

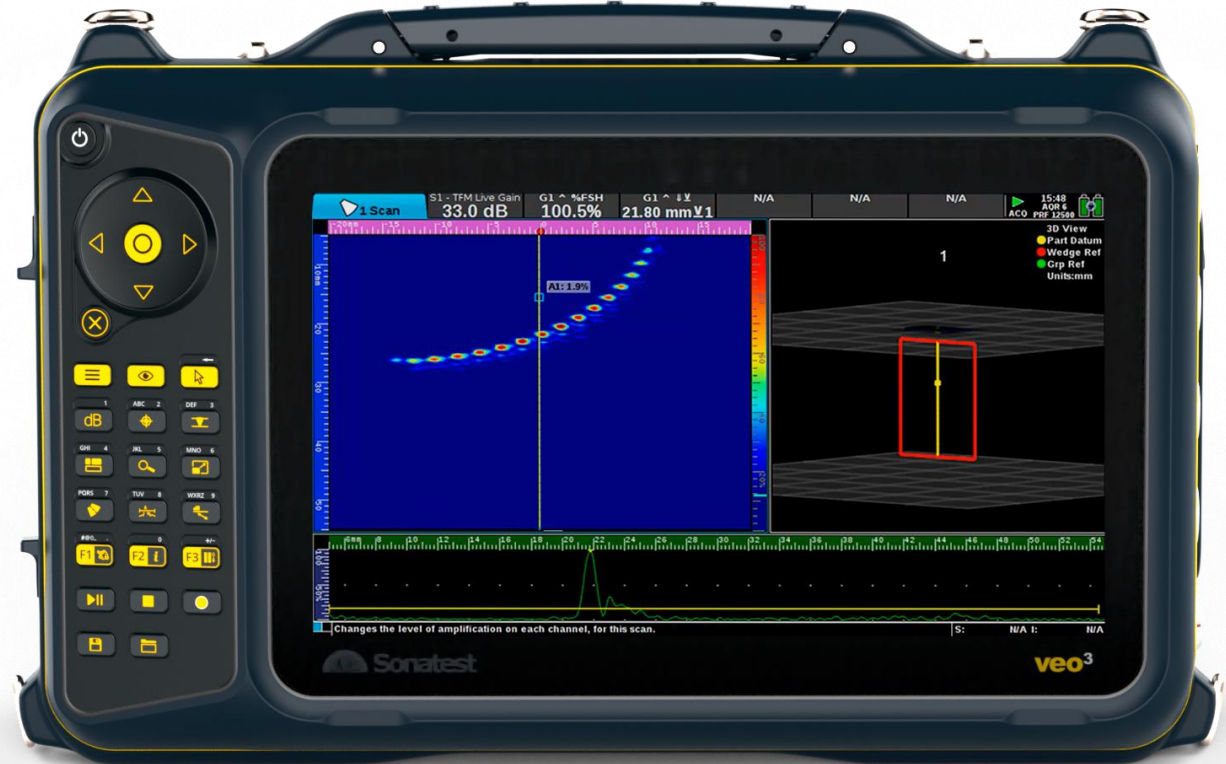
Veo3

Inspect with Confidence



Presentation Details

- Product offering
- Multi-scan, multi-technique
 - Built your expertise with confidence
 - Efficient compliance
- Instrument capabilities
 - Scan
 - Amplitude fidelity wizard
 - TCG
 - ZOI bigger than the thickness
 - Hilbert envelope
 - Users template
- Application
 - Bolt
 - Advanced Composite Inspection
 - Corrosion Mapping
 - Flange
 - 5T mode



Sonatest Product Portfolio

- AlphaGage+ Series
- D series
- Wave
- Prisma
- Rsflite
- **Veo3**



The Best of Veo+ and Much More

Modern technologies, Modern Approach, Modern instrument



A Proven Enclosure

- Shock-proof
 - 1.2 m (4 ft) drop test
- Extended temperature range
 - From -10 to 40 °C (14 to 104 °F)
- Sealed enclosure
 - No impact to inside components
 - Heat sink with external fan
- Designed to meet IP66



So rugged that it still worked after being caught in a fire

Veo3 Advantages

TFM: A New Solution in Your Toolbox

Problems

- TFM and PA are complementary techniques like TOFD and PA
- Changing inspection methods can be very costly for an NDT department (re-qualification, training...)

