



شرکت پترو فرهان گستر جنوب

NEW



- CORROSION MODULE
- TROUGH COAT MEASUREMENT
- PRECISION MEASUREMENT
- TIME ENCODED B-SCAN
- FLAW DETECTOR UPGRADE
- BEST IN CLASS PERFORMANCE

ADVANCED ULTRASONIC A-/B-SCAN WALL THICKNESS GAGE

# SONOWALL 70

FOR NONDESTRUCTIVE TESTING

MADE IN GERMANY

DIGINDT.IR

SONOTEC

## SONOWALL 70 - ADVANTAGES AT A GLANCE

### BOOST YOUR PRODUCTIVITY

More built-in features for even greater efficiency:

Advanced corrosion module with easy setup for test path grid creation, data logger for rapid measurement savings with 16 GB internal memory, multi layer measurement with up to 4 layers measured simultaneously, extended accuracy mode which increases the resolution up to 0.001 mm, temperature compensation for automatic measurement recalculation of hot or cold test objects, high penetration option improving measurements on highly attenuating materials and more...

### CUSTOMIZEABLE DISPLAY AND KEY ASSIGNMENT

Flexible measurement value selection, flexible key assignment for optimal gage configuration for your application.

### FAST RESULT EVALUATION

The adjustable min/max tolerance generates an alarm signal, when the threshold is exceeded, additionally the color coded bar graph helps evaluating by giving a constant feedback during the measurement.

### MULTIPLE MEASUREMENT MODES

Digital reading of selected values, A-scan and B-scan mode.

### LARGEST A-SCAN PRESENTATION IN ITS CLASS

The automatic „Flip screen“ function features a high-resolution A-scan display of 470 x 256 pixels in portrait mode and stunning 790 x 470 pixels in full screen landscape mode - much bigger than in other devices. The A-scan size assures a perfect amplitude presentation for hours of testing.

### ONE CLICK SETUP LOAD

The setup data base allows to load previously saved setups without complicated data re-entry. A setup can also be loaded from previously made screenshots.

### SONO-ID WIRELESS PROBE IDENTIFICATION

The SONOWALL 70 is the first thickness gage in the market with intelligent wireless probe recognition.

In addition, the extended probe management enables probe-specific information, such as DAC-curves, delay lines and serial numbers, to be saved directly in the probe.



### ONBOARD PDF READER

The operation manual is stored in the device memory; an integrated PDF reader can also display personal files.

### GRAB AND GO SIMPLICITY

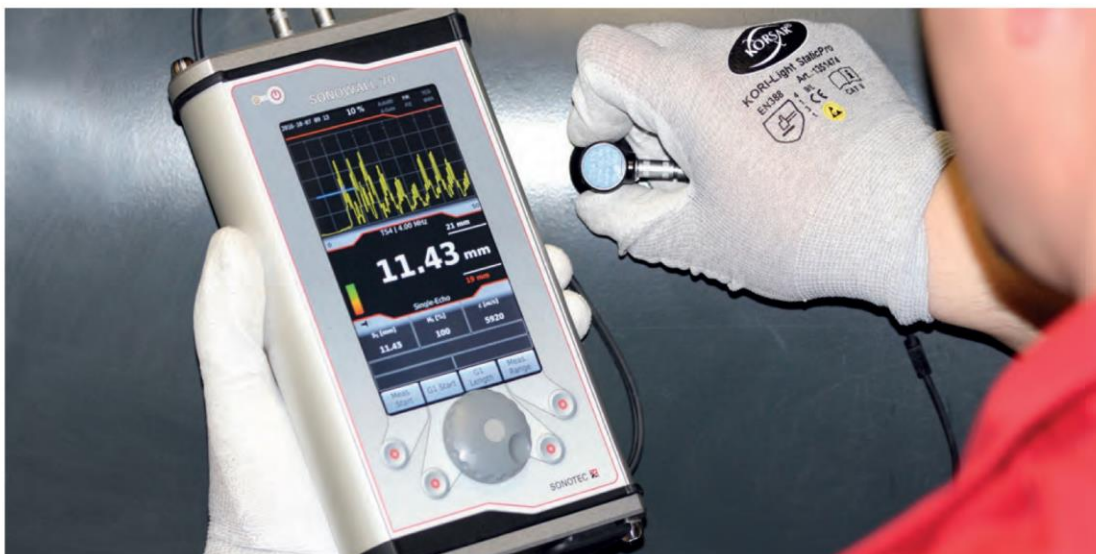
Simple and extremely intuitive menu with clear structure and full text. Intuitive interface, light-weight and eye friendly design, ergonomic one-hand-button navigation and automatic screen rotation for portrait or landscape view makes the SONOWALL 70 amazingly comfortable to operate - even in hard to reach areas.

