Eddyfi Technologies
Beyond current

Technical Specifications

CAPTURE

Be the best inspector you can be

Streamlined PAUT software for Gekko®, Mantis™, Panther™ and PC.

Capture™ provides a quick way to improve knowledge and remains focused on speeding up analysis while respecting inspection requirements.

ADVANCED PHASED ARRAY FOR ALL LEVEL INSPECTORS

Capture™ is the streamlined software embedded in Gekko and Mantis portable flaw detectors, also available for PC, and on the Panther desktop solution. It is dedicated to conventional Ultrasonic Testing (UT), Phased Array UT (PAUT), Time-of-Flight-Diffraction (TOFD), Total Focusing Method (TFM) and Adaptive Total Focusing Method (ATFM). Continuously updated based on industry feedback, be the best inspector you can be.

FEATURES

- One UT software from setup to reporting

- Covers existing PAUT and TOFD procedures

- Dedicated wizards for all setups

- Analysis made simple

- TFM inspection at an industrial scan speed

- Compliance with the latest TFM standards

- Smart connectivity for remote operation

- Innovation driven by market applications

ONE UT SOFTWARE FROM SETUP TO REPORTING

All the same intuitive software tools and features are available in the Gekko and Mantis instruments and the PC version.

- Application-oriented templates, step by step setup configuration
- Complete probe, wedge, and scanner libraries
- Custom probe creation, including DLA/DMA probes
- Focal law calculation with linear, matrix, DLA, DMA probes
- Scan plan for procedure compliance
- Analysis and reporting
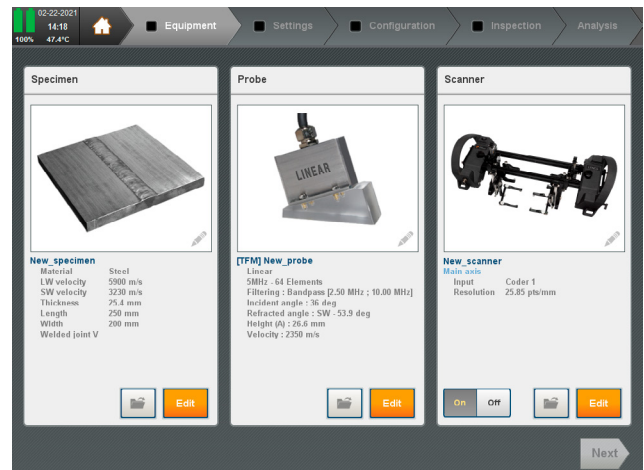- Customizable inspection report

Figure 1: Streamlined workflow.

UNIQUE 3-CLICK CALIBRATION WIZARDS

Smart calibration wizards fulfill the requirements of your existing procedure:

- Part and wedge velocity calibration
- Amplitude balancing and dead element check
- Best-in-class wedge delay + angle calibration - including AOD/COD wedges
- Beam balancing for PAUT sensitivity calibration (ACG)
- Innovative TCG calibration - including TFM

Historically, essential calibration steps such as wedge verification and TCG have been complicated and time-consuming. Capture does it accurately, quickly, and efficiently
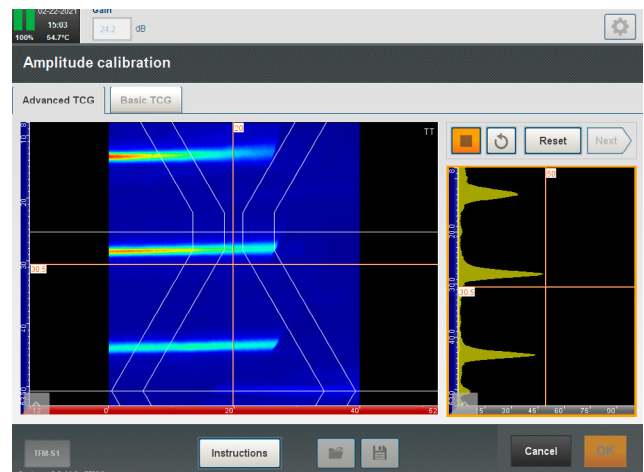

Figure 2: Calibration wizard.

