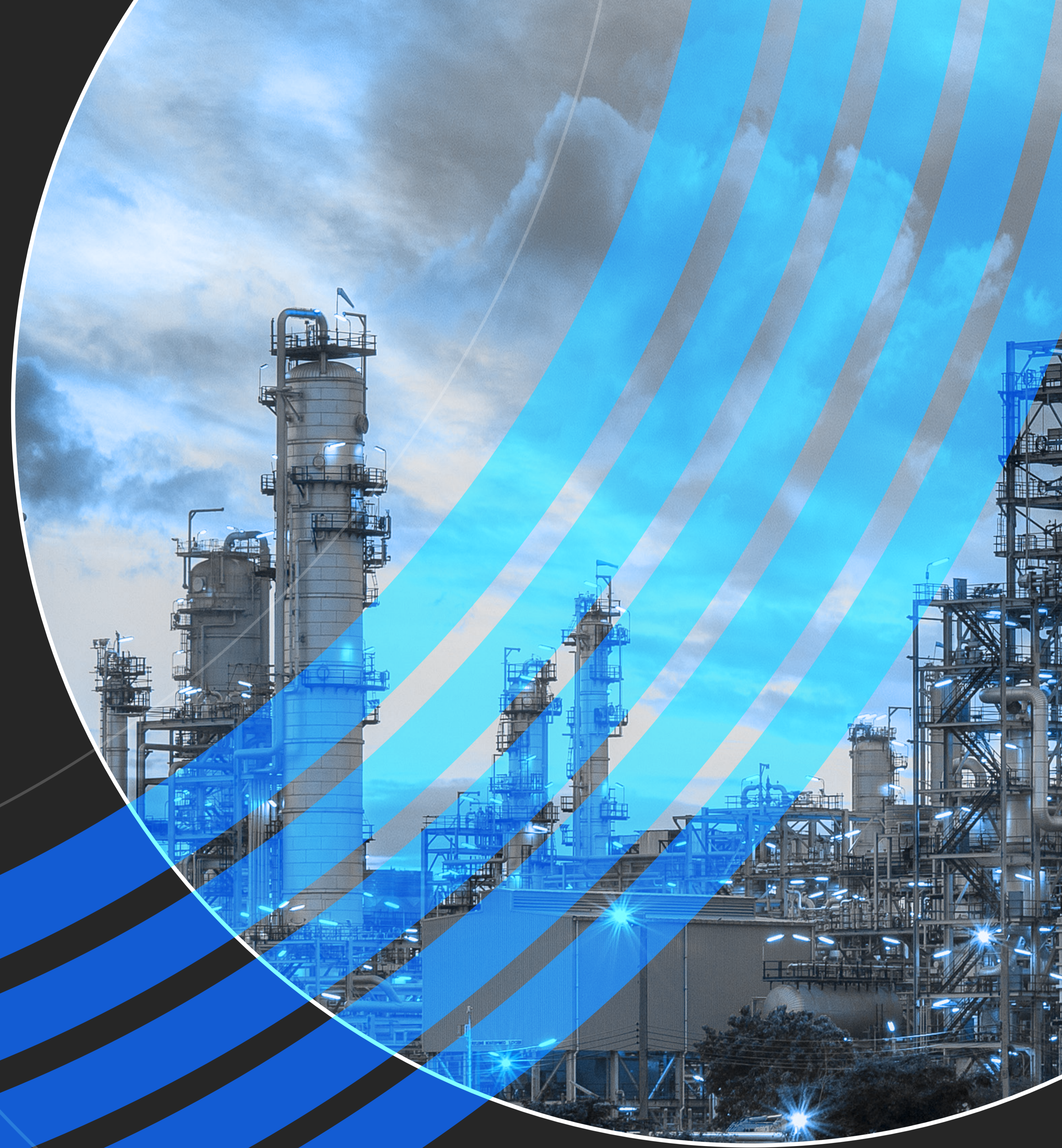


APEX-FI
Flawless Industry

COMPANY PROFILE

**NEVER
COMPROMISE
QUALITY**

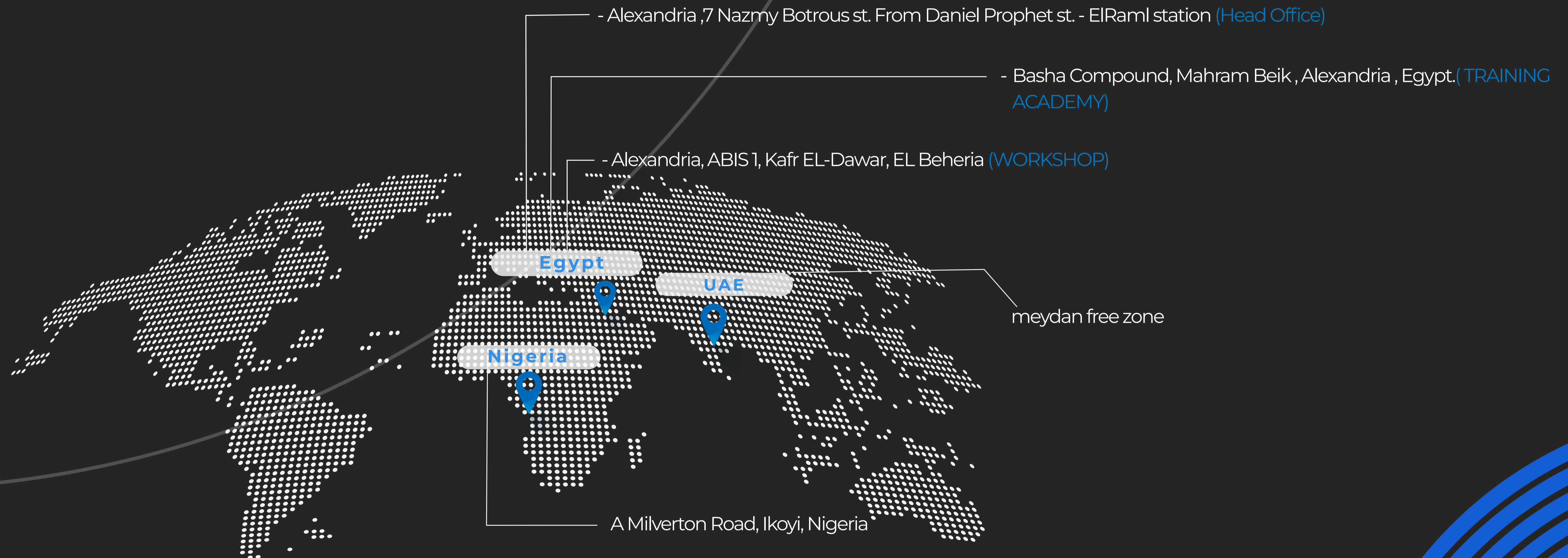




WELCOME to APEX-FI Flawless Industry, where innovation meets precision in the field of industrial inspection and asset integrity. We're all about being creative, following standards, and saving costs, making us leaders in the industry. Our commitment to creativity shines in our inspections where our dynamic team uses smart strategies for insightful results. APEX-FI proudly has industry certifications, proving our dedication to quality, safety, and compliance. Beyond that, we're a reliable choice, setting high standards in every project. Our focus on cost-saving means we work to cut expenses without compromising quality. Choose APEX-FI for a blend of creativity, standards, and cost-effective solutions - where excellence isn't just a goal, but a standard we consistently meet.



