

Including flaw detection mode

SONO-ID for wireless probe recognition

SONOGRID corrosion management software

A-/B-Scan Ultrasonic Gauge

SONOWALL® 70

Thickness Measurement and Flaw Detection

MADE IN GERMANY

Nondestructive Testing

SONOWALL® 70

Best Performance in its Class



Optional heavy duty case and working harness for hands-free operation

High resolution anti-glare 5" display (800px × 480px), colour scheme selectable

Setup, probe, material and calibration block database

Customizable display of measurement values

Mini USB port, microSD, power supply

Largest A-scan presentation in its class: 4,7" diagonal

Optimal readability even in direct sunlight

Powerful 400V pulser for highest penetration capabilities

Short cut function for fast access to all relevant settings



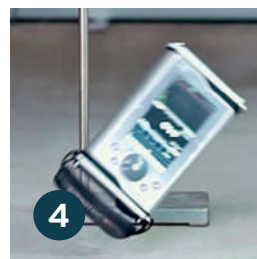
Maximum Flexibility
Custom function softkey and 2× LEMO 00 for connecting probes from other manufacturers



SONO-ID
For wireless probe recognition and setup transfer

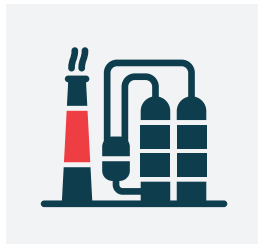


Design
Rotary button with 4 soft keys for rapid, operation and easy access to all functions in left-/right-handed use



Robust Housing
Robust aluminum housing IP67 certified, drop tested according to EN 60068-2-31 (2008); 20 Drops

Applications and Industries for SONOWALL® 70



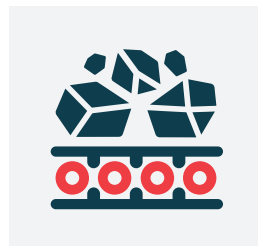
**Corrosion and Erosion
Measurement**
e. g. oil and gas industry



**Quality Control of For-
gings and Castings**
e. g. heavy industry



**Inspection of Steel
Constructions**
e. g. shipbuilding
industry



**Abrasion Testing of
Conveyor Belts**
e. g. mining industry

Materials: Metals | CFRP & GFRP | Plastics | Rubber etc.

SONOSCAN UT Probes

We offer a large selection of SONOSCAN standard single element and dual element probes as well as SONO-ID probes for wireless probe identification.

SONOTEC is also specialized in customized probes - therefore, please send us test task!



SONOSCAN ultrasonic probes with SONO-ID tag

Standard Ultrasonic Probes for Thickness Measurement

Type	Frequency	Element Size	Measurement Range	
PL1	Single element probe	1MHz	Ø 24 mm	20 mm ... 5 000 mm
PL2	Single element probe	2MHz	Ø 24 mm	15 mm ... 2 000 mm
PS2	Single element probe	2MHz	Ø 10 mm	6 mm ... 1 000 mm
TS2	Dual element probe	2MHz	Ø 11 mm / 2	5 mm ... 800 mm
TL2	Dual element probe	2MHz	7 × 18 mm	10 mm ... 1500 mm
PS4	Single element probe	4MHz	Ø 10 mm	4 mm ... 600 mm
TS4	Dual element probe	4MHz	3.5 × 10 mm	2 mm ... 500 mm
TS5	Dual element probe	5MHz	Ø 9 mm / 2	1 mm ... 400 mm
TS5P	Probe with pipe adapter	5MHz	Ø 9 mm / 2	3 mm ... 200 mm
TS5H	Hight temperature probe	5MHz	Ø 8 mm / 2	3 mm ... 200 mm
TXS7.5	Dual element probe	7,5MHz	Ø 5 mm / 2	0.8 mm ... 50 mm
PXS10	Single element probe	10MHz	Ø 6 mm	0.6 mm ... 100 mm
PXS15	Single element probe	15MHz	Ø 5 mm	0.6 mm ... 25 mm