Veo3 Solution

- The Veo3 multi-technique allow inspectors to keep inspecting like they always have; there is no need to change their current workflows.
- By doing so, users can benefit from the additional resolution and sizing performance of TFM while carrying out an already approved, trusted and reliable procedure.



The Veo3, with its multi-technique capabilities, gives inspectors the benefits of TFM technologies while being compliant.

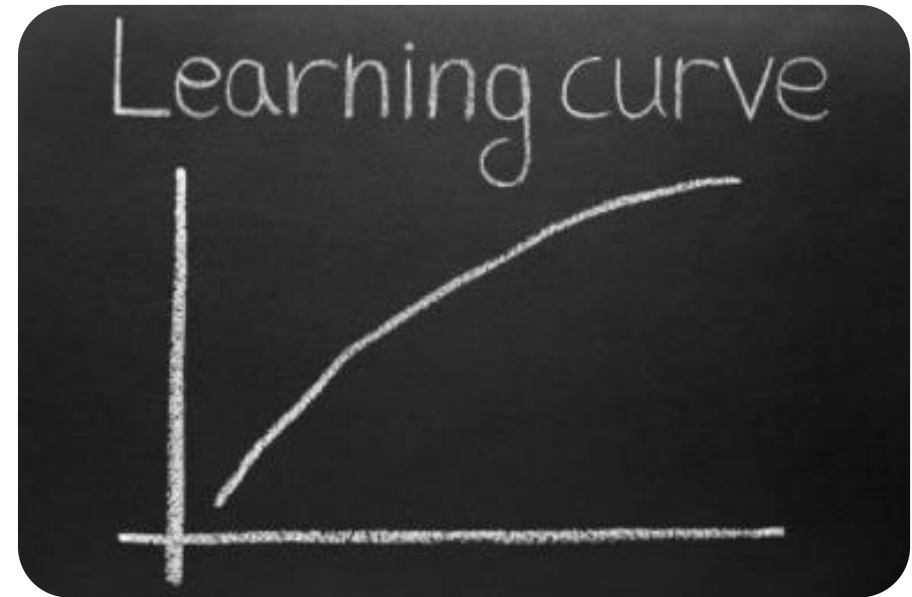
Build Your Expertise with Confidence

Problems

- An incorrect settings (wrong propagation mode) can cause TFM image distortion.
- The new technique is based on ultrasonic imaging and brings new know-how.

Veo3

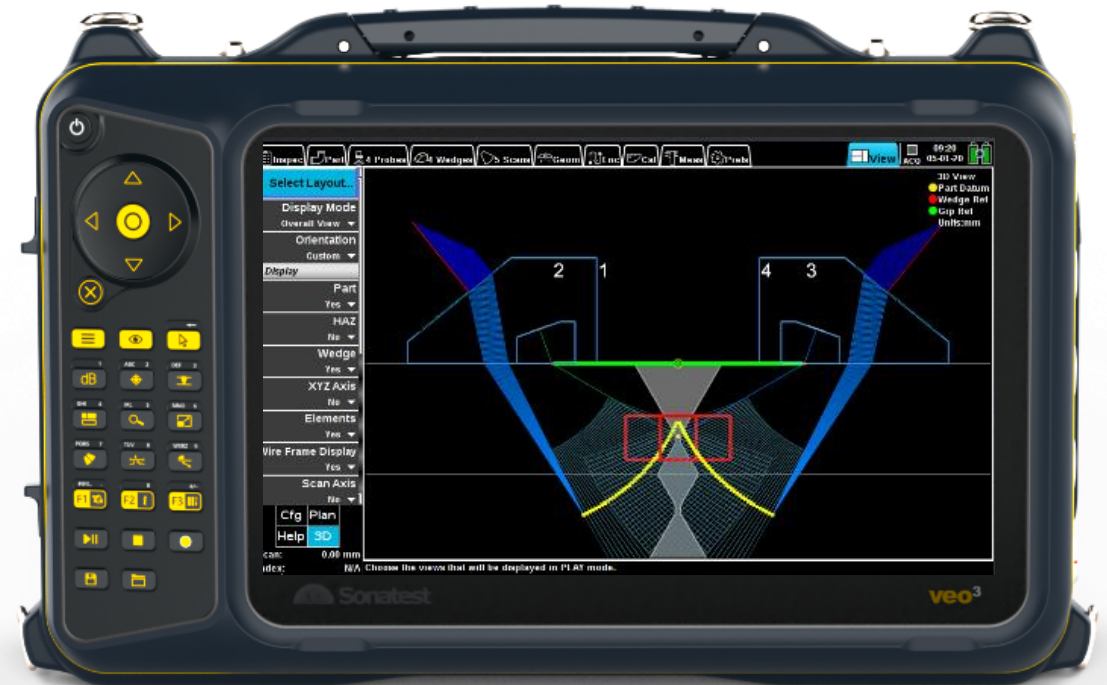
The multi-technique (PA-TFM) allows inspectors to compare the two techniques in real time with the same acquisition conditions.



