

TBIT Ultra Service

Sizing the Smallest Metal Loss Defects with our Tank Bottom Inspection Service



Highest sensitivity allows for early detection of small features



Competence and reliability in MFL data analysis from our ILI market leadership position



Reduction of hours due to automated feature detection and sizing



Fast inspection turnaround time through on-site reporting



Exceeding inspection compliance requirements

Where corrosion is one of the most common threats to lifetime performance, TBIT Ultra can help ensure tank bottom integrity. Through sensitive detection and diagnosis, the TBIT Ultra service is capable of accurately sizing the smallest metal loss defects and delivers fast results, which inform decisions now and aid with planning for the future.

Detection & Diagnosis

Early detection of the presence or absence of any small defect indications enables operators to obtain more precise corrosion rate determinations, reduces the costs of ownership and extends the inspection interval. The TBIT Ultra Service provides industry leading performance in automated and accurate sizing, including the smallest metal loss defects. The TBIT Ultra Service allows for maximum coverage of the tank floor by using a remote-control tank floor scanner for difficult-to-access areas (e.g. under piping or heating coils). In addition, a dedicated Blind Zone Scanner for areas that otherwise remain uninspected due to the physical limitations of the floor scanner significantly reduces the risk of missing relevant metal loss defects in areas normally not being covered by floor scanners.

Benefits

- Highest sensitivity — 10% metal loss reporting threshold
- Automated defect sizing through signal-based analysis — more reliable and more accurate than manual UT
- Automated internal and external defect discrimination
- High coverage inside the critical zone including annular plates, sketch plates and areas close to the plate and corner welds
- Suitable for use in restricted areas by using remote-control tank floor scanner (e.g. below heating coils and piping)
- Less blind zones: Reduction of uninspected areas through dedicated Blind Zone Scanner
- Fast inspection turnaround time through on-site reporting resulting in less out-of-service time
- Reduction of hours in confined spaces due to automated feature detection and sizing
- Coating removal is not required (for coatings 0.24 inches / 6mm)
- From compliance to performance — exceeding requirements outlined in API653 and EEMUA 159
- Instant access to relevant integrity data and clear recommendations on mitigation and repair
- Data stitching – alignment of data sets from tank floor scanner (TBIT Ultra) and Blind Zone Scanner
- Data integration and visualization in ROSOFT for Tanks data management and planning software



Prescription & Prognosis

“ROSOFT for Tanks” is a versatile data management and planning system that visualizes all inspection findings (from 10% metal loss) and enables quick and easy development of repair scenarios, and corresponding Bills of Material (patch plate sizes, welding lengths,

etc.). Our integrity team provides a short-term prescription and long-term prognosis to help optimize expenditure by providing sound advice on mitigation, repair, and future needs.

Technical Specifications

	TBIT Ultra	Blind Zone Scanner
Detection Threshold	0.1t	0.2t
Pitting & General Corrosion Pinholes	Ø2mm [0.08"] and 0.2t	Ø3mm [0.12"] × 0.2t
Sizing Accuracy Depth	±0.04t	±0.1t
Coating Thickness	Up to 6mm [0.236"] (automatic sizing) 6-10mm [0.236"-0.394"] (detection only)	Up to 2mm [0.08"] (automatic sizing) 2-3mm [0.08"-0.12"] (detection only)
Plate Thickness	4-16mm [0.156"-0.625"]	4-8mm [0.156"-0.315"]
No. of Sensors	1029 (Hall + EC)	270 (Hall + EC)
Internal/External Discrimination	Yes	Yes
Scan Speed	100 m²/h or 1076 ft²/h	Less than a minute per blind zone (245mm × 245mm [10" × 10"])

Please note that this specification only applies if certain conditions are in place. For details please refer to the Performance Qualification Reports “ROSEN TBIT Ultra Validation test Version 1.0” and “BZS Validation report”, which are an integral part of this specification. No other party than ROSEN shall be entitled to copy, alter or modify this specification or to use it for own or other purposes or disclose it on to third parties without the prior written consent of ROSEN.

Service Level Specifications

Our TBIT Ultra Service provides different service levels allowing you to choose the solution that meets your needs and budget.

Service Level	Extended	Standard	Essential
Reporting Threshold	10% Ø2mm	20% Ø3mm	40% Ø10mm
ROSOFT for Tanks Reporting including	<ul style="list-style-type: none">• Floor map• Stripes incl. bitmaps• Floor map of features above 10%• Coordinates• Feature list• Feature statistic• Full data set incl. C-scan• Lift-off and respective coating thickness• Wall thickness	<ul style="list-style-type: none">• Floor map• Stripes• Floor map of features above 20%• Coordinates• Feature list• Feature statistic	<ul style="list-style-type: none">• Floor map• Stripes• Floor map of features above 40%
Reporting Format	Comprehensive PDF report	Standard PDF report	PDF report (1 page)

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