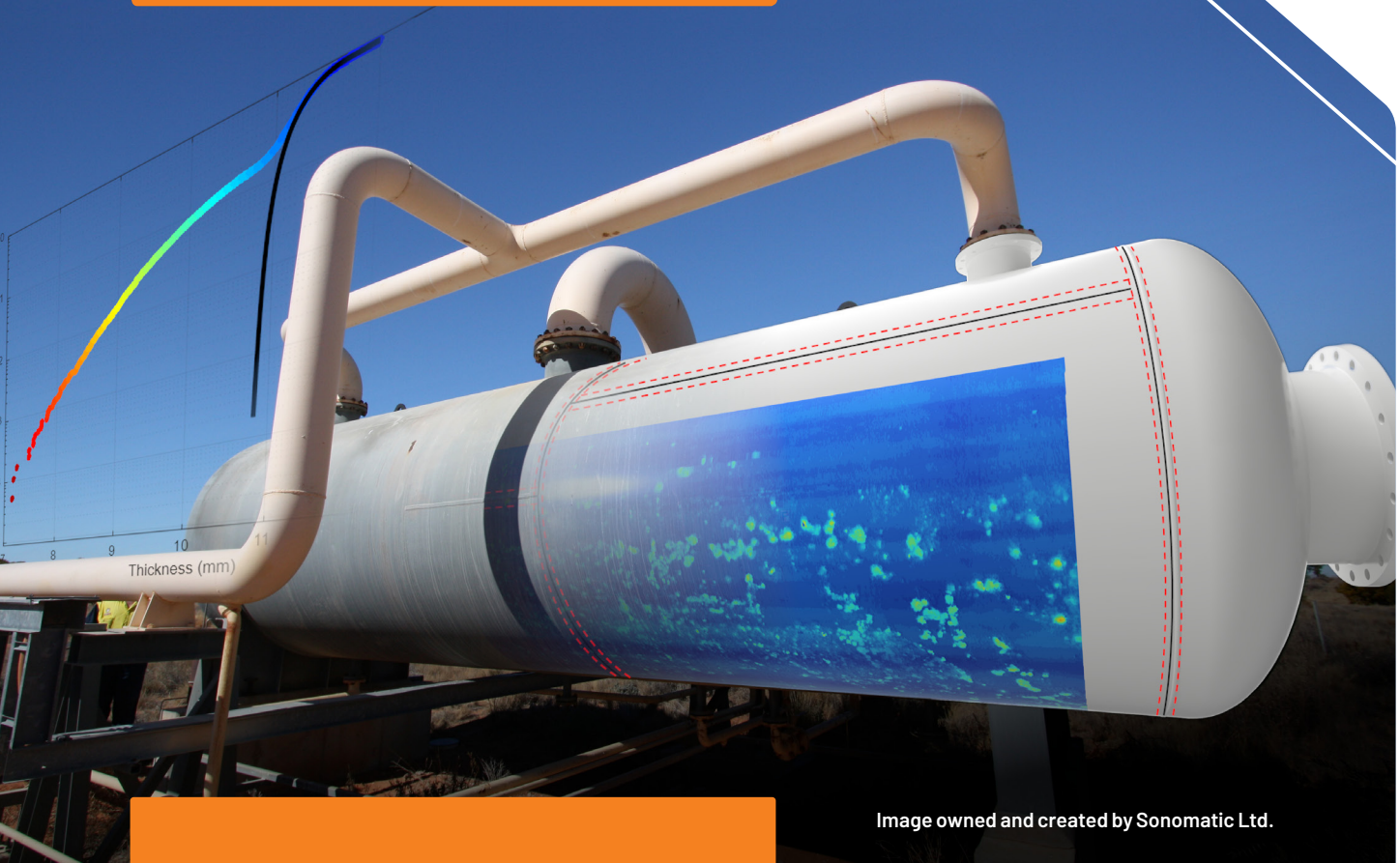


CAPABILITY STATEMENT

INTEGRITY SERVICES

THE PURPOSE

This document is composed to assist our clients and the supply chain to understand our group operating structure along with a high-level understanding of the benefits, services and specialist packages associated with our integrity and engineering capabilities.