OUR LOCATIONS



ACHIVEMENTS

+120
CLIENTS

+850
TRAINEES

+30
TECHNIQUES

+25
SYLLABUS

+5
YEARS



OUR CLIENTS



METHANEX



KraftHeinz



Coca-Cola





VISION

- To become a leading inspection solutions provider at both domestic and international levels by providing reliable and integral services and products through competent and creative approaches.
- To be a role model for an African inspection company that reaches international recognition.

MISSION

- To qualify the African and Middle Eastern NDT professionals, through training, to compete at the highest international level. To consistently maintain international standards for the service providers.
- To provide the industry with innovative solutions helping in developing of NDE market.

WHAT WE DO

Industrial Training



NDT Products Innovation



Tank Calibration & Measurements



3D Laser Scanning



Advanced NDT Services



Third party Inspection



Asset Integrity Solutions



NDT ISO 9712 Examination & Certification



Failure Analysis and forensic engineering

NDT SERVICES

● SUPPLEMENTARY

HOLIDAY DETECTOR INSPECTION

HARDNESS TESTING (HT)

HEAT TREATMENT (PWHT SERVICES)

POSITIVE MATERIAL IDENTIFICATIONS (PMI)

ROPE ACCESS

WELDING INSPECTION

LIFTING EQUIPMENT INSPECTION SERVICES

DRY FILM THICKNESS (DFT)

REPLICA TEST

● ADVANCED

TUBE INSPECTION SERVICES

PULSED EDDY CURRENT TESTING (PECT)

MFL INSPECTION

THERMOGRAPHIC INSPECTION

ACOUSTIC EMISSION

LONG RANGE ULTRASONIC TESTING (LRUT)

SHORT RANGE ULTRASONIC (SRUT)

PAUT INSPECTION

TOFD INSPECTION

CORROSION MAPPING INSPECTION

DIGITAL RT

● CONVENTIONAL

MAGNETIC PARTICLES INSPECTION

LIQUID PENETRANT TESTING

ULTRASONIC FLAW DETECTION

RADIOGRAPHIC TESTING

ULTRASONIC THICKNESS GAUGING

VACUUM BOX TESTING

TRAINING SERVICES

IN SERVICE

API'S

CATHODIC PROTECTION

FITNESS FOR SERVICE

NDT LEVEL III REFRESHER

BASIC

MT,PT

UT,RT

ET,IR

MFL

QC/QA

ELECTRICITY

WELDING

CIVIL

COATING

SCARFFOLDING

NDT CONVENTIONAL

MAGNETIC PARTICLES INSPECTION

DYE PENETRANT TESTING

ULTRASONIC TESTING

VT

RTFI

ET

NDT ADVANCED

PHASED ARRAY

TOFD

EDDY CURRENT TESTING

TUBE TESTING

MFL

ACFM

ADVANCED NDT SERVICES

● **TUBE
INSPECTION
SERVICES**

● **MFL
INSPECTION**

● **ACOUSTIC
EMISSION**

● **LONG RANGE
ULTRASONIC
TESTING (LRUT)**

● **PAUT
INSPECTION**

● **CORROSION
MAPPING
INSPECTION**

● **PULSED EDDY
CURRENT TESTING
(PECT)**

● **THERMOGRAPHIC
INSPECTION**

● **SHORT RANGE
ULTRASONIC
(SRUT)**

● **TOFD
INSPECTION**

HIGHLIGHTED NDT TECHNIQUES

1- PAUT/TOFD/TFM

- Automatic and Semi-automatic scanning of seam and circumferential welds.
- Automatic and semi-Automatic Corrosion Mapping.

-Online inspection of the following.

- Metal loss under storage tank annular plates.
- Metal loss under pipe supports.
- Flange face corrosion/erosion.
- Piping weld root corrosion/erosion.
- Bolts corrosion/cracking.

-Special tools for the following applications:

- Weld inspection of Piping from ½ to 4.5 inches.
- Weld inspection of stainless steel, alloys, and dissimilar metals.
- Weld inspection of high density polyethylene (HDPE).
- Corrosion mapping of elbows, irregular shapes, and other special configurations.
- Early detection of HTHA, Stress Corrosion Cracking and creep damage.



HIGHLIGHTED NDT TECHNIQUES

2- ACFM WELD INSPECTION

- High sensitivity to surface-breaking cracks and defects.
- Suitable for conductive material.
- Requires minimal surface preparation, typically cleaning and removal of loose debris.
- Normal probe 3X faster than MT/PT.
- Array probe 10X faster than MT/PT.
- Detects and measures surface-breaking cracks and defects in conductive materials.

APPLICATIONS:

- Splash zone inspection and subsea.
- High temperature applications.
- Weld inspection.
- Thread inspection.
- Inspection through thick coating.



HIGHLIGHTED NDT TECHNIQUES

3- PULSED EDDY CURRENT TESTING (PECT)

