



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



**SONOTEC**  
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

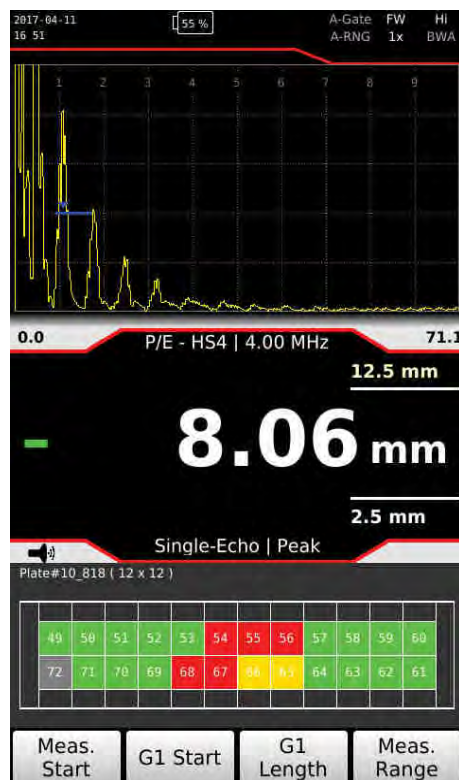
Corrosion surveys are one of the most popular applications for the thickness gaging in the industry. Most often those surveys are performed by certain grids in order to obtain a clear picture of corrosion in a certain area.

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



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

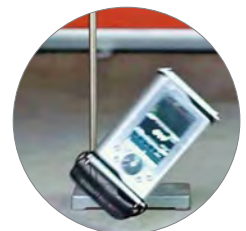
IP67 certified

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

Mini USB port | microSD | Power supply



## 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

## INCLUDED ACCESSORIES

### SONOWALL 70

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



# 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



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

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

## 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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 Germany



**SONOTEC**   
 Certified according to ISO 9001

Subject to change without notification!  
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