WHO WE ARE



Vertech, Sonomatic, Geo Oceans and Blue Ocean Marine Services have combined into a single group that compliments each other's strengths. As a cohesive unit we can provide a wide range of services and specialist packages tailored to the needs of each client. No matter what the scope, we offer the very best mechanical, coating, alternative access, rigging, visual inspection, ROV, and NDT services, all within one group.

OPERATING STRUCTURE



In Australia, Sonomatic operates as the advanced and subsea specialist arm of Vertech Group. Sonomatic specialise in the design, development and application of Non-Destructive Testing (NDT) inspections. Since the company's formation in the 1980s, we have combined these NDT processes with integrity engineering capabilities to provide fully integrated inspection packages that directly meet the needs of the client.

Bringing innovative bespoke inspection solutions to the market through in-house development of equipment, software and robotics, Sonomatic resides as the global leader for ROV-deployed subsea inspection and Non-Intrusive Inspection (NII) technologies.

Our team is committed to providing accurate, proactive inspection and engineering solutions that enable clients to manage the integrity of newly constructed assets and make informed decisions crucial to the safe continued operation of maturing ones.

GLOBAL FOOTPRINT



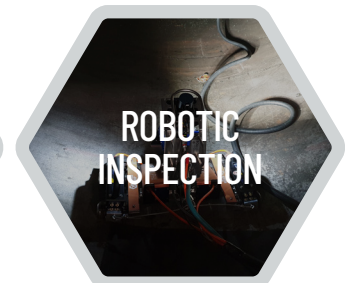
WHAT WE DO

Sonomatic provide integrity engineering and NDT services at every stage of a project's life cycle. NDT subject matter experts assess each scope of work individually to ensure that the inspection solution(s) will meet the desired deliverables. If a unique solution is required, our R&D department can design and manufacture inspection technologies and scanners that will exactly meet our client goals. Our integrity service offerings provide industry leading inspection and engineering evaluations of the inspection data to enable recommendations for repeatable inspection programmes.

SUBSEA



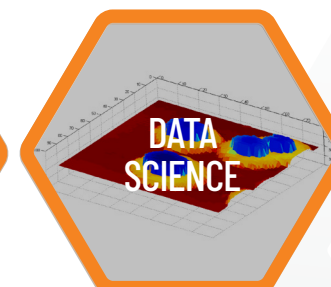
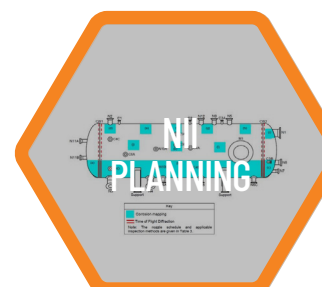
ONSHORE/ TOPSIDE



RESEARCH & DEVELOPMENT



INTEGRITY SERVICES



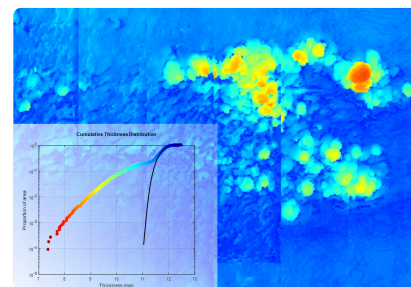
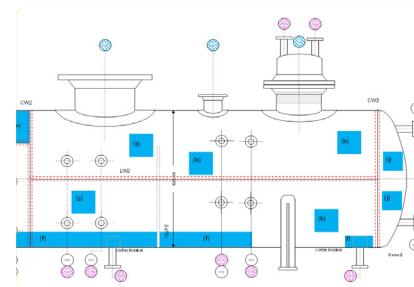
INTEGRITY SERVICES

Sonomatic's integrity services team strives to maximise the value of advanced inspection in the context of integrity management. We achieve this by combining our years of experience in this field with specialised data analytics, statistical methods and custom software development. Traditional integrity management systems are designed around the planning and utilisation of visual inspection and conventional NDT. However, advanced NDT and Non-Intrusive Inspection (NII) make up a growing percentage of the market. This is where we find our niche; supporting integrity management through effective planning for a robust, objective analysis of advanced inspection.