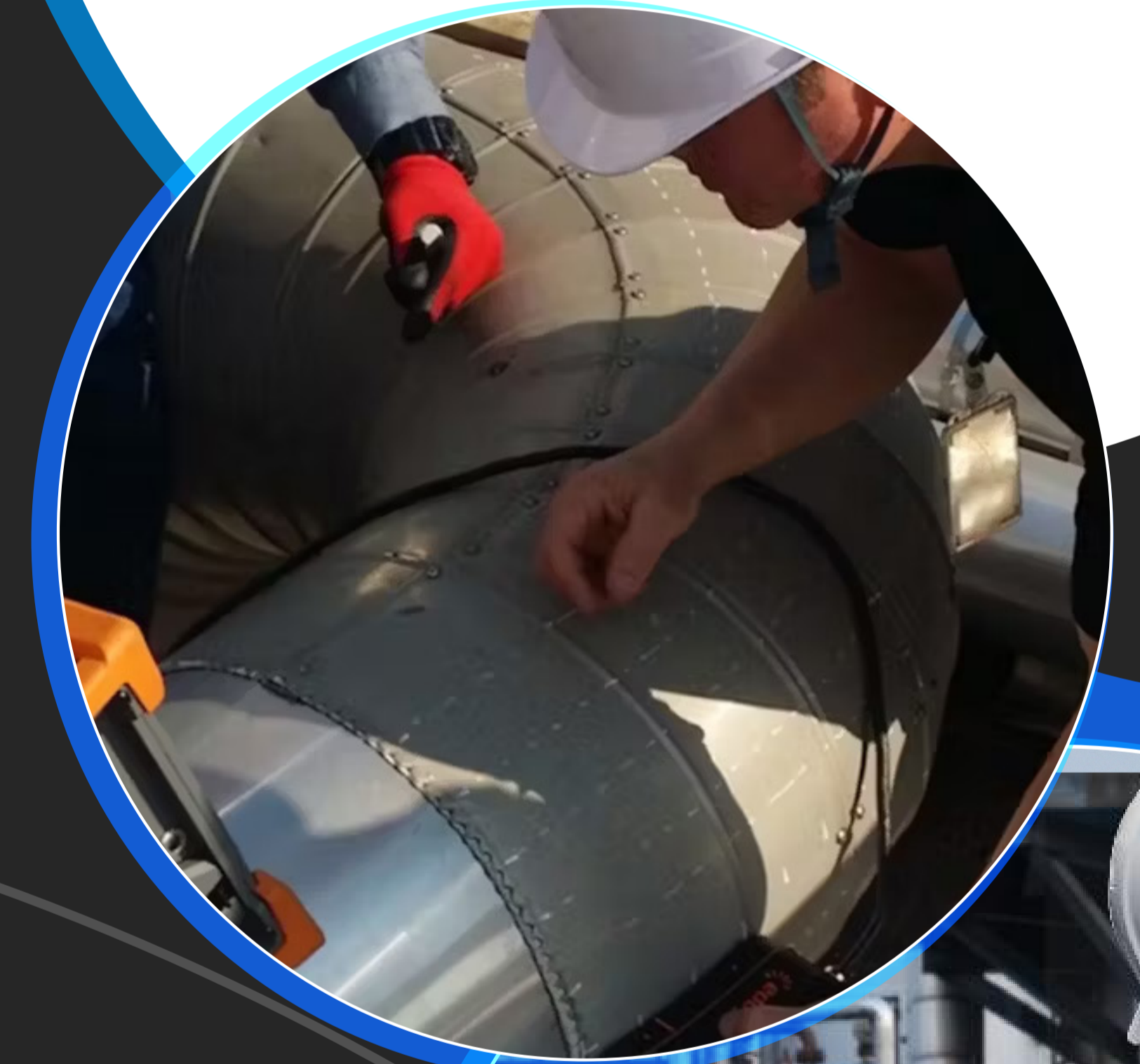
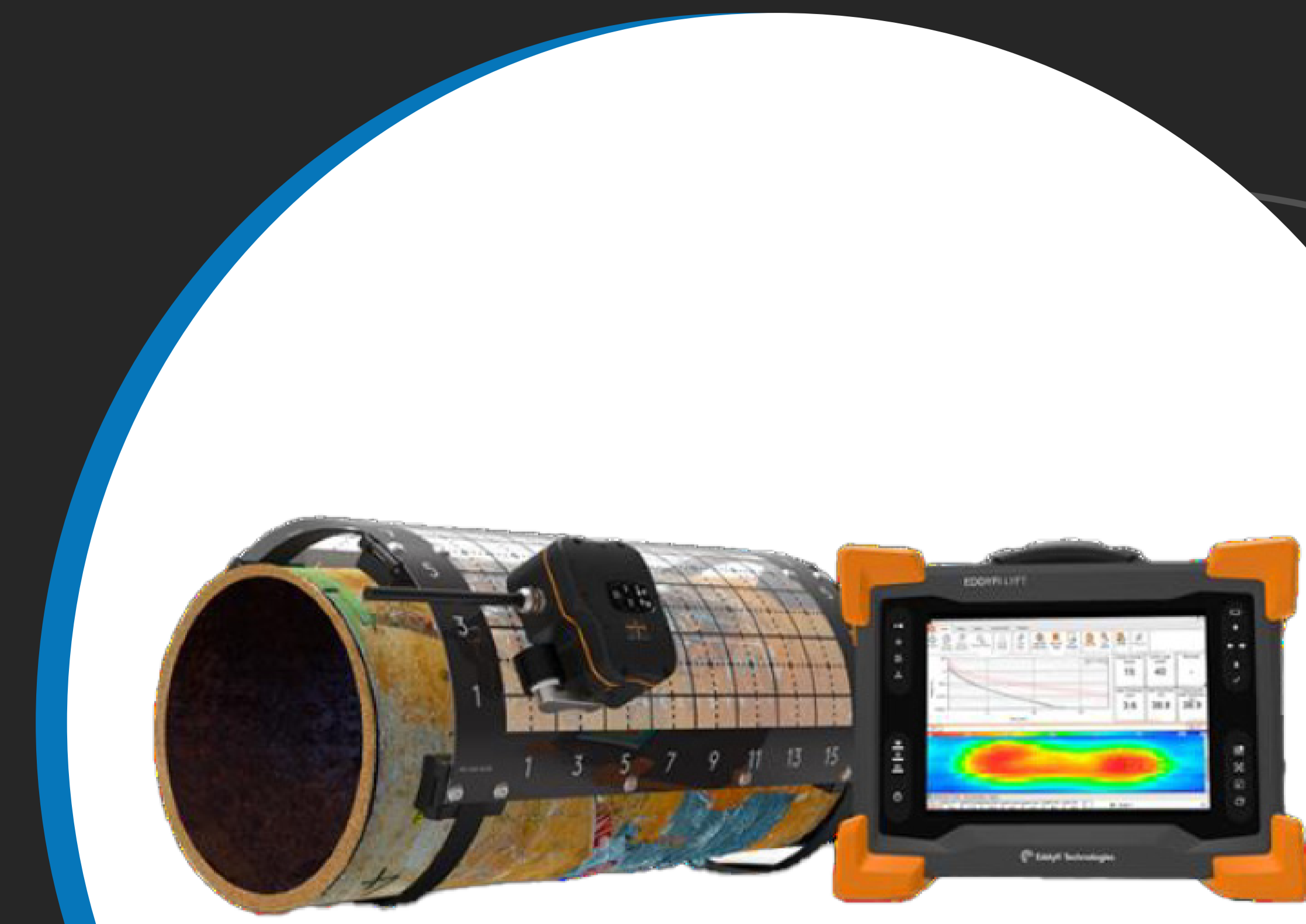
VERSATILE APPLICATIONS:

Pulsed Eddy Current (PEC) demonstrates exceptional capabilities in inspecting a diverse range of complex structures.

TARGETED INSPECTION:

Whether its pipes, vessels, or storage tanks, PEC offers a precise and targeted solution for flaw detection. Efficient Large-Scale Inspections: PEC excels in conducting efficient inspections over extensive areas, making it well-suited for applications where large-scale assessments are crucial.

Minimal Surface Preparation: Enjoy the efficiency of PEC inspections with the added benefit of minimal surface preparation, streamlining the inspection process and minimizing downtime. corrosion under concrete pipe for sub-sea pipelines



HIGHLIGHTED NDT TECHNIQUES

1- TUBE INSPECTION SERVICES

1. Eddy current testing (ECT Non ferrous Tubing)

- Fast and accurate process.
- Sensitivity to surface defects.
- Can detect through several layers.

2. MFL (magnetic flux leakage)

- Early Detection
- High Sensitivity
- Fast Inspection
- Minimal Surface Preparation

3. IRIS Tube Inspection

- Accurate wall thickness measurements.
- Sensitivity to both internal and external defects.
- Defect position can be located in relation to tube length.
- 100% coverage of the tube.

4. Remote Field Inspection (RFT- Ferrous Tubing)

- Suitability for ferromagnetic materials.
- Equal sensitivity at the inner and outer surfaces.
- High sensitivity to wall-thickness variations.

5. Near Field Testing (NFT – Fin Fans)

specifically suited to detecting corrosion, erosion, and pitting inside carbon steel tubing.

