

Full functioning flaw detector

SONO-ID for wireless probe recognition

SONOGRID corrosion management software

Advanced Ultrasonic Flawdetector

SONOWALL® 70

DAC (with TCG)

DGS

AWS D.1.1

MADE IN GERMANY

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 x 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

SONOWALL 70

2019-10-18 09:51 [69%] [rc] [SD] A-Gate A-RNG A-Gain 1x FW HI

42.0 dB

0.0 T/R - TSSj | 5.00 MHz 51.6 No Wedge 20.50 mm

10.00 mm

5.00 mm

Echo-Echo | ZeroCr+

Th [mm]	S ₁ [mm]	c [m/s]
10.00	10.30	5970

SONOTEC



Maximum Flexibility

Custom function softkey and 2x LEMO 00 for connecting probes from other manufacturers



SONO-ID

For wireless probe recognition and setup transfer



Design

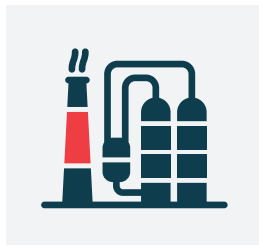
Rotary button with 4 soft keys for rapid, operation and easy access to all functions in left-/right-handed use



Robust Housing

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

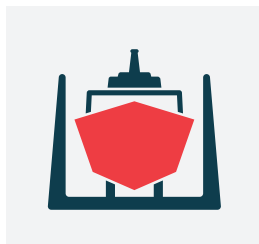
Applications and Industries for SONOWALL® 70



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

Type	Angle	Frequency	Element size	Connection
PL1	Single element	1MHz	Ø 24 mm	LEMO 1S
PL2	Single element	2MHz	Ø 24 mm	LEMO 1S
PL4	Single element	4MHz	Ø 24 mm	LEMO 1S
PS2	Single element	2MHz	Ø 10 mm	LEMO 00
PS4	Single element	4MHz	Ø 10 mm	LEMO 00
HS4	Single element	4MHz	Ø 10 mm	LEMO 00
TS2	Dual element	2MHz	Ø 11 mm / 2	2 x LEMO 00
TS4	Dual element	4MHz	3.5 x 10 mm ²	2 x LEMO 00
TS5	Dual element	5MHz	Ø 9 mm / 2	2 x LEMO 00
TL2	Dual element	2MHz	7 x 18 mm ²	2 x LEMO 00
TL4	Dual element	4MHz	6 x 20 mm ²	2 x LEMO 00
WS (small)	45° 60° 70°	4MHz	8 mm x 9 mm	LEMO 00
WS (small)	45° 60° 70°	2MHz	8 mm x 9 mm	LEMO 00
WM (medium)	45° 60° 70°	2MHz	14 mm x 14 mm	LEMO 00
WL (large)	45° 60° 70°	2MHz	20 mm x 22 mm	LEMO 00

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.

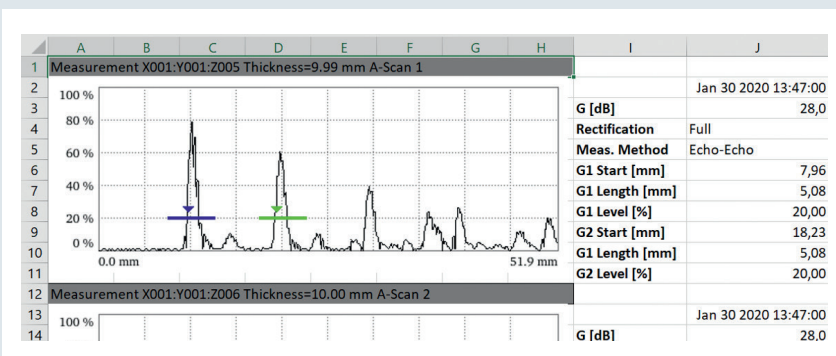
youtube.com/SONOTECGmbH



SONOGRID Corrosion Management Software

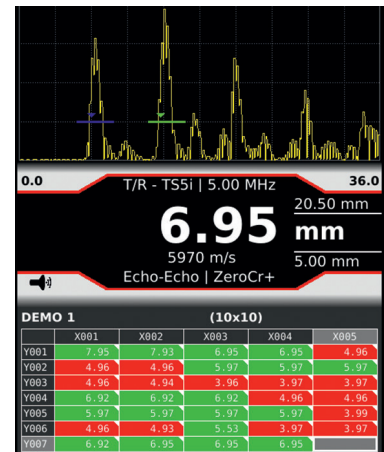
Efficient data acquisition, presentation and management

- 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.

	A	B	C	D	E
1	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

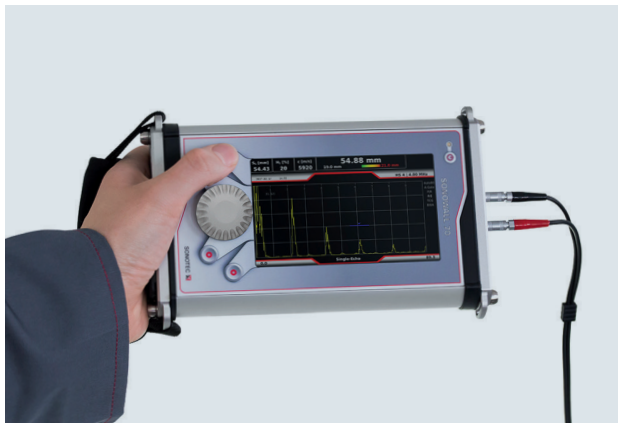


Efficient and reliable data collection with colour coded grid visualization

Flaw detection

The SONOWALL 70 has the following 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
- **SONOSCAN TS5H Ultrasonic Probe:** For precise high temperature measurements up to °550C 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 12688-1, ASTM E 1324, ASTM E 317, DIN EN 15317 (optional)
Ambient Temperature	-20°C ... +60°C
Display	5" TFT Screen, 800 px x 480px, 60Hz
Measurement Methods	Single-Echo, Echo-Echo
Size (W x H x D)	195mm x 115mm x 40mm
Weight	990g
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	8GB
External Memory	MicroSD card up to max. 128GB
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 0.001mm
Scan	100MSps @ 12 Bit
Gates	2 independant gates (including automatic positioning) Gate 4+3 only available in multilayer mode
Measurement Range	Up to 10000mm (20000mm with screen shift)
Probe Connection	2x LEMO 00 (IP67)

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

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

Contact and Support

SONOTEC GmbH
Nauendorfer Str. 2
06112 Halle (Saale)
Germany

☎ +49 (0)345 / 133 17-0
✉ sonotec@sonotec.de
🌐 www.sonotec.eu
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Rev. 4