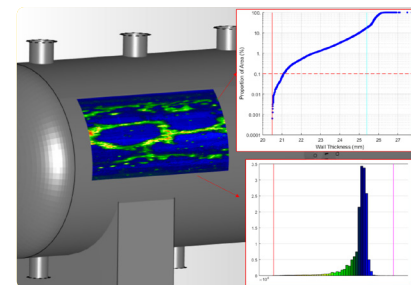
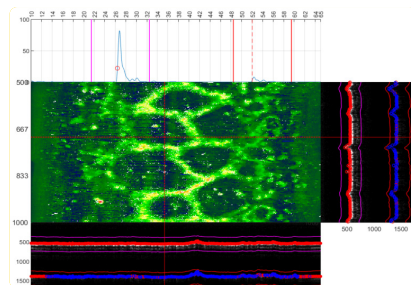
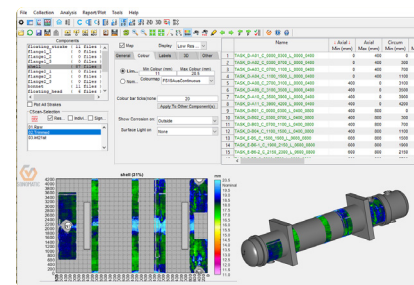
Sonomatic has pioneered the formal industry approach for Non-Intrusive Inspection and has developed practical statistical methods for analysis of inspection data as well as inspection planning through simulation. Sonomatic is well-positioned to support the integrity management sector in its inevitable transition to increased data-driven decision making.

KEY OFFERINGS

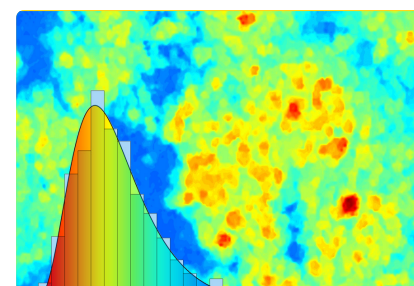
FULLY INTEGRATED NII PACKAGE



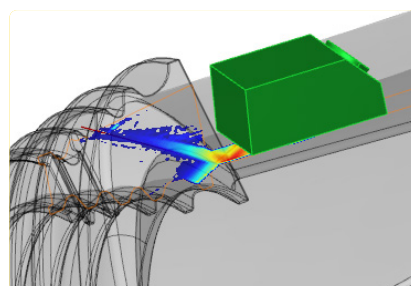
SONOMATIC INTEGRITY MANAGEMENT SOFTWARE - SIMS



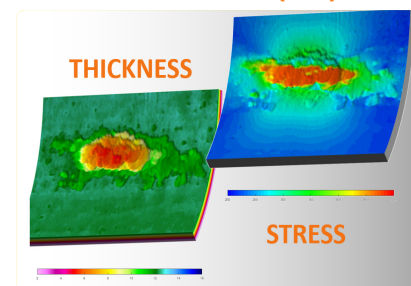
DATA SCIENCE



INSPECTION MODELLING

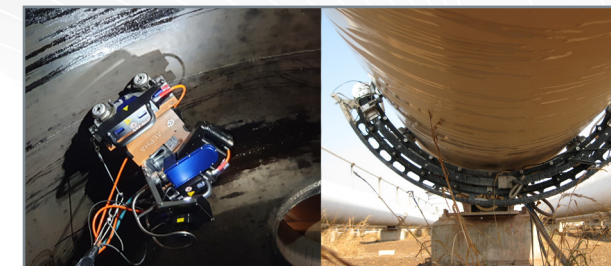


FITNESS FOR SERVICE (FFS)



CASE STUDIES

KEY SONOMATIC SUCCESS STORIES



NII - RDVI STRATEGY DEVELOPMENT

Sonomatic is the primary author of HOIS-RP-103, the Recommended Practice for Non-Intrusive Inspection of Pressure Equipment. We apply our expertise in this space to write operator specific strategies for NII. This capability extends to an integrated NII-RDVI strategy through collaboration with Vertech's RDVI specialists. We help operators realise significant savings by implementing long-term NII-RDVI strategies early in the project lifecycle. This includes influencing vessel design to optimise the overall use of NII or RDVI.