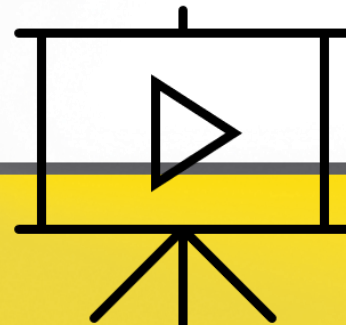
*The Veo3 improves inspectors' understanding of the advantages and limitations of this new technique, giving them all the **confidence they need to carry out inspection.***

A Powerful & Capable Instrument

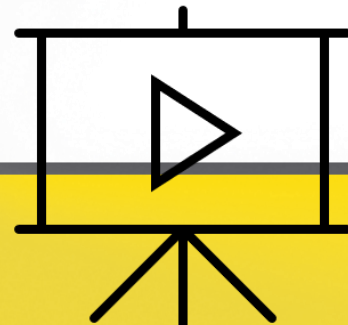
Techniques	Scans up to:
Total Focusing Methods (TFMs)	6
Full Matrix Capture (FMC)	1
PA	8
TOFD	2



Total Focusing Method with a TCG



Amplitude Fidelity- Improved Compliance



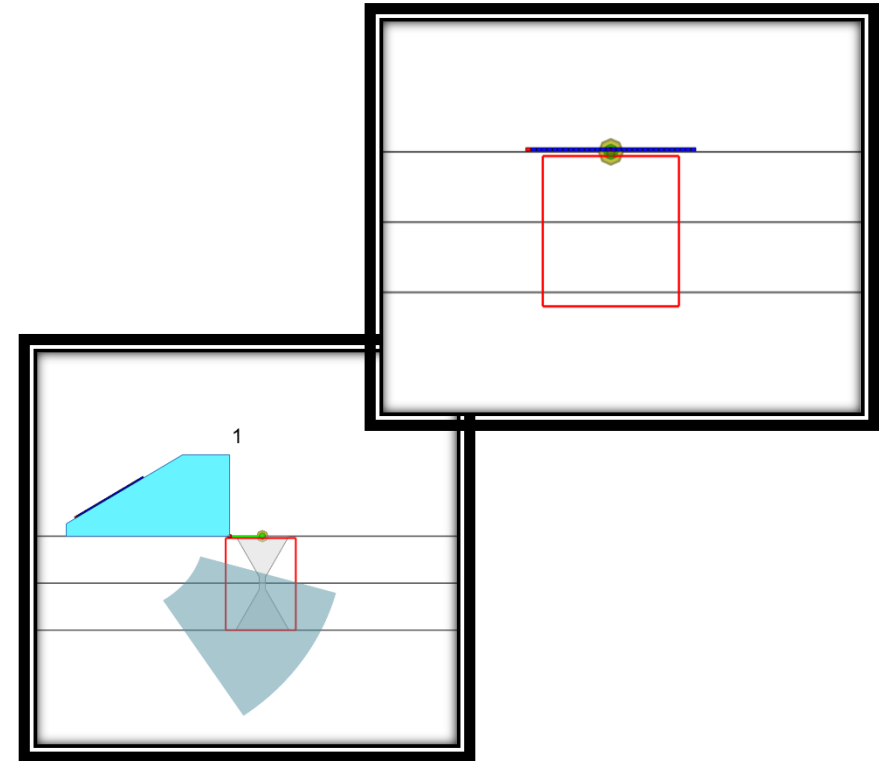
New Welcome Screen User Templates for Improved Conformity



