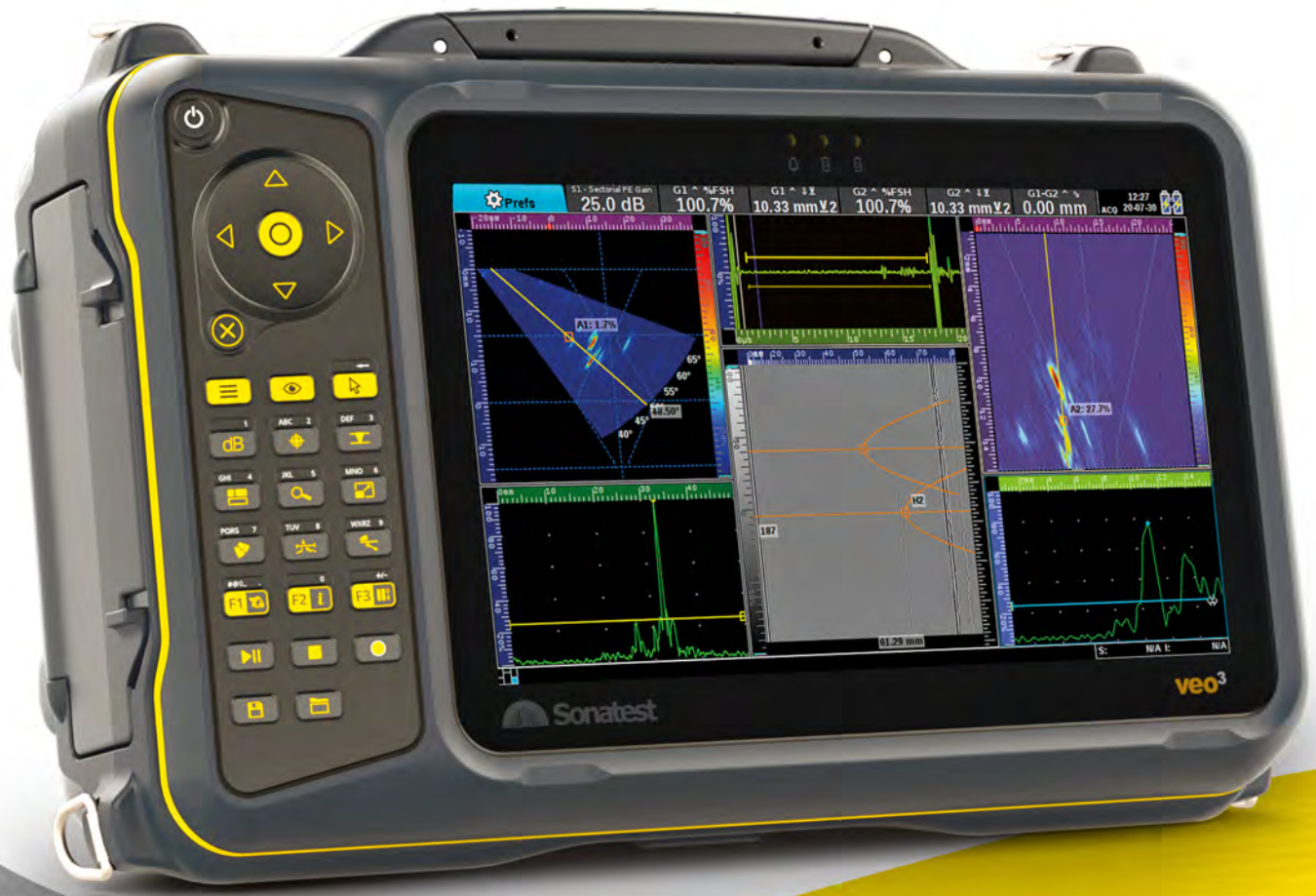
Sonatest

veo³

veo³ - Inspect with Confidence



Inspect with Confidence

Simplicity | Capability | Reliability

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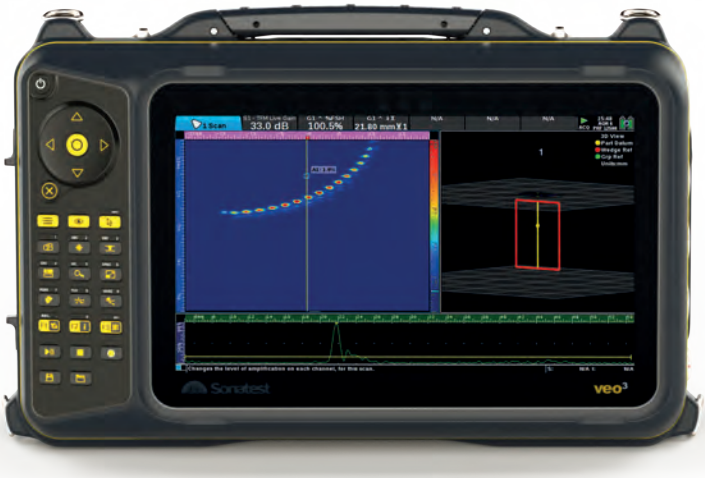
veo³



Inspect with Confidence

In 2010, Sonatest introduced the first phased array instrument that featured onboard scan plan capabilities and a live 3D view with ray tracer representation.

Then **Veo+** was launched in 2016. It introduced the concept of remote hardware update allowing the user to instantly unleash the power and flexibility of a greater number of PA channels. With the Sonatest XPair software package Sonatest pioneered true real-time remote collaboration allowing an expert to have full control of the instrument and share the **Veo+** screen whilst in another location anywhere in the world. Sonatest were also the first to provide phased array correction for curved surfaces making long seam weld inspections true, faster and easier than ever.

Now, introducing **Veo3**. Fitted with a state-of-the-art PCAP touch panel, the now legendary user interface is even better. But what makes **Veo3** really stand out, is its unique real-time multi-scan/multi-technique capabilities. Simultaneous TFM, TFMi™, PA and TOFD views are now possible.

Multi-technique advantages