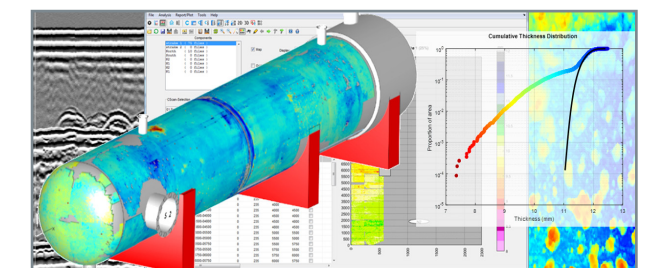
WOODSIDE NORTH WEST SHELF

Sonomatic has supplied Woodside with NII services for over 80 pressure equipment items across the Karratha Gas Plant and Pluto LNG facilities since 2016. This has often enabled inspection execution to be removed from turnaround scopes, providing valuable information on asset condition to the client ahead of time. Sonomatic was also engaged to author a company specific NII methodology and associated documentation, enabling NII to be fully adopted into the clients existing integrity management processes.



FULLY INTEGRATED NII

Santos engaged Sonomatic to complete NII for 13 vessels in lieu of internal inspection across two gas processing facilities in regional Queensland. Sonomatic's Integrity Team completed NII assessment and workscope development in accordance with HOIS-RP-103 and successfully executed inspection work through our Specialised Field Services Division. A detailed evaluation of the achieved NII demonstrated the required level of assurance and provided recommendations for ongoing monitoring. Significant cost and safety benefits were realised through the complete avoidance of scheduled turnarounds.



SIMS FOR NII OF LARGE PROCESS VESSEL

Sonomatic delivered NII planning, inspection and evaluation for a large separator vessel with known internal degradation. Over 100m² and 80GB of high-resolution ultrasonic corrosion mapping data was collected. Using SIMS, Sonomatic delivered 2D and 3D composite images during the inspection for assurance of coverage and vessel condition. SIMS significantly improved data processing times and generated a clean composite thickness map of the entire vessel. This streamlined transition to a finite element model for representative Fitness For Service (FFS) within days of the inspection.

SERVICES

NON-INTRUSIVE INSPECTION (NII)

NII is a safe and viable alternative to conventional internal visual inspection (IVI) that, when executed effectively, offers an equivalent or improved level of assurance, provide significant cost benefits and eliminates the need for Confined Space Entry (CSE).

As key authors of the HOIS recommended practice for NII, published as HOIS-RP-103, Sonomatic is a global leader in the implementation of NII. We are uniquely positioned to offer fully integrated NII, including comprehensive planning and evaluation services as well as advanced NDT capabilities. Our integrity services group has a strong track record of successful NII delivery, with extensive experience in assessments for suitability, workscope development, on site execution, and evaluation for more than 1000 pressure equipment items worldwide.

SUBSEA INTEGRITY SUPPORT

Sonomatic's integrity support capabilities extend to subsea inspection. We can provide formal justification for externally applied sampling inspection of unpiggable pipelines. This includes the design of key inspection requirements through statistical simulation of proposed inspection strategies against expected degradation scenarios, as well as a detailed evaluation of the achieved inspection and estimates for the overall line condition.

Sonomatic also provides support for In-Line-Inspection (ILI) verification using externally applied inspection. This includes evaluation of the ILI and ILI verification data to quantify potential biasing effects. Sonomatic has built the case for the continued operation of a number of subsea pipelines based on the verification of a small number of the deepest reported anomalies.

FITNESS FOR SERVICE

Fitness For Service (FFS) assessments are used to justify safe operation of damaged equipment. Sonomatic provides FFS and remaining life assessments to a range of industry codes and recommended practices. We have extensive experience in reliable defect definition from inspection data. Sonomatic's streamlined approach delivers representative Level 3 FFS based on finite element analysis and high-resolution inspection data at a competitive cost and turnaround time. We have also developed statistical methods to improve degradation rate and future corrosion growth estimates, which are crucial for setting ongoing integrity management requirements.