Total Focusing Methods- Boxes beyond Thickness

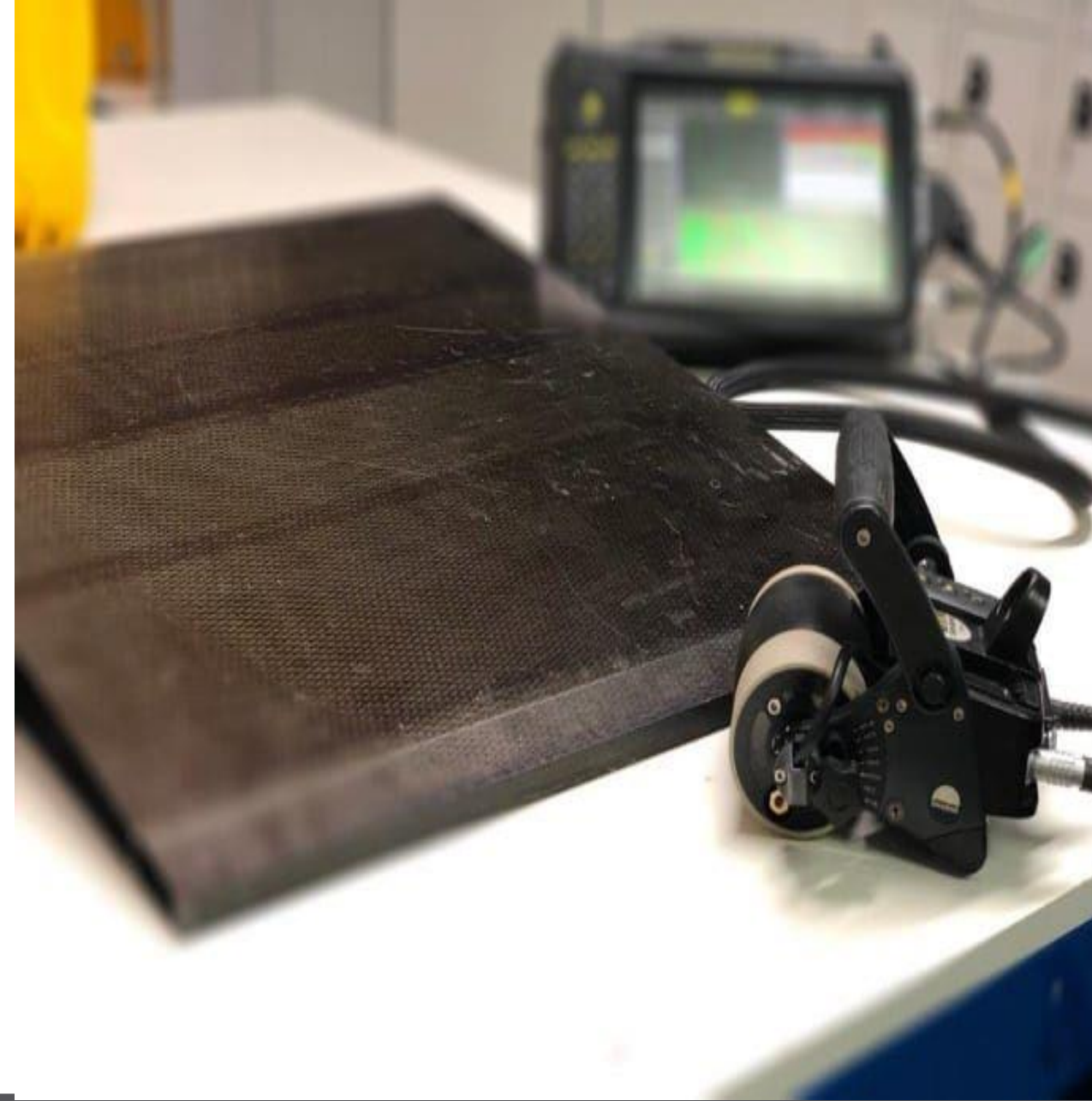
Possibilities

- With shear waves, this implementation detail allows users to inspect with one boxes TT & TT-TT
- With longitudinal waves, this allows users to cover 2 consecutive back wall with their TFM's



Composite Materials & Structures

Total Focusing Method	Phased-array
<ul style="list-style-type: none">• High resolution• Better sizing of defects located on threads• Improved volumetric coverage	<ul style="list-style-type: none">• Improved sound penetration• Understood• Faster acquisition



