324, ASTM E 317
Operating temperature	-20 to +60 °C
Screen	5" TFT Screen, 800 x 480 pixels, 60 Hz
Measurement methods	Single-Echo, Echo-Echo
Size (W x H x D)	195 x 115 x 40 mm
Weight	990 g
Case	Aluminum
Protection class	IP 67
Battery	Li-Ion, up to 12h operation
Wireless probe recognition	Available for selected SONOSCAN probes via SONO-ID
Internal memory	16 GB
Memory card	microSD up to 128 GB
Video output	Adapter to LDVS, DVI or HDMI
Reporting	JPEG, PNG, CSV report files
Transmitter	
Frequency	0.5 to 15 MHz (up to 30 MHz optional)
Pulse	Negative rectangle (single pulse)
Pulse width	20 to 500 ns, in steps of 5 ns
Amplitude	0 to 400 V, in steps of 10 V

Damping	50 Ohm; 400 Ohm
Receiver	
Dynamic range	Up to 130 dB
Amplifier bandwidth	0.2 to 20 MHz
Digital filters	1/2/4/5/10/15/0.5-20 MHz
Input impedance	500 Ohm (in T/R-mode)
Probes compatibility	Single and dual element (manufacturer independent)
Resolution	Up to 0.001 mm or 0.0001 "
Scan	100 MSps @ 12 Bit
Gates	Auto-Gate function for gate 1+2 Gate 3+4 only available in multi-layer mode
Measurement range	Up to 10 000 mm
Probe connectors	2x LEMO (IP 67 compliant)
Functionalities	<ul style="list-style-type: none"> • V/W error correction • Automatic gates • Subsequent measurement of frozen A-scan • High penetration mode • Differential and % wall loss • Time encoded B-scan option • Temperature compensation • Through-coat measurement • Multi-layer measurement • Sound velocity measurement

SONOSCAN ULTRASONIC PROBES

Probe		Frequency	Element Size	Measuring Range
PL1	Single Element Probe	1 MHz	Ø 24 mm	20 to 2000 mm
PS2	Single Element Probe	2 MHz	Ø 10 mm	6 to 1000 mm
TS2	Dual Element Probe	2 MHz	Ø 11/2 mm	5 to 800 mm
TL2	Dual Element Probe	2 MHz	7 x 18 mm	10 to 1500 mm
PS4	Single Element Probe	4 MHz	Ø 10 mm	4 to 600 mm
TS4	Dual Element Probe	4 MHz	3.5 x 10 mm	2 to 500 mm
TS5	Dual Element Probe	5 MHz	Ø 12/2 mm	1 to 400 mm
TXS7.5	Dual Element Probe	7.5 MHz	Ø 8/2 mm	0.8 to 50 mm
PXS10	Single Element Probe	10 MHz	Ø 6 mm	0.6 to 100 mm

We offer an extensive range of different SONOSCAN standard pulse echo and dual element probes as well as probes with SONO-ID for wireless probe recognition.

Via SONO-ID you can recall test setups extremely fast and have the equipment ready to work in seconds.

Simply choose the probe that matches your application from our product range.



FAST SERVICE & PROFESSIONAL SUPPORT

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