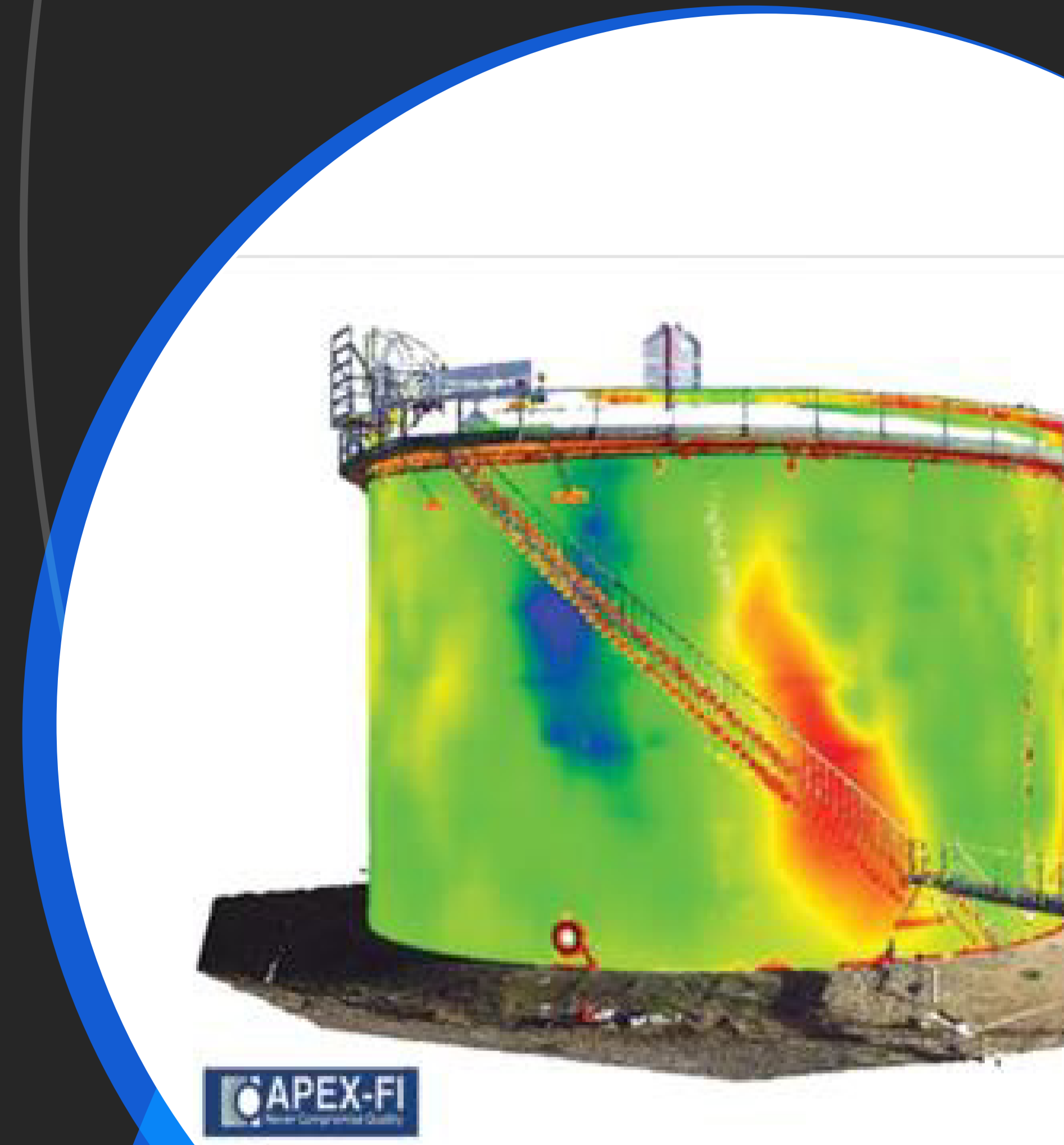
- Fast & Easy to use.
- No need for an external reference coil.
- Unaffected by structures such as support plates and tube-sheets.



3D LASER SCANNING

STORAGE TANK 3D MODELING AND DEFORMATION ANALYSIS

- APEXFI has the capabilities to perform spatial analysis and 3D scan modeling using point cloud system generated by our 3 D Laser Scanning platforms.
- With this technology, we can generate measurable 3 D scan point clouds of your facilities, tanks pipes, etc. This 3 D scan data can be useful when performing dimensional analysis, volume calculations repair planning, settlement survey, shell distortion, and other spatial analyses of the 3 D scan models generated by the scanner.
- Tanks calibration using 3 D laser scanner technology and geometrical and structural analysis aimed to verify the compliance with API 650 and API 653



SERVICES INCLUDE

TANK SHELL DISTORTION
COLOR MAP

RAFTER STRUCTURAL ASSESSMENT

FOUNDATION SETTLEMENT PROFILE

3D MODELING (AS BUILT)