Corrosion Application

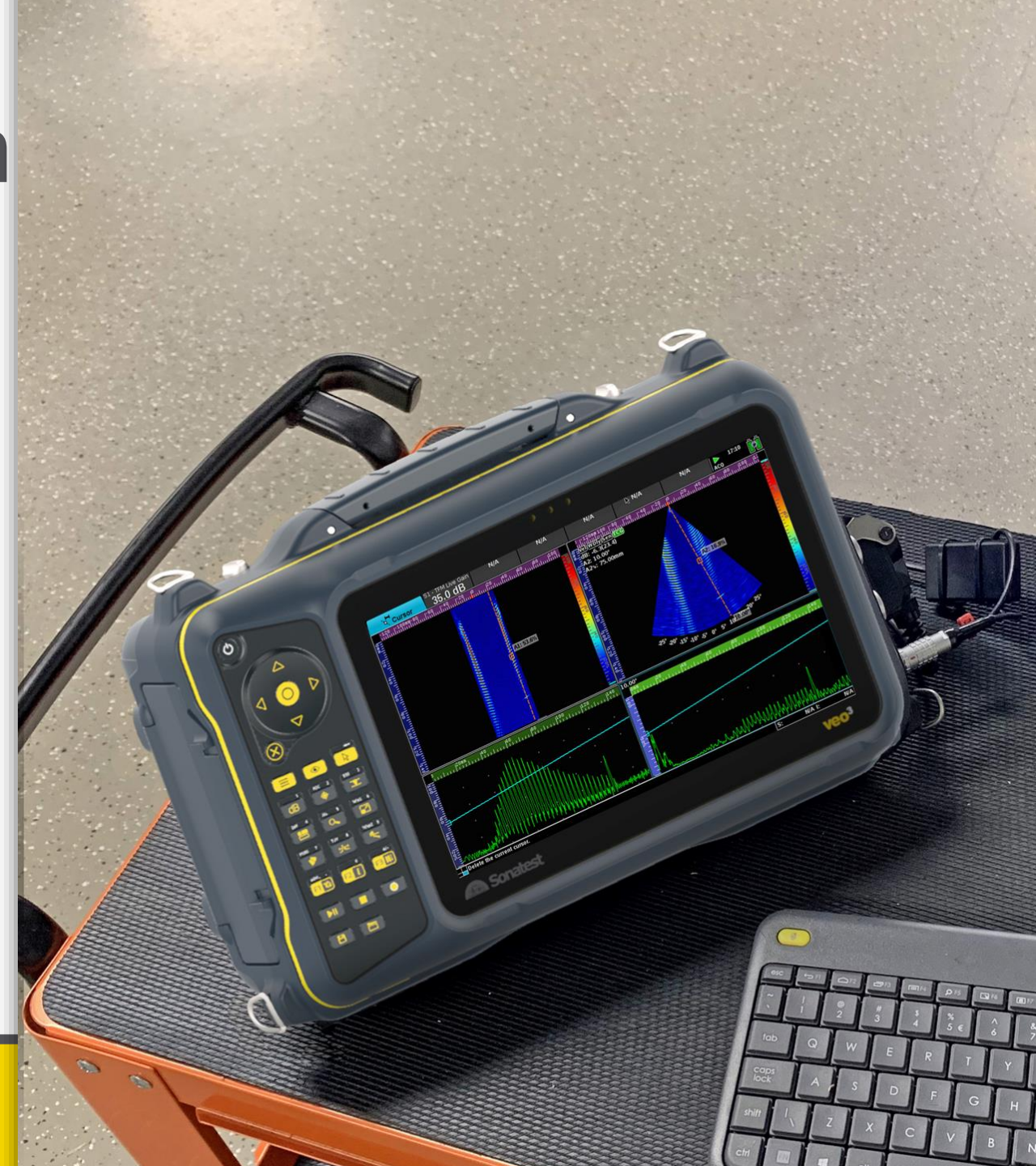
Improvement

- Better for small pitting detection
- Improved image resolution for an enhance corrosion side profiles
- Thin residual thickness measurements is improved because of smaller dead zone



