SONOTEC

- 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 (800 px × 480 px), 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 400 V 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 Forgings 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	1 MHz	Ø 24 mm	20 mm ... 5 000 mm
PL2	Single element probe	2 MHz	Ø 24 mm	15 mm ... 2 000 mm
PS2	Single element probe	2 MHz	Ø 10 mm	6 mm ... 1 000 mm
TS2	Dual element probe	2 MHz	Ø 11 mm / 2	5 mm ... 800 mm
TL2	Dual element probe	2 MHz	7 × 18 mm	10 mm ... 1500 mm
PS4	Single element probe	4 MHz	Ø 10 mm	4 mm ... 600 mm
TS4	Dual element probe	4 MHz	3.5 × 10 mm	2 mm ... 500 mm
TS5	Dual element probe	5 MHz	Ø 9 mm / 2	1 mm ... 400 mm
TS5P	Probe with pipe adapter	5 MHz	Ø 9 mm / 2	3 mm ... 200 mm
TS5H	Hight temperature probe	5 MHz	Ø 8 mm / 2	3 mm ... 200 mm
TXS7.5	Dual element probe	7,5 MHz	Ø 5 mm / 2	0.8 mm ... 50 mm
PXS10	Single element probe	10 MHz	Ø 6 mm	0.6 mm ... 100 mm
PXS15	Single element probe	15 MHz	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.

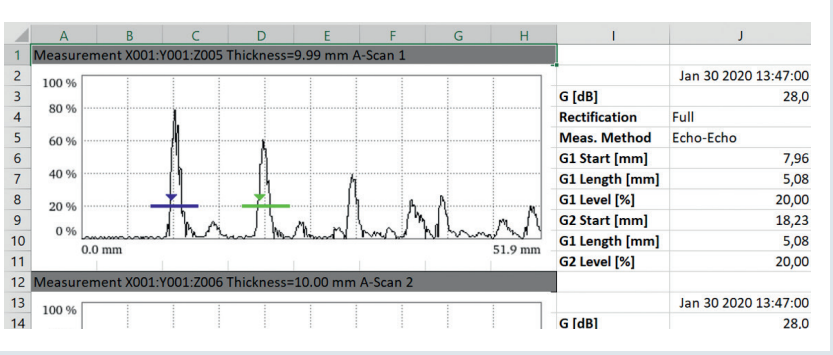
Watch our SONOWALL 70 video tutorials and get to know more details about its broad functions.

youtube.com/SONOTECGmbH

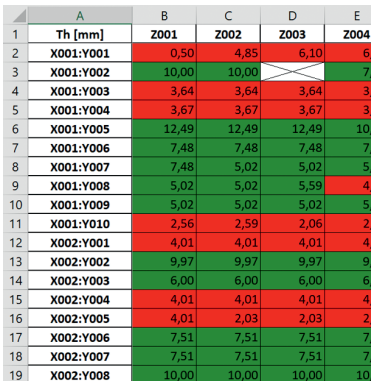
SONOGRID
Corrosion Management Software

Efficient data acquisition, presentation and management

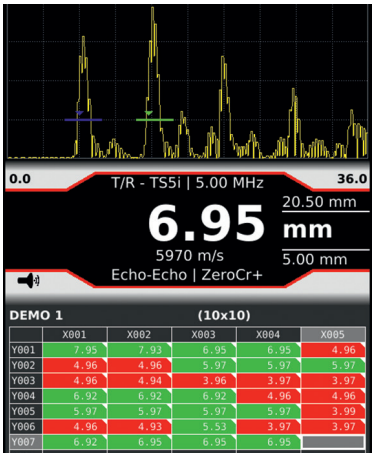
- Colour coded linear, 2D and 3D matrix creation including micro grids
- Copying of test grids with adjustment option
- Simple recording of measuring points incl. attachments such as A and B images
- Live comparison function and corrosion rate estimation
- Customizable test report in XLSX format and 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.



	Th [mm]	Z001	Z002	Z003	Z004
2	X001:Y001	0,50	4,85	6,10	6
3	X001:Y002	10,00	10,00		7
4	X001:Y003	3,64	3,64	3,64	3
5	X001:Y004	3,67	3,67	3,67	3
6	X001:Y005	12,49	12,49	12,49	10
7	X001:Y006	7,48	7,48	7,48	7
8	X001:Y007	7,48	5,02	5,02	5
9	X001:Y008	5,02	5,02	5,59	4
10	X001:Y009	5,02	5,02	5,02	5
11	X001:Y010	2,56	2,59	2,06	2
12	X002:Y001	4,01	4,01	4,01	4
13	X002:Y002	9,97	9,97	9,97	9
14	X002:Y003	6,00	6,00	6,00	6
15	X002:Y004	4,01	4,01	4,01	4
16	X002:Y005	4,01	2,03	2,03	2
17	X002:Y006	7,51	7,51	7,51	7
18	X002:Y007	7,51	7,51	7,51	7
19	X002:Y008	10,00	10,00	10,00	10



Efficient and reliable data collection with colour coded grid visualization

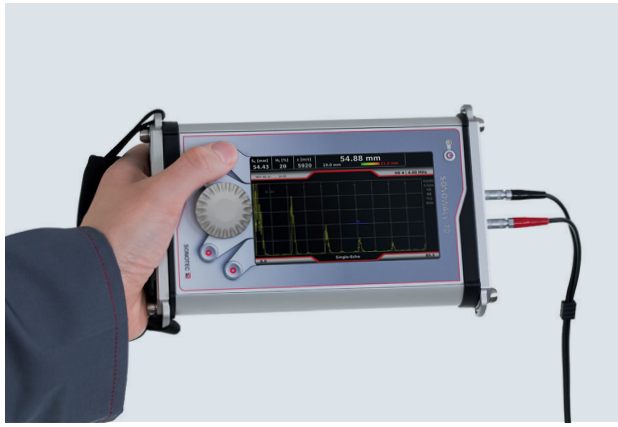
Flaw detection mode

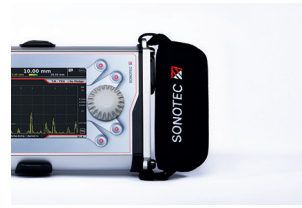
The SONOWALL 70 has the following basic flaw detection functions for inspections:

- → 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, 800 px × 480 px, 60 Hz
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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