High-Performance Software

Powerful Software Functions:

- A- and B-Scan presentation
- Single and dual element probe operation
- Single-echo and echo-echo mode
- Automatic gate, range and gain control
- Differential wall loss
- V-Path error correction of sound beam
- Through-coat measurement
- Basic and expert mode (password protected)
- Temperature compensation
- Multi-layer measurement
- Sound speed measurement
- Dual element probe zeroing in air*

* For SONOSCAN and most third party probes.



Watch our **SONOWALL 70** video tutorials and get to know more details about its broad functions.

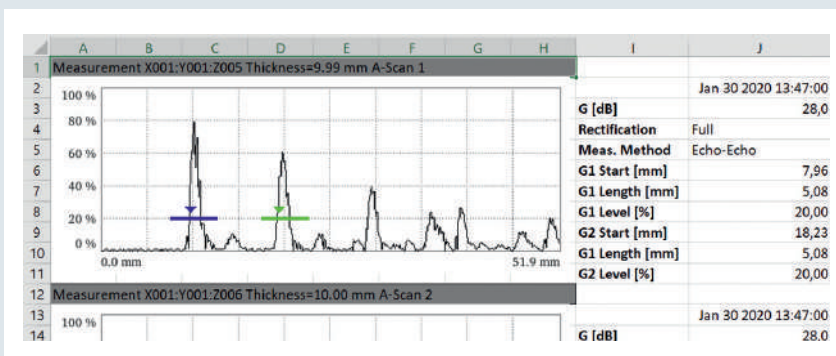
youtube.com/SONOTECEGmbH



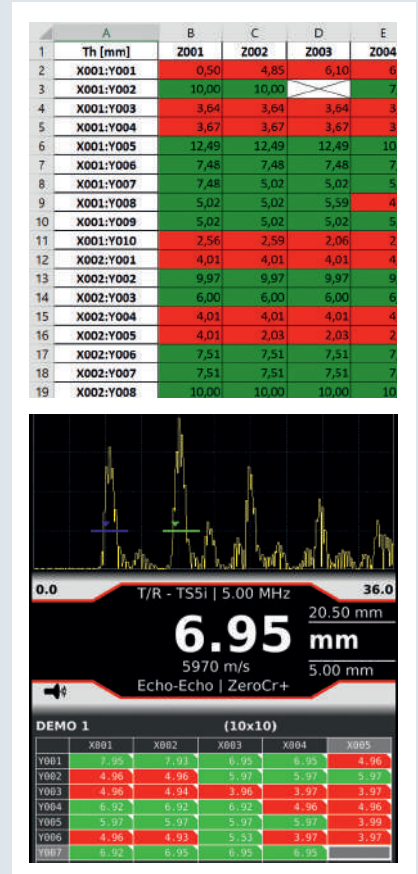
SONOGRID Corrosion Management Software

Efficient data acquisition, presentation and management

- Colour coded linear, 2D and 3D matrix creation including micro grids
- Copying of test grids with adjustment option
- Simple recording of measuring points incl. attachments such as A and B images
- Live comparison function and corrosion rate estimation
- Customizable test report in XLSX format and optional SQLite database
- Device setup list for all collected measurement points
- Sufficient text length for comments



Direct data export and reporting to MS Excel format including linked A-scans, B-scans, comments, setups and much more.

