CERTIFICATION ACCORDING TO EN OR ASTM STANDARD COMPACT DESIGN AND POWERFUL PERFORMANCE ALUMINUM HOUSING WITH IP67 PROTECTION CLASS SONO-ID FOR WIRELESS PROBE RECOGNITION SONOGRID CORROSION MANAGEMENT SOFTWARE

# Advanced A-/B-SCAN WALL THICKNESS GAGE

FOR ULTRASONIC NONDESTRUCTIVE TESTING

MADE IN GERMANY



# PERFECT FOR CORROSION TESTING

## SONOGRID CORROSION MANAGEMENT SOFTWARE



- Colour coded linear, 2D and 3D matrix creation including micro grids
- Grid copy function with possibility to edit its parameters
- Easy data collection of measurement values and attachments
- Live comparison function and corrosion rate estimation
- Customizable test report in XLSX format and optional SQLite database

Th [mint]

0.5

8.15

- Device setup list for all collected measurement points
- Unlimited text length for comments





G2 Start (mm)

G2 Level [N]

G1 Length [mm]

18,23

5.08

20,00

Efficient and reliable data collection with colour coded grid visualization

Direct data export and reporting with MS-Excel including linked A-scans, B-scans, comments, setups, etc.

# **BEST IN CLASS PERFORMANCE**



# **POWERFUL SOFTWARE FUNCTIONS**

- ¬ A and B-scan
- 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
- Through-coat measurement
- Basic and expert mode (password protected)
- Temperature compensation
- Multi-layer measurement
- Sound speed measurement
- Dual element probe zeroing in air\*1

# **VIDEO TUTORIALS**

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



https://www.youtube.com/SONOTECGmbH

### FLAW DETECTION MODE LITE



The SONOWALL 70 features basic flaw detection capabilities including:

- ¬ Trigonometric calculations
- ¬ The use of angle beam probes
- ¬ AVG / DGS
- ¬ DAC with TCG
- ¬ AWS D1.1
- Backwall echo attenuation

# ACCESSORIES

Useful range of accessories

- Handstrap for ergonomic single hand operation
- Desktop stand ideal for inside use and calibrations
- 4-point working harness for longterm operation (optional)
- Transport & storage case including space for accessories
- Heavy Duty protection case for harsh environments (optional)
- Calibration blocks, cables and probes (optional)





\*1: for SONSOCAN and most third party probes

# **APPLICATIONS AND INDUSTRIES**



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 | GFRP & CFRP | PLASTICS | RUBBER ETC.

# **SONOSCAN PROBES**

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

SONOTEC also specializes in customized transducers - send us your application!



#### STANDARD PROBES FOR WALL THICKNESS GAGING

TYPE		FREQUENCY	ELEMENT SIZE	MEASUREMENT RANGE
PL1	Single element probe	1 MHz	Ø 24 mm	20 to 5000 mm
PL2	Single element probe	2 MHz	Ø 24 mm	15 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 9/2 mm	1 to 400 mm
TS5 P	Probe with pipe adapter	5 MHz	Ø 9/2 mm	3 to 200 mm
TS5 H	High temperature probe	5 MHz	Ø 8/2 mm	3 to 200 mm
TXS7.5	Dual element probe	7.5 MHz	Ø 5/2 mm	0.8 to 50 mm
PXS10	Single element probe	10 MHz	Ø6mm	0.6 to 100 mm
PXS15	Single element probe	15 MHz	Ø 5 mm	0.6 to 25 mm

Standards	DIN EN 12668-1, ASTM E 1324, ASTM E 317, DIN EN 15317 (optional)		
Operating temperature	-20 to +60 °C		
Screen	5" TFT Screen, 800 x 480 Pixel, 60 Hz		
Measurement methods	Single-Echo, Echo-Echo		
Size (W x H x D)	195 x 115 x 40 mm		
Weight	990 g		
Housing	Aluminum		
Protection class	IP67		
Battery	Li-lon, 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)		
Transmitter			
Bandwidth	0.5 to 15 MHz		
Pulse	Negative rectangle (single pulse)		
Pulse width	20 to 500 ns, in 5-ns-steps		
Voltage	0 to 400 V, in 10-V-steps		
Damping	50 Ohm; 400 Ohm		
Receiver			
Dynamic range	Up to 110 dB		
Amplifier bandwidth	0.2 to 20 MHz		
Digital filters	1/2/4/5/7.5/10/15/0.5-20 MHz (EN 12688-1 certified)		
Averaging	2x, 4x, 8x		
Input impedance	500 Ohm (in T/R-mode)		
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	2x LEMO 00 (IP67)		

#### FAST SERVICE & PROFESSIONAL SUPPORT

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