COLUMN STRUCTURAL
ASSESSMENT

MEASURABLE ONLINE POINT
CLOUD ACCESSIBILITY

TANK CALIBRATION

TANK SURVEY

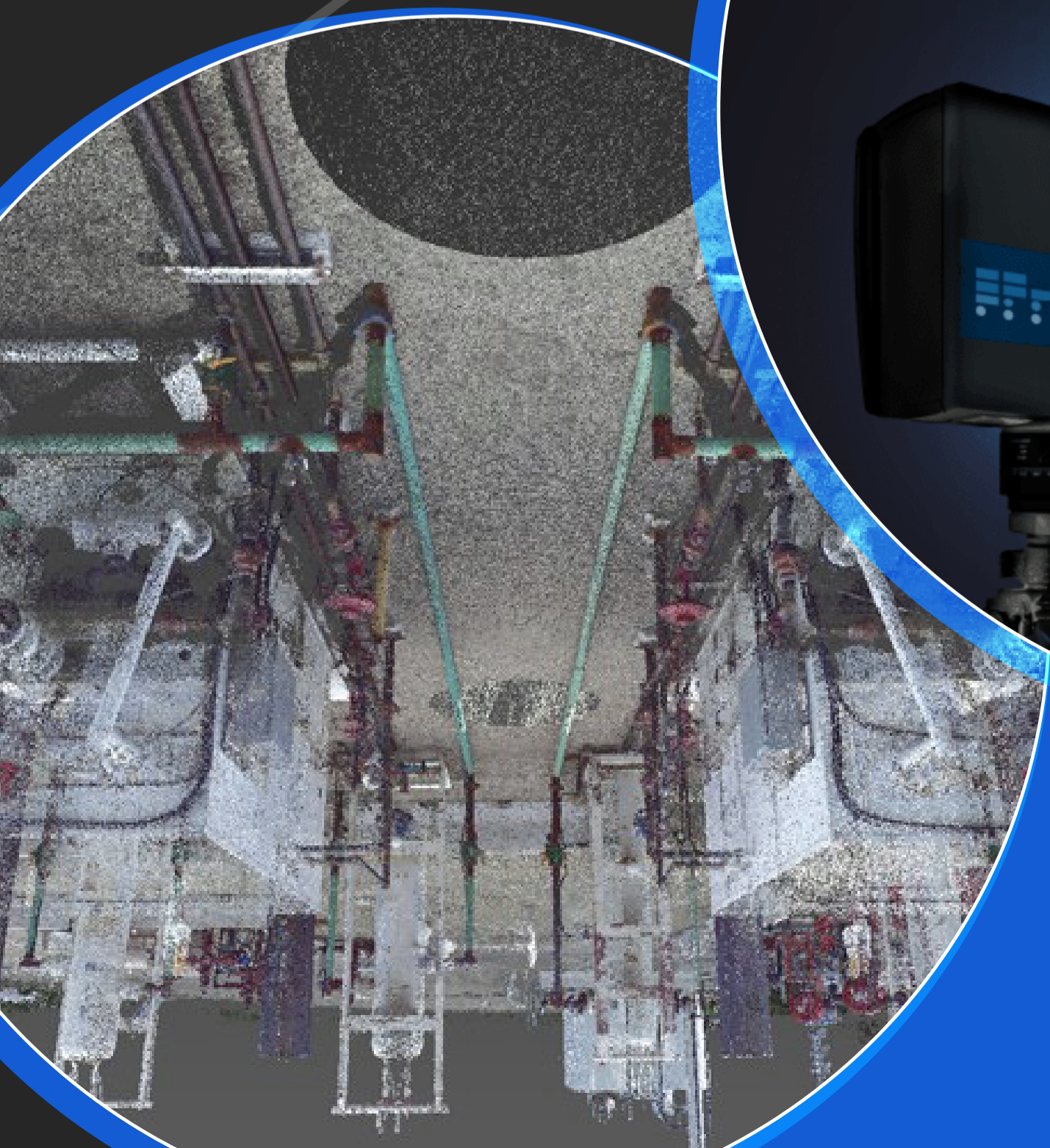
MARINE VESSEL MODELING



3D LASER SCANNING

STORAGE TANK 3D MODELING AND DEFORMATION ANALYSIS

- extension and changes Plants often need to be changed, restructured or expanded due to changing market requirements unforeseen situations, new procurement sources, regulatory updates or technical innovations.
- It is important for companies to manage these changes effectively and efficiently in order to minimize shut down time and associated costs. Thanks to precise and complete 3D documentation, operators can identify conflicts between proposed designs and actual conditions, and check any critical measurements and specifications relating to installations and components such as motors, pumps valves, pipe systems, etc.
- The areas requiring revamping work can be processed and updated by using geometrical models and photo realistic images with color information from scan data. 3D data can also be processed by specialized software to accurately explore and assess different design options.





VOLUMETRIC TANK CALIBRATION SERVICES

- Tank calibration is the science of determining the exact true volume of a containment system corresponding to a certain measurement value. Reliable quantity measurement is the critical basis of good contractual relationships in worldwide trading of chemicals, petroleum products and liquefied gases. This can only be assured by accurate and regular calibration.
- At APEXFI we use the latest and the most innovative laser calibration measurement technology to help companies to reduce time and costs of tank management, as well as offering storage tank calibration to International Standards.
- We can calibrate any tanks, regardless of shapes and sizes. What is the precise capacity of our customers' tanks. The difference can mean hundreds of thousands of dollars to their businesses and we at APEXFI ensure that our customers don't lose these money.

METHODS OF CALIBRATION

- Internal and external tank calibration by Manual strapping OTM EODR 3D Laser Scan.
- Pipeline Volume Calculations.
- Ship and Barge Tank Volume Calculations.
- Custody Transfer Systems (CTS).



VENDOR INSPECTION

- Providing worldwide network of vendor inspection companies by linking our professional and local inspectors with your selected vendor, anywhere around the world, saving you time, travel and lodging expenses.
- Our global network of local inspector companies support both on call and resident based inspection services.



- Secondment of national and international professionals skilled in NDT, Inspection, QA / QC and Engineering.
- We supply technically educated personnel from start ups to experienced professionals at executive and management level.
- This involves both vacancies for permanent positions or temporary projects.

SUBSEA SOLUTIONS

APEX-FI as a market leader in advanced ultrasonic solutions integrates with subsea automatic solution providers to extend their services in the subsea sector. This integration resulted in a comprehensive Automated Ultrasonic

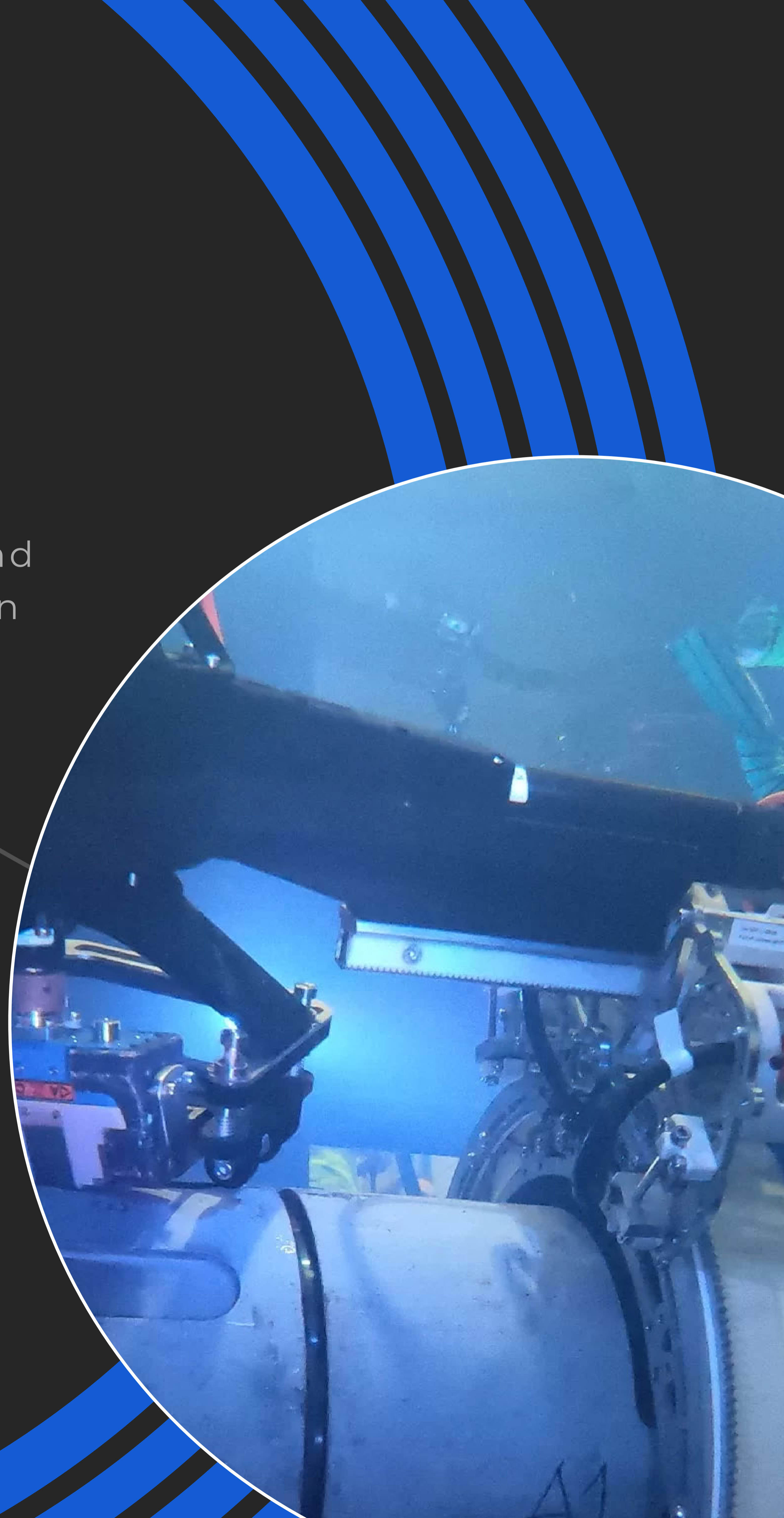
Testing (AUT) on subsea structures and pipelines. The system utilizes top-of-the-line technologies to investigate anomalies and providing fitness-for-service assessments with high levels of accuracy, in exceptionally short time and effective cost.