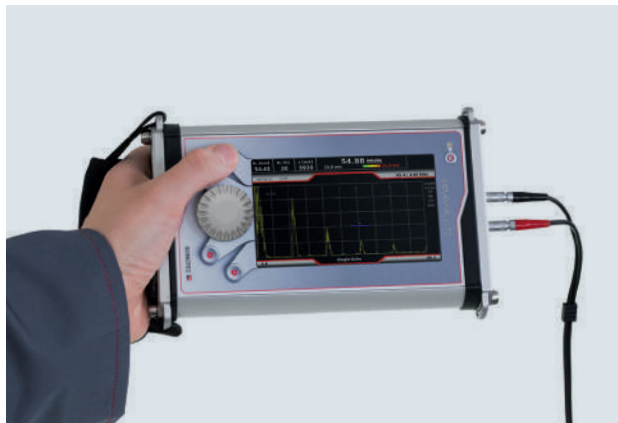


Efficient and reliable data collection with colour coded grid visualization

Flaw detection mode

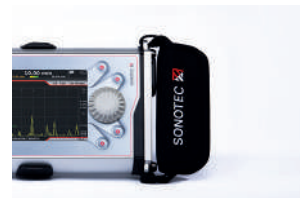
The SONOWALL 70 has the following basic flaw detection functions for inspections:

- Trigonometric calculations
- Applications with angle beam probes
- AVG / DGS
- DAC with TCG
- AWS D1.1
- Backwall echo attenuation



Accessories

- **Handstrap** for ergonomic single hand operation
- **Stand** for the work surface and calibrations
- **Transport and storage case** including space for accessories
- **4-point working harness** for longterm operation (optional)
- **Heavy duty protection case** for harsh environments (optional)
- **Calibration blocks, cables, probes** (optional)



SONOWALL® 70 High Temperature Corrosion Kit Complete Solution for Extreme Test Conditions

Complete Kit:

- **SONOWALL 70:** High-End A-/B-scan thickness gage with powerful pulser up to 400 V
- **Temperature Compensation:** Function for automatic adjustment of the sound velocity of hot test objects
- **SONSOCAN TS5H Ultrasonic Probe:** For precise high temperature measurements up to 550°C including armored cable and handle extension
- **SONOGRID Corrosion Management Software:** For efficient collection of linear, 2D and 3D matrix data
- **Heavy Duty Impact Protector Set:** For maximum protection against shocks and drops



Technical Data

General Data	
Standards	DIN EN 12668-1, ASTM E 1324, ASTM E 317, DIN EN 15317 (optional)
Ambient Temperature	-20°C ... +60°C
Display	5" TFT Screen, 800px × 480px, 60Hz
Measurement Methods	Single-Echo, Echo-Echo
Size (W x H x D)	195 mm × 115 mm × 40 mm
Weight	990 g
Housing	Aluminum
Protection Class	Gauge: IP67, Gauge with video connection: IP40
Battery	Li-Ion, up to 12 hours operation
Wireless Probe Recognition	For selected SONOSCAN Probes with SONO-ID
Internal Memory	8 GB
External Memory	MicroSD card up to max. 128 GB
Reporting	Data logger CSV Screenshots JPEG, PNG SONOGRID XLSX, SQLite database (optional)
Password Protection	For expert mode (access to all settings and basic mode configuration)
Probe Compatibility	Single and dual element (manufacturer independent)
Resolution	Up to 0.001 mm
Scan	100 MSps @ 12 Bit
Gates	2 independant gates (including automatic positioning) Gate 3+4 only available in multilayer mode
Measurement Range	Up to 10 000 mm (20 000 mm with screen shift)
Probe Connection	2 × LEMO 00 (IP67)

Transmitter	
Bandwidth	0.5 MHz ... 15 MHz
Pulse	Negative rectangle (single pulse)
Pulse Width	20 ns ... 500 ns, in 5-ns-steps
Voltage	0 V ... 400 V, in 10-V-steps
Damping	50 Ω, 400 Ω

Receiver	
Dynamic Range	Up to 110 dB
Amplifier Bandwidth	0.2 MHz ... 20 MHz
Digital Filters	1/2/4/5/7,5/10/15/0,5 ... 20 MHz (EN 12688-1 certified)
Input Impedance	500 Ω (in T/R-mode)

Contact and Support

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