Bolt / Rivet Inspection

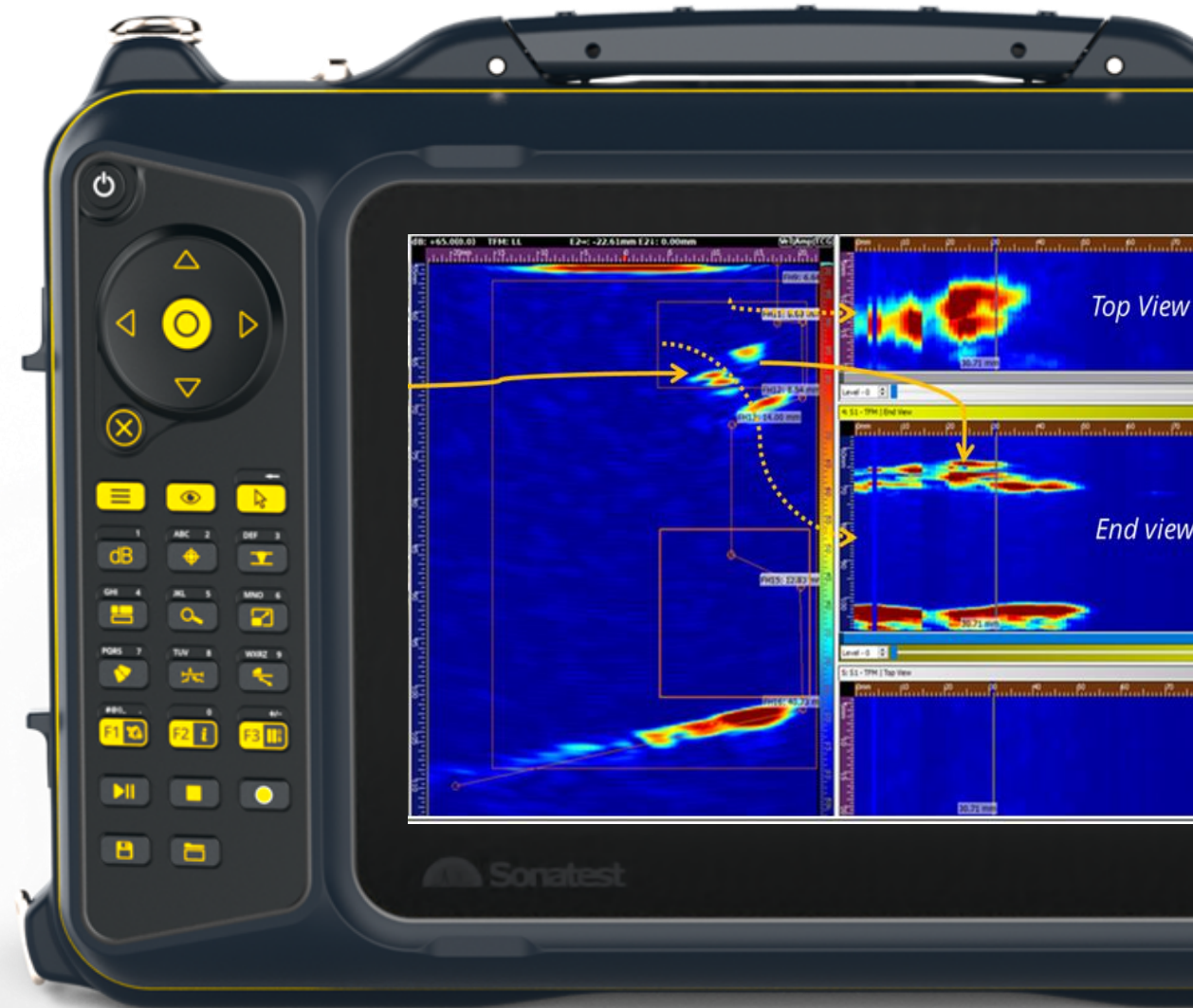
Total Focusing Method	Phased-array
<ul style="list-style-type: none">• High resolution• Better sizing of defects located on threads• Improved volumetric coverage	<ul style="list-style-type: none">• Improved sound penetration• Understood• Faster acquisition



Flange Corrosion

Improvement

- Better imaging from corrosion gasket
- Simpler setup
- No angle wedge required
- Can cover a larger area while being compliant (no pixel limitation on the depth axis)



The 5T for Better Visibility

- Up to 10 different images reconstructions
- 5T mode for one-sided inspections
- FMC export into CSV for more advanced processing



Veo3: Great Features to Discover



- Up to 8 scans
- TFM with Hilbert transfer
- FMC recordings for postprocessing
- Real UT channel
- Up to 500 K pixels separated on 6 different scan and probes
- Live ray tracer