Even though TFM is now a ubiquitous inspection method, correct configuration and selection of the most appropriate TFM propagation mode for the application is a very real challenge. Comparing modes is frustrating and time consuming. With **Veo3**, having the ability to simultaneously show a PA and several live TFM scans it is now easier than ever to identify and size flaws with high P.O.D. and increased technician confidence.

The advanced technology in **Veo3** also allows the addition of a TOFD scan to the PA and TFM live scans. Inspect with confidence when simultaneously using three complementary inspection techniques.

No need for additional qualification

The **Veo3** multi-technique functionality, combining phased array with TFM, allows users to benefit from the additional resolution and sizing performance of TFM – all while performing inspections to an already approved phased-array procedure. No need to change. No need to go through a new approval process.

Focus where it matters

The **Veo3** has all the flexibility necessary to help you solve challenging applications. Its unique architecture can generate up to six live TFM (including TFMi™) scans, produced from multiple FMC sources on different probes. This allows the end-users to focus where it matters, solving the most difficult inspections.

Single scan of thicker parts

The **Veo3** can generate TFM images of up to 500K pixels with a maximum resolution of 100 pixel per mm without limiting the number of pixel per axis. Combining Time Corrected Gain on the TFM image, the technician is able to inspect thicker parts with superior flexibility whilst remaining ASME compliant. And all with a single scan. The **Veo3** has what it needs to answer your daily challenges.