PAUT & TOFD CORROSION MAPPING

**ALTERNATING CURRENT FIELD
MEASUREMENT**

ITI

PULSED EDDY CURRENT



EQUIPMENT LIST

PAUT/TOFD



● MANTIS



● TOPAZ 64



● GEKKO

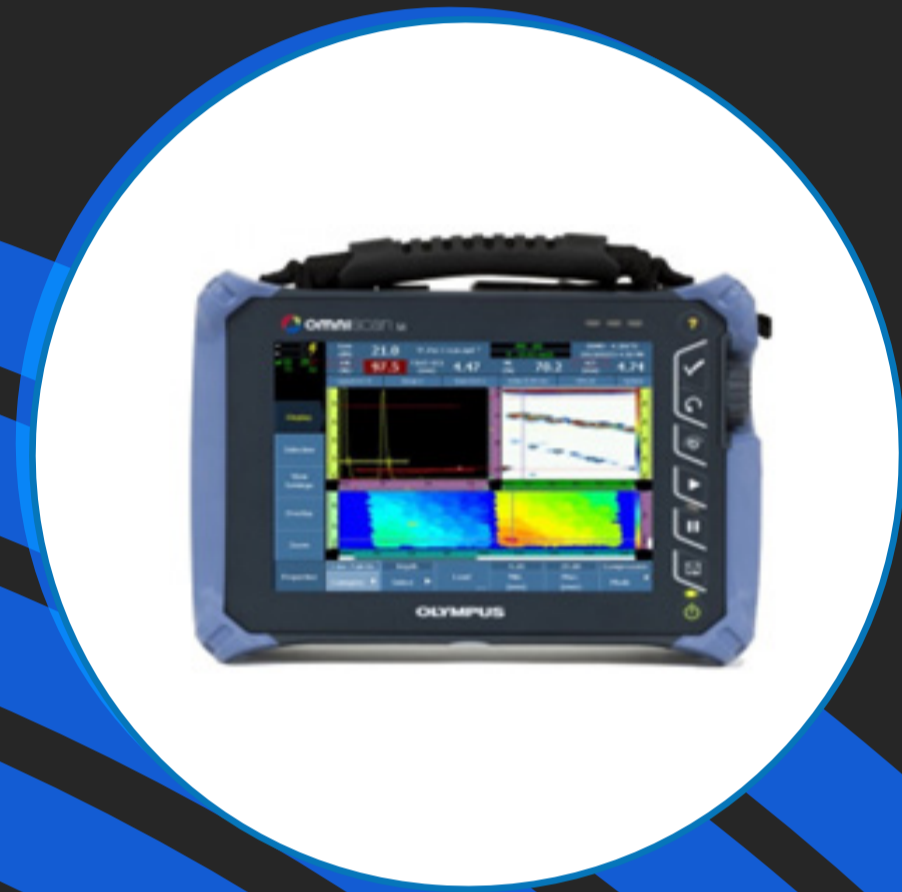
EQUIPMENT LIST

OLYMPUS

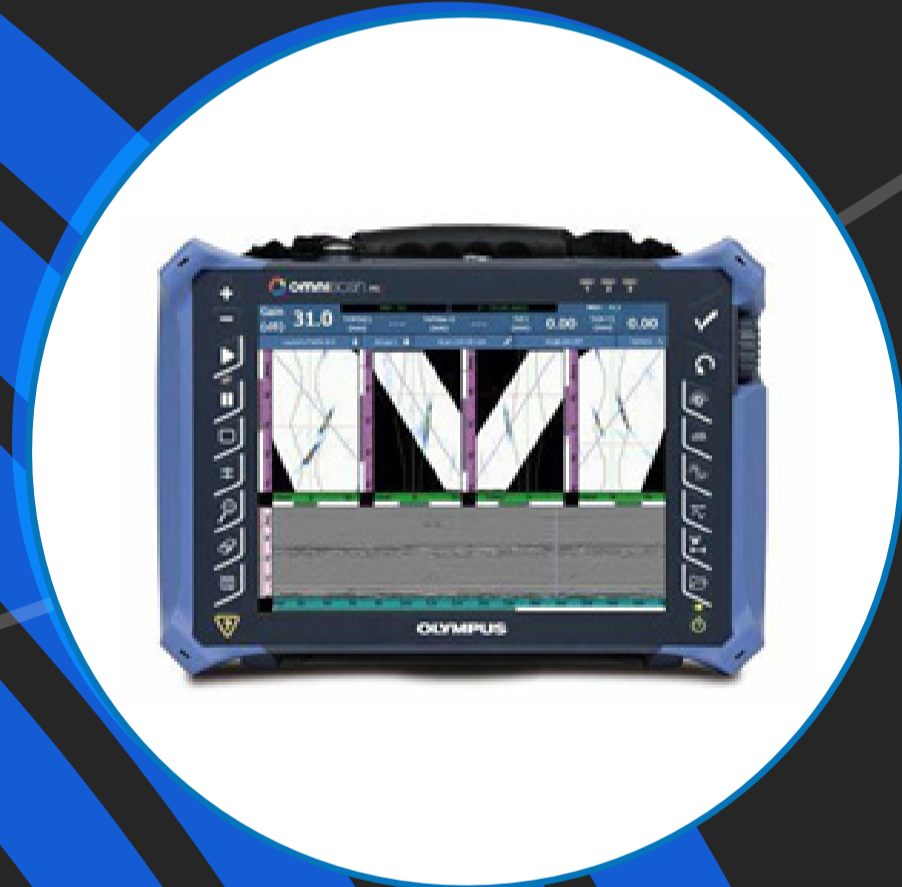
● SONA TEST VEO3



● OLYMPUS SX



● OLYMPUS MX2



● PRISMA



● OLYMPUS X3



EQUIPMENT LIST

ACFM



● AMIGO 2

Pulsed eddy current



● EDDYFI LYFT

Tube Testing



● EDDYFI ECTANE²



● OLYMPUS MULTISCAN
MS5800

EQUIPMENT LIST

Magnetic Flux Leakage



● MFE MARK IV

Survey



● CTS-112R4 TOTAL
STATION

EQUIPMENT LIST

3D scanning

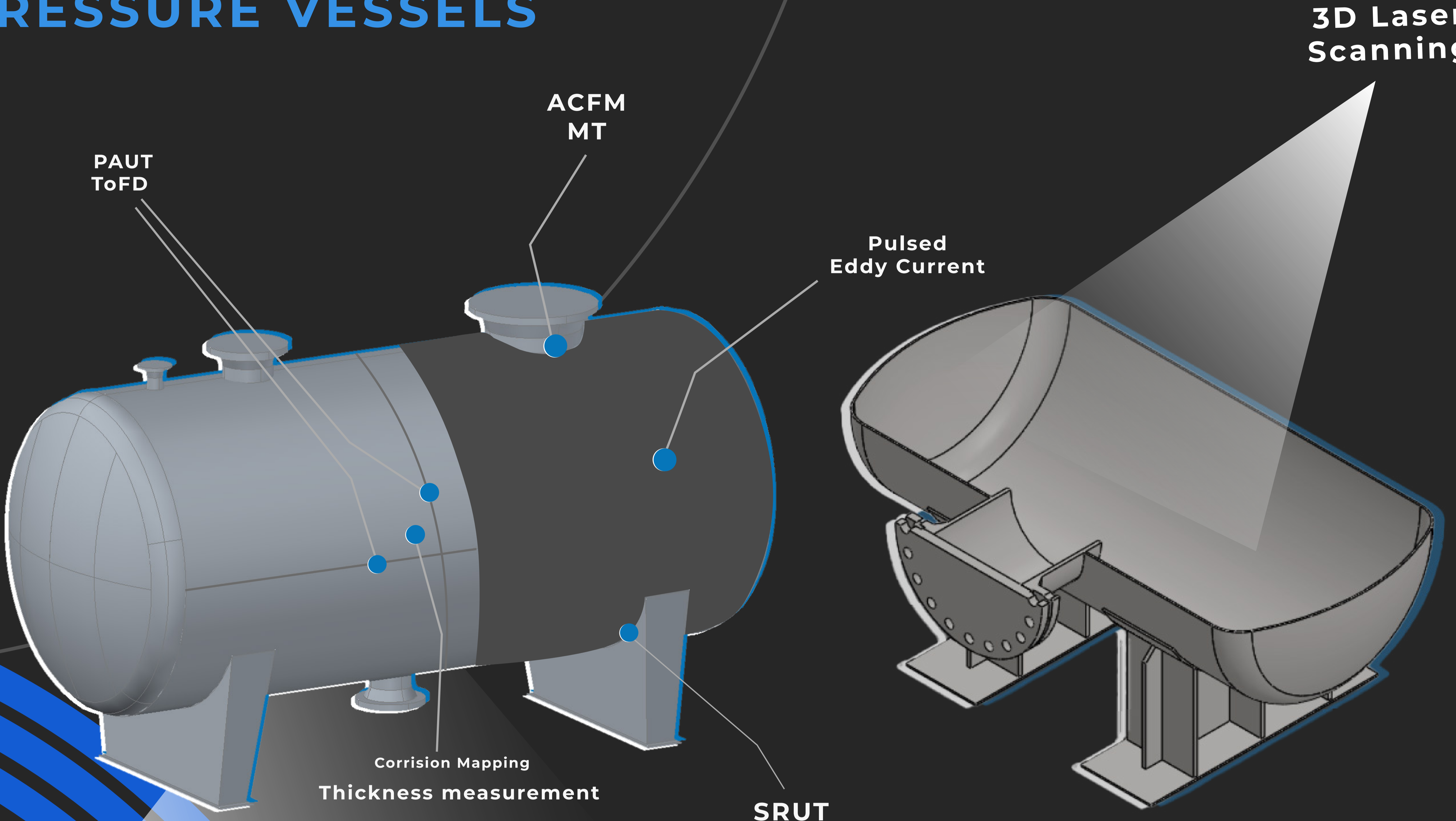


- **FARO FOCUS LASER SCANNER**
(S70, S120 AND S350)