SONOMATIC INTEGRITY MANAGEMENT SOFTWARE (SIMS)

SIMS has been developed in-house specifically for improving the effectiveness of NII delivery through realisation of a digital twin for pressure equipment condition. This software aims to close the gap between inspection and integrity-related activities in NII by streamlining NII workscope development, data collection, data analysis, statistical analysis and NII evaluation.

A parametrically defined model of the asset is central to linking the key phases of NII. The itemised inspection workscope can be displayed on a 2D or 3D representation of the vessel. The model is used throughout the inspection, allowing accurate recording of inspection locations, data and results. This ensures conformance to the scope, increases reliability, ensures repeatability and provides an intuitive way to access the data. Inspection data can be displayed on the asset model providing improved visualisation and reporting of inspection results for the asset. SIMS also makes this data available for detailed interrogation, facilitating efficient statistical analysis and NII evaluation. Long terms benefits of SIMS include effective data management and detailed comparison of repeat inspection data sets.

INSPECTION DATA ANALYTICS

Data-driven decision making is playing an increasing role in integrity management. Sonomatic is recognised as an industry leader in the development and application of statistical analysis of inspection data. Our approaches facilitate integrity decisions based on the best possible knowledge of the equipment's condition and an understanding of measurement uncertainty. Sonomatic played a key role in the development of the HOIS Recommended Practice for Statistical Analysis of Inspection Data, HOIS12(R8). We continue to innovate our analytical approaches, ensuring the benefits of advances in inspection and monitoring technologies are fully realised in practice.

PIPEWORK INSPECTION STATISTICAL ANALYSIS

Ageing facilities often have a wealth of under-utilised pipework inspection data. Sonomatic has developed analytical methods and custom software to gain insights from this historical inspection. We then use statistical simulations to test future inspection strategies against likely degradation scenarios based on this historical data. This drives the transition to more effective inspection strategies. Sonomatic has supported many ageing facilities with this approach and are experiencing increased interest from new facilities where early adoption can lead to significant through-life efficiency.

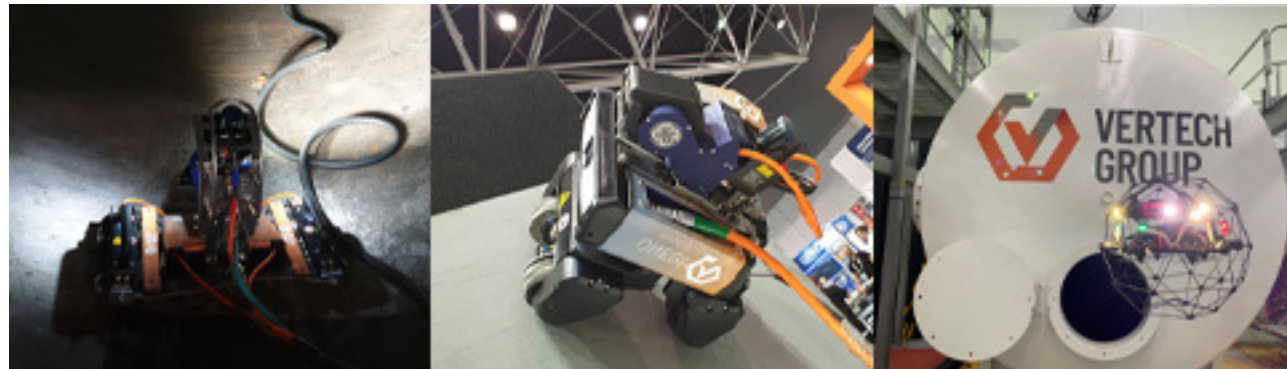


CWL GROUP PARTNERS

VERTECH RDVI

Remote Digital Visual Inspection (RDVI) is the use and application of digital inspection systems to internally inspect equipment without the need for Confined Space Entry (CSE). The Vertech RDVI Division is the amalgamation of cutting edge technology, multi-skilled site based crews and a technically experienced management team. This strong foundation has allowed us to become the pathfinders of this emerging industry, setting the standard for others who follow.