### ROBUST AND RELIABLE

Aluminum housing, IP 67 protected and the broadest operating temperature range in its class - from -20 to +60 °C.

### DOCUMENTATION +

Quick report generation in CSV format, easy transfer via mini SD card or mini USB for fast documentation of your work.



The SONOWALL 70 is designed for the harshest environments and your toughest inspection jobs.

# APPLICATIONS



- Wall thickness measurement of different materials (metals, rubber, glass, plastic, etc.)
- Wall thickness measurement through coatings of different materials
- Thickness measurement of multilayer materials (Composites)
- Through coating measurements

- Corrosion monitoring
- Maintenance checks
- Oxide scale measurements
- Sound velocity measurements to estimate elastic modulus
- Measurement of even thick castings and forgings



## TECHNICAL DATA SONOWALL 70



<b>Standards</b>	DIN EN 15317, DIN EN 61326, ASTM E 1324, ASTM E 317	<b>Pulser</b>	Adjustable up to 400 V
<b>Operating temperature</b>	-20 to +60 °C	<b>Damping</b>	50 Ohm; 400 Ohm
<b>Screen</b>	5" TFT Screen, 800 x 480 pixels, 60 Hz	<b>Receiver</b>	
<b>Measurement methods</b>	Single-Echo, Echo-Echo	<b>Dynamic range</b>	Up to 130 dB
<b>Size (W x H x D)</b>	195 x 115 x 40 mm	<b>Amplifier bandwidth</b>	0.2 to 20 MHz
<b>Weight</b>	990 g	<b>Digital filters</b>	0.5, 1, 2, 2.25, 4, 5, 7.5, 10, 15, 0.5 - 20 MHz
<b>Case</b>	Aluminum	<b>PRF</b>	45 Hz
<b>Protection class</b>	IP 67	<b>Input impedance</b>	500 Ohm (in T/R-mode)
<b>Battery</b>	Li-Ion, up to 12 h operation	<b>Probes compatibility</b>	Single and dual element (manufacturer independent)
<b>Wireless probe recognition</b>	Available for selected SONOSCAN probes via SONO-ID	<b>Resolution</b>	Up to 0.001 mm
<b>Internal memory</b>	16 GB	<b>Scan</b>	100 MSps @ 12 Bit
<b>Memory card</b>	microSD up to 128 GB	<b>Gates</b>	Up to 4 independent gates, automatic
<b>Video output</b>	Optional (LDVS, DVI or HDMI connector)	<b>Measurement range</b>	Up to 10 000 mm
<b>Reporting</b>	JPEG, PNG, CSV report files	<b>Probe connectors</b>	2x LEMO (IP 67 compliant)
<b>Transmitter</b>		<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 option</li> <li>- Differential and % wall loss</li> <li>- Time encoded B-scan option</li> <li>- Temperature compensation</li> <li>- Through coating measurement</li> <li>- Multi-layer measurement</li> <li>- Sound velocity measurement</li> </ul>
<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>Output impedance</b>	50 Ohm, 400 Ohm		

## SONOSCAN ULTRASONIC PROBES

We offer an extensive range of different SONOSCAN probes - standard probes and probes with SONO-ID. Simply choose the probe that matches your application from our product range.



**ANGLE BEAM PROBES** –  
in a range of sizes, angles and frequencies



**STRAIGHT BEAM PROBES** –  
pulse-echo and dual element probes for precise wall thickness measurement

## ULTRASONIC TESTING TECHNOLOGY MADE IN GERMANY

SONOTEC was founded in 1991 by the two physicists Dr. Santer zur Horst-Meyer and Hans-Joachim Münch and is still owner operated. With currently more than 140 employees SONOTEC is a growing technology company highly renowned as solution

provider for ultrasonic measurement technologies especially in the field of nondestructive testing (NDT). The integration of a strong R&D department and flexible manufacturing makes SONOTEC the ideal partner for your NDT tasks.

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