- **LEICA BLK360 IMAGING**
LASER SCANNER

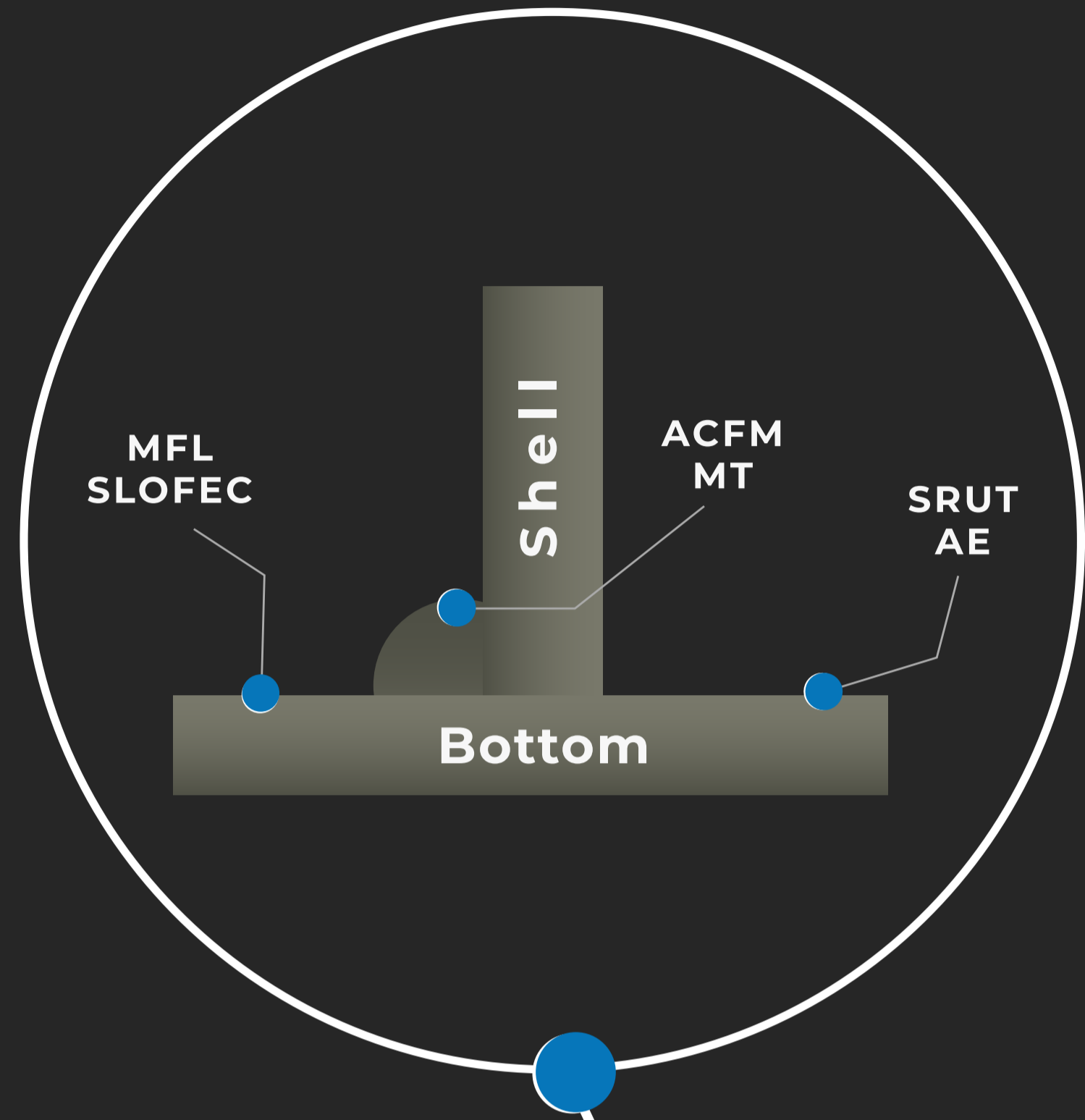
COMPLETE INTEGRITY SOLUTION FOR PRESSURE VESSELS



3D Laser Scanning

3D Laser Scanning

COMPLETE INTEGRITY SOLUTION FOR TANKS



Aut. Corrosion Mapping
Thickness measurement

Pulsed
Eddy Current

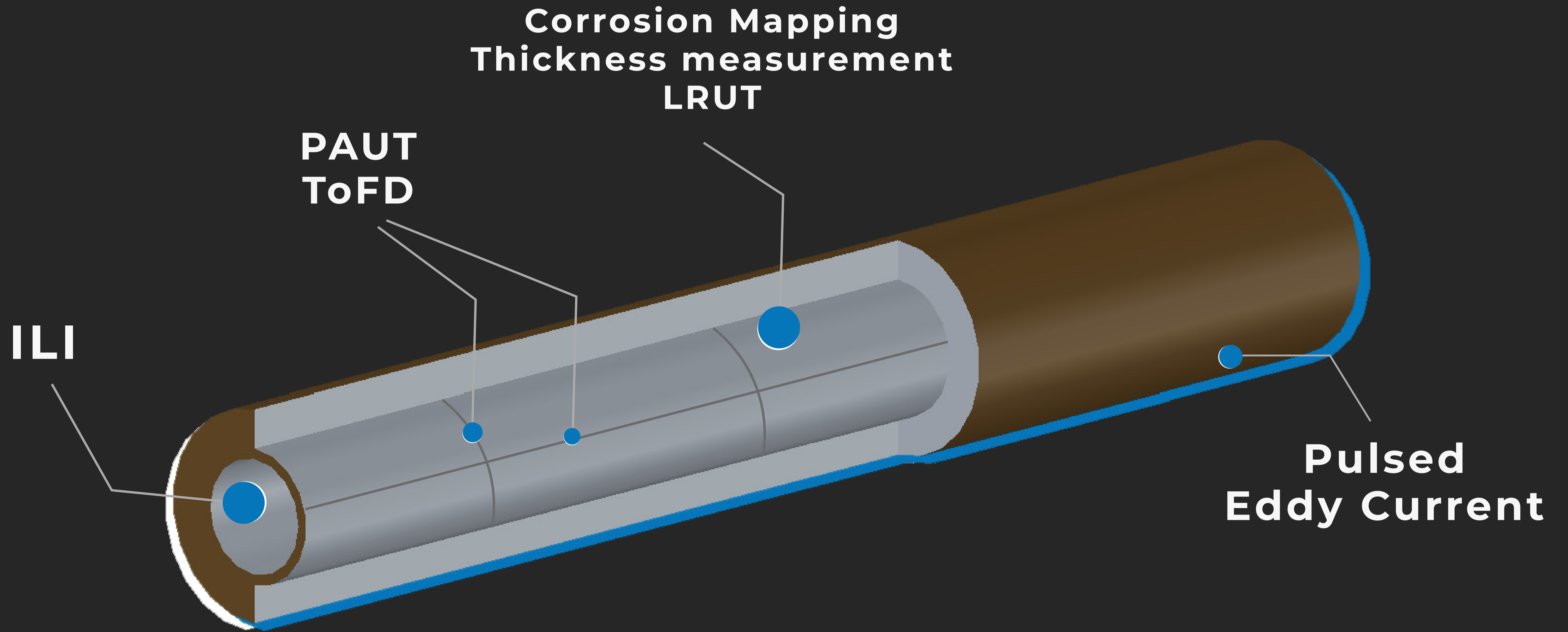
PA
AcFM

3D Laser
Scanning