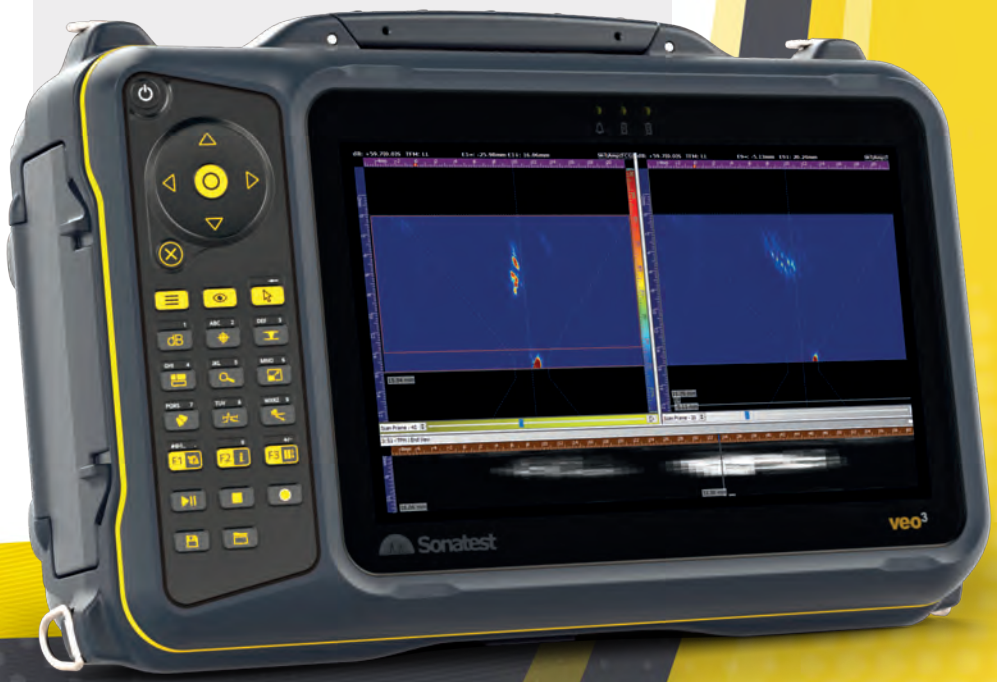
We revolutionised TFM imaging

TFMi is a unique technique on the market, developed in partnership with Holloway NDT.

The **Veo3** can combine up to 4 live TFM modes. As known as TFMi™, the details of the defects have never been so close to the reality. That imaging scan provides a high-precision height assessment and an improved shape accuracy compared to conventional PA inspections.

The ability to characterise the type of defects is now effortless. This technique has indeed demonstrated superior results on weld analysis.

Flaw Characterisation and Assessment has never been this easy in difficult applications.



Onboard Live TFM | Touch Screen | Linux

Specification

GENERAL	PHASED ARRAY (32:128PR)	UT-TOFD (2PR)	Live TFM
Multi-scan Quantity	Up to 8 scans	Up to 2 scans (UT & TOFD) Up to 2 scans	Up to 6 TFM scans/ 1 FMC Scan
Pulsers / Receivers	32:128PR	2PR (4 connectors)	Up to 64 elements probe
Gain Range	80dB	100dB	80dB
Sampling Frequency	125MHz @ 12-Bit (processing 16-Bit)	50/100/200 MHz @ 10-Bit	125 MHz @ 12-Bit (processing 16-Bit)
System Bandwidth	0.2 to 23 MHz	0.2 to 18 MHz	0.2 to 23 MHz
Max Pulse Rate Frequency	50,000 Hz	20,000 Hz	50,000 Hz
Pulse Voltage	100-50V ActiveEdge©	400-100V ActiveEdge©	100-50V ActiveEdge©
Focusing Mode	Natural or Constant Depth/ Path/Offset/Resolution	na	Focusing at all points TFM
S-Scan Resolution	Up to 0. 1°	na	Down to 0.01 mm
L-Scan Resolution	1 element, double resolution, or custom element steps	na	TFM and TFMi resolution up to 0.01mm
Max PA Beams	Up to 1024 beams	na	Up to 500,000 Pixels
Measurement tools	Extraction Box, 4 Gates / A-Scan, TCG, DAC/Split-DAC	4 Gates/A-Scan, TCG, DGS/ Split-DGS, DAC/Split-DAC	Extraction Box and all the standard PA tools

OPERATING SYSTEM		OPERATING TIME, ENCLOSURE & ENVIRONMENTAL	
Onboard Reporting Tools	PDF auto-report, Export data to CSV file, Save screen capture	**Operating Temperature**	-10°C to 40°C (14°F to 104°F) storage -20°C to 60°C (-4°F to 140°F)
Onboard Scan Plan Tools	Onboard 3D live rendering	**Operating Time**	6h (hot swappable batteries)
Integrated Online Help	ACTIVE help genius for parameter optimization procedures, reports	**Power Input**	AC 110V/240V @ 50Hz/60Hz
Onboard PDF Reader	Ability to load and read any PDF documents	**Unit Dimensions**	115 x 220 x 335 mm (4.52 x 8.66 x 13.19 in)
Calibration Standards	ISO18563 (EN16392) & EN12668	**Weight**	5.1 kg (11 lb) no battery 460 g (1 lb) battery
		Environmental Rating	Designed for: IP66

Our Complete Set of Tools

All applications
Create
Analyse
Report

Editable A-B-C-End-Top-S-3D Views
3D data rendering
Live raytracer

Corrosion application
Stitch
Analyse
Export

Export to CSV
Defect Auto-Sizing
C-scan Analysis modification

Remote application
Share
Control
Transfer

VNC viewer
VPN network
Send Config/PDF files in the fields

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