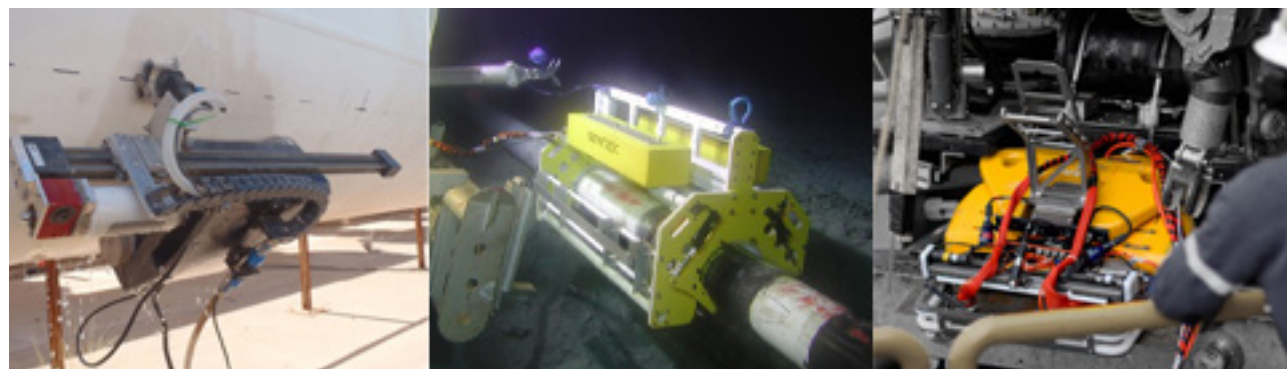
Our staff accept nothing but excellence from themselves and each other, which has led to the RDVI team being known throughout the industry as the service provider of choice. Across the whole of CWL Group, we pride ourselves on executing and delivering high profile, technically challenging scopes due to our commitment to innovation, the best people and our absolute client focus.



SONOMATIC FIELD SERVICES

Sonomatic Field Services delivers both topside and subsea advanced NDT. Sonomatic has a strong capability in the research and development of advanced NDT techniques, equipment design and delivery of advanced inspections. Our Integrity Support Team and Specialist Inspection Division work closely together to design and execute effective inspection solutions for a given combination of expected damage and integrity management requirements.

Sonomatic are uniquely positioned in that we offer advanced NDT execution capabilities in addition to detailed NII planning and evaluation services, thereby providing the full suite of NII services to clients. This can enable huge efficiencies in inspection data management and overall project delivery.



CONTACTS

SONOMATIC

Americas

Esteban Cesan - General Manager Americas
T: +1(832) 977 0303
E: Esteban.Cesan@sonomatic.com

Australia & NZ

Alex Cesan - General Manager Australia & NZ
T: +61 498 442 666
E: Alex.Cesan@sonomatic.com

South East Asia

Zach McCann - Region Manager
T: +60 12 555 1569
M: +61 404 797 670
E: Zach.McCann@sonomatic.com

Middle East

Gordon Reid - Region Manager
T: +971 2 6580708
E: Gordon.Reid@sonomatic.com

Europe & Africa

Graham Marshall - Subsea Project Manager
T: +44 (0) 1224 823960
E: Graham.Marshall@sonomatic.com

Worldwide

John Lilley - General Manager Worldwide
T: +44 (0) 1925 414000
E: John.Lilley@sonomatic.com

ENGINEERING SERVICES

Americas

Agata Surowiec - Operations / Project Manager
T: +1(281) 769 1304
E: Agata.Surowiec@sonomatic.com

Australia

Tyron Kimble - Senior Integrity Engineer
T: +61(8) 6240 2450
M: +61 427 277 603
E: Tyron.Kimble@sonomatic.com

South East Asia

Stuart Blumfield - Integrity Manager SEA
T: +60 128112447
E: Stuart.Blumfield@sonomatic.com

United Kingdom

Robert Cumming - Principle Data Science Architect
T: +44 (0) 1224 923960
E: Robert.Cumming@sonomatic.com

United Kingdom

Donna Stewart - Integrity Operations Coordinator
T: +44 (0) 1224 923960
E: Donna.Stewart@sonomatic.com

VERTECH RDVI

Worldwide

Sean Peters - RDVI & Project Coordinator
T: +61(8) 6168 7600
E: Sean.Peters@vertech.com.au