PAUT
ToFD

MFL
SLOFEC

COMPLETE INTEGRITY SOLUTION FOR PIPELINES



COMPLETE INTEGRITY SOLUTION FOR SPHERE TANKS

Pulsed Eddy Current Thermography

PA
ACFM

Aut. Corrosion Mapping
Thickness measurement

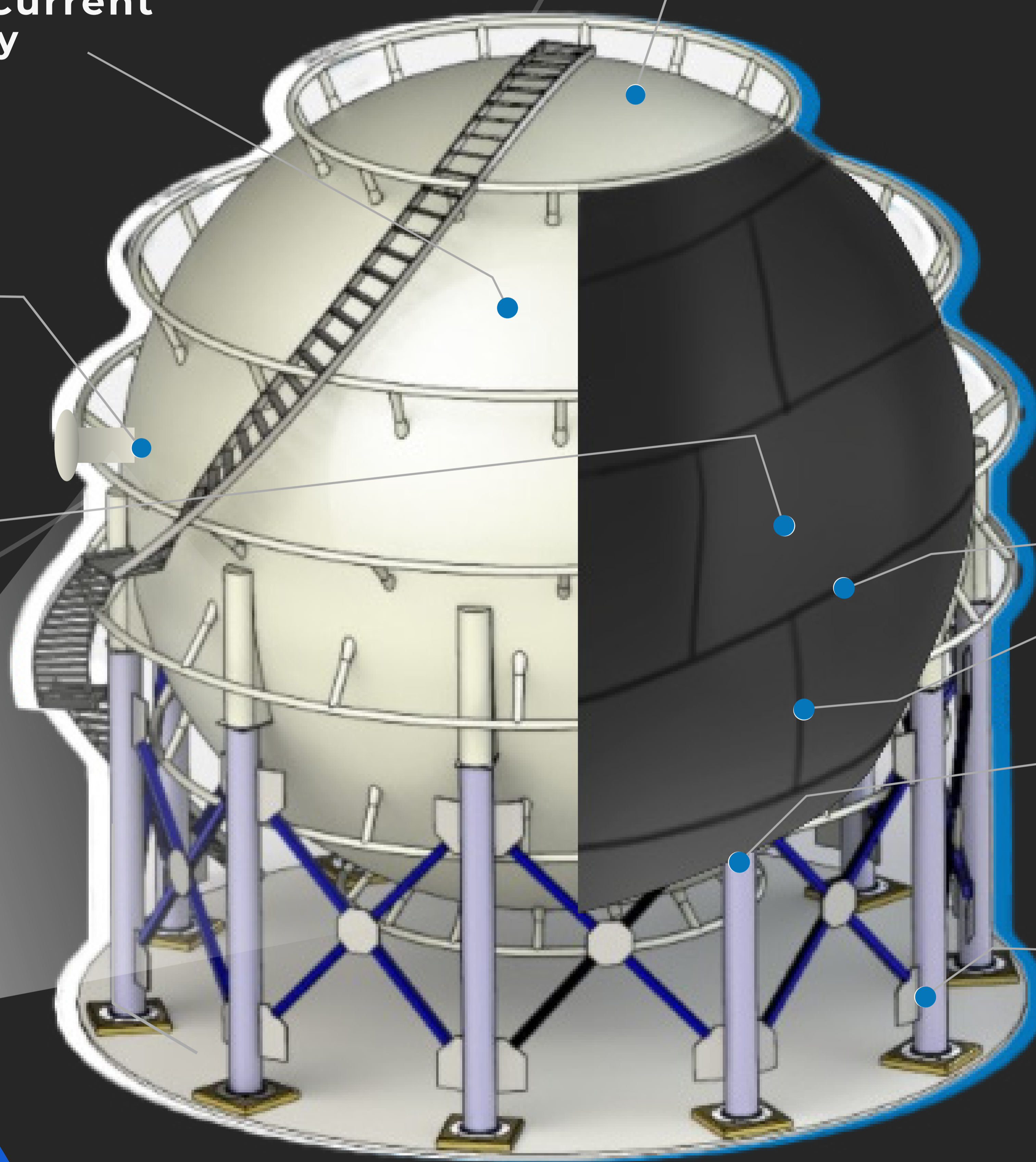
3D Laser
Scanning

Acoustic Emission

PAUT
ToFD

ACFM
MT

LRUT



COMPLETE INTEGRITY SOLUTION FOR PIPING