ANALYSIS MADE SIMPLE

Capture offers all the tools necessary for efficient and reliable data analysis.

- Complete set of views and custom layout edition
- Advanced readings banner
- Floating gates for enhanced corrosion data quality
- Accurate geometry display for better assessment
- Auto-detection and sizing for corrosion and weld
- Advanced reporting tools, customizable indication table
- Data stitching and export (PDF and Excel)
- Assisted analysis for butt weld inspection

Capture remains focused on simplifying analysis to improve sizing and accuracy, increase productivity and repeatability while respecting code inspection requirements.
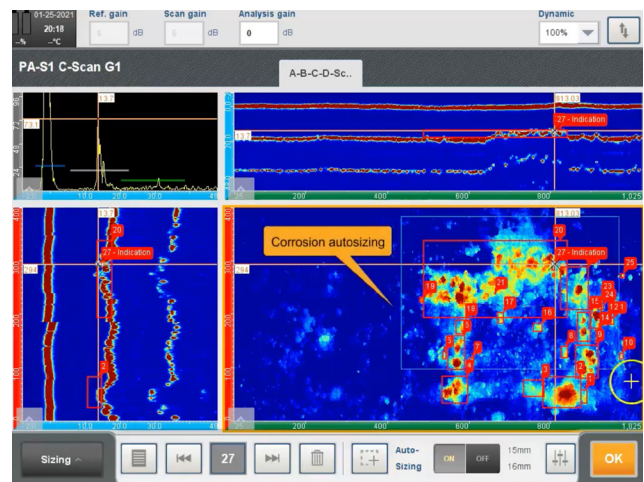

Figure 3: Automatic corrosion sizing

TFM FOR THE FIELD - OUR DNA

Benefiting from over 8 years of experience with TFM in the field, Capture offers:

- PCI phase-based technique
- Multi-probe, multi-group, and multi-mode TFM configurations including Pitch & Catch face-to-face probe
- Various transmission modes (FMC, sparse, PWI) compatible with both amplitude-based and PCI processing
- Acoustic sensitivity map for better mode selection and scan plan
- Compatible with linear, matrix, DLA, and DMA probes up to 128 elements
- Unique grid verification tool compliant with ASME-V/ISO 23865
- Typical 1 inch weld inspection from both sides up to 130 mm/sec (5 in/sec)
- Advanced component (3D CAD, nozzle, fillet welds...) inspection available for direct modes (LL, TT)

TFM offers improved data quality allowing more accurate sizing to reduce false calls in full compliance with the latest codes and standards.

OFFERING ADVANCED SOLUTIONS

Capture provides advanced solutions through a streamlined workflow.

- 3-axis nozzle inspection, including parametric weld configuration
- Fillet welds (T, Y) with multi-skip ray tracing
- True CAD import
- Embedded scanner controls for the LYNCS
- Paintbrush 2D mapping with 3-axis rotating arm
- Unique Adaptive TFM(ATFM) solution for wavy surfaces

For these advanced inspections, Capture provides a higher Probability of Detection (POD) with improved and faster defect characterization.

CONNECT YOUR CAPTURE

Capture offers full connectivity with lean data management for both devices and PC. Remote control and data management allow Capture to be connected to ease your daily inspection.

- Version manager & remote update from the cloud
- Easy file management and remote control through ethernet/ wireless
- Multi-instance Capture PC
- License fleet management through the cloud
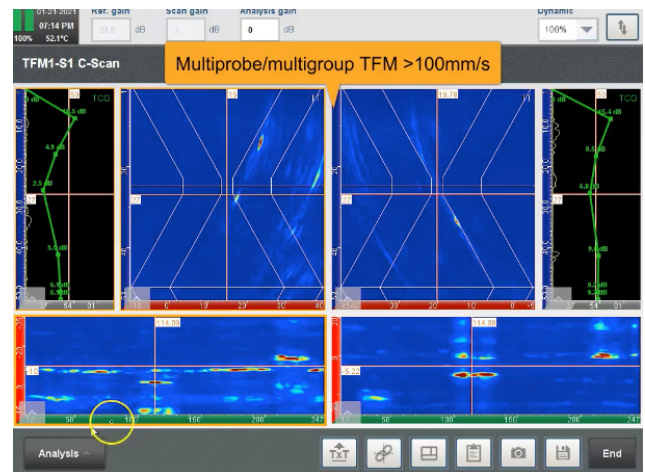- Compatible with analysis software (CIVA Analysis, Ultis, NTPlot...)

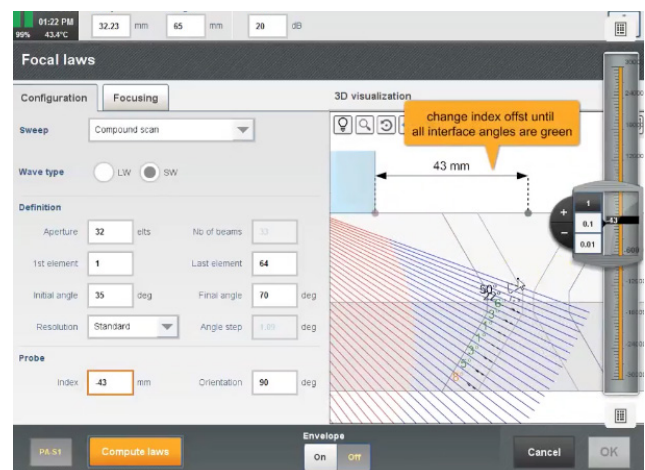**Figure 4:** Multi-group and multi-mode TFM configurations.

Figure 5: Fully embedded scan plan.

Figure 3: View live Capture data on a remote PC.

SPECIFICATIONS

	GO GEKKO	GO MANTIS	PRO PANTHER	CPN PC	PRO PC
Setup & Inspection					
UT, PAUT, TOFD techniques	•	•	•	•	•
TFM technique	•	•	•	•	•
Plate, Pipe with weld overlay and HAZ	•	•	•	•	•
DXF overlay import (CIVA, ES BeamTool)	•	•	•	•	•
Advanced geometries (nozzle with weld overlay, fillet weld, True 2D CAD)	•	•	•	•	•
Scan plan with multi-skip ray, signal display, angle with bevel and near field	•	•	•	•	•
Sectorial, Linear and Compound scan	•	•	•	•	•
Focal LAW import (CIVA)	•	•	•	•	•
Multigroup settings (up to 8)	•	•	•	•	•
3-click cal. wizards for all techniques	•	•	•		
Data acquisition up to 3 encoded axis	•	•	•		
TFM Toolbox•					
FMC/sparse TFM with Linear, Matrix, DLA, DMA probe	•	•	•	•	•
PWI/TFM with Linear, Matrix, DLA, DMA probe	•		•	•	•
Max TFM aperture (channels)	128•	64•	128•	128	128
Multi-group, multi-mode, multi-probe (up to 4)	•	•	•	•	•
Max number of pixels per group	500k	225k	1M	500k	500k
Envelope display	•	•	•		
ATFM module	• •				
Grid Verification (Amplitude Fidelity)	•	•	•		
TCG calibration	•	•	•		
FMC Recording	•	•	•		

• According to the Package   • • Add-on module sold separately

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SPECIFICATIONS

	GO GEKKO	GO MANTIS	PRO PANTHER	CPN PC	PRO PC
Data Analysis & Reporting					
Cursor position	•	•	•	•	•
Zoom & Fullscreen	•	•	•	•	•
A-, B-, C-, D-, E-, S-, T-Scan, echo-dynamic views	•	•	•	•	•
Amplitude Dynamic Range–16 bits	•	•	•	•	•
Top view, side view, 3D view	•	•	•	•	•
Customizable layout edition	•	•	•	•	•
Editable readings banner & indication table	•	•	•	•	•
Offline gate & thickness edition	•	•	•	•	•
TOFD tools (Wedge Delay, PCS, LW synchro, and removal)	•	•	•	•	•
Customizable inspection report (PDF/Excel export)	•	•	•	•	•
Indication auto-sizing (Amplitude/Thickness)	•	•	•		•
Assisted analysis for butt weld	•	•	•		•
C-Scan stitching and data merging	•	•	•		•
3D multi-group display & data rendering	•	•	•		•
Advanced Indication table and indication merge	•	•	•		•

• According to the Package   •• Add-on module sold separately

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