

CAPABILITY STATEMENT

REMOTE DIGITAL VISUAL INSPECTION 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, key people and equipment associated with our world leading Remote Digital Visual Inspection and Robotic Services.



VERITECH
GROUP



GEO OCEANS



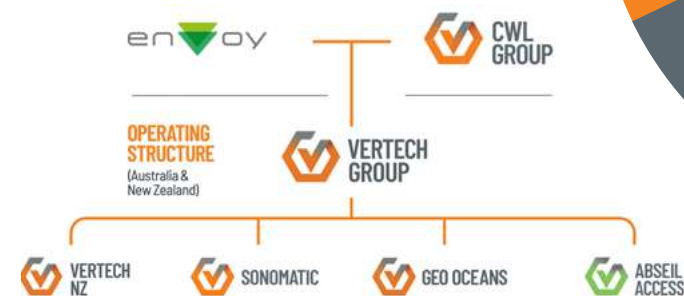
SONOMATIC



COMBINED SERVICES

The bringing together of the services and specialisations provided by Vertech, Geo Oceans and Sonomatic couldn't be more complimentary or interlink more seamlessly with a combined offering including Remote Digital Visual Inspection, alternative access, Mini ROV's, conventional and advanced NDT, integrity management and specialist maintenance packages all within one group.

OWNERSHIP STRUCTURE



OFFICE LOCATIONS



VERTECH RDVI SOLUTIONS

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 had led to the RDVI team being known throughout the industry as the service provider of choice. Across the whole of Vertech 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.

WE PRIDE OURSELVES ON OUR



WHAT IS VERTECH'S ADVANCED-RDVI?

RDVI is the use and application of Remote Digital Visual Inspection systems to internally inspect equipment without the need for Confined Space Entry (CSE).

RDVI methods are ideal for In-Service Inspections, conditional assessment, process efficiency assessments, and the removal or retrieval of debris & foreign objects in a variety of systems.

Vertech's RDVI experience and understanding of the industry has led us to create Advanced-RDVI Specialist Packages, which are complete, integrated, and pre-planned packages that deliver a higher level of data and a more complete service. The results can not only be used for statutory equipment sign off in the field, but also for post-inspection analysis, risk reviews and process operational requirements.

What makes these Advanced-RDVI specialist packages unique, is the 60+ years of experience and expertise behind them. Each package was created by experts who intimately understand the tasks required, solving potential issues before they arise. This ensures your inspections are completed with the highest level of integrity and are repeatable for future comparative purposes.



**TRUST A TEAM WITH OVER
SIXTY YEARS OF
RDVI EXPERIENCE**

YOU'RE IN SAFE HANDS

RDVI SERVICES

Remote Digital Visual Inspection or RDVI is the application of remote digital systems such as cameras, robots or crawlers to internally inspect and asses difficult to access areas without the need for intrusive inspections and the associated Confined Space Entry. RDVI methodologies work for condition assessment, process efficiency assessments and Foreign Object Search And Retrieval (FOSAR).

RDVI SPECIALISED ENGINEERING SERVICES

FRONT END ENGINEERING DESIGN (FEED)

Our RDVI team collaborate with our clients during the FEED and planning phase of a project to define critical assets areas where RDVI can be applied, what will be required to access these areas and the likely degradation mechanism. RDVI integration in the Pre-FEED and FEED stages of the project maximises RDVI capabilities and results in the most significant savings, exceptional inspection coverage, a reduction in turnaround timeframes and fewer resource requirements. This process also dramatically reduces the possibility of substantial changes being required during the execution phase.

OPERATIONAL PLANNING & REVIEW

Vertech's Facility Review & Planning service provides clients with focused campaign planning for the internal inspection requirements of pressure equipment. Our processes ensure that the correct inspection equipment, support tooling and techniques are applied in a timely and efficient manner. We have taken full advantage of our team's extensive campaign & project experience to create a specialised array of procedures and methods to help reduce execution windows, bringing assets back online faster.

RDVI SPECIALISED SITE EXECUTION SERVICES

ONSITE EXECUTION SERVICES

Vertech's Campaign Execution Team provides complete end-to-end assistance with campaigns, projects and turnarounds. Our RDVI technicians have a wide variety of inspection experience and are specifically trained across the full suite of RDVI technologies, allowing them to assess each situation and apply the correct tooling on a case by case basis. What sets Vertech's RDVI Team apart is that our experts understand the needs of a variety of stakeholder groups, from onsite personnel to upper management. Our team works with each group every step of the way to help them understand and interpret the relevant data, results & information.

**VERTECH OWNS, OPERATES
AND MAINTAINS THEIR OWN
CORE RDVI EQUIPMENT**

TRUST A TEAM WHO KNOW THEIR EQUIPMENT



BENEFITS OF RDVI

INCREASED SAFETY BY REDUCING
PERSONNEL EXPOSURE

REDUCTION OF SHUT DOWN
RESOURCE REQUIREMENTS

IMPROVED INSPECTION
REPEATABILITY

REDUCTION IN OVERALL
RISK PROFILES

INCREASED INSPECTION COVERAGE

REDUCTION IN POTENTIAL
LEAK POINTS

ENSURING SAFETY EXCELLENCE ACROSS ALL PROJECTS



ADV-RDVI SPECIALIST PACKAGES

Vertech offers not just the latest generation RDVI systems but also provide the very best people in Asia Pacific. The equipment and supporting tooling we use has been custom designed & fabricated to suit specific requirements within each sector to ensure a best in class outcome and safety excellence on all projects that we undertake.



01 FOREIGN OBJECT SEARCH & RETRIEVAL (FOSAR)

Vertech employs a suite of off the shelf and custom-built tooling systems to remove items of foreign debris found during an inspection without the need for costly CSE and to ensure the ongoing integrity of the client's plant and process.



02 RDVI IN-FIELD INSPECTIONS

Vertech's In-Field Inspection execution team works alongside statutory and class societies to assess and record the condition of an asset without the need for CSE. Our technicians have an extensive track record in this area and can draw on their experience to complete inspections efficiently, even when there is limited inspection data available.



03 BASELINE, COMPLETIONS CLOSES UP & QA/QC

Our QA/QC RDVI package builds upon the best practice principles of conventional QA/QC inspections, using RDVI technology to identify items of pressure equipment that have been constructed out of specification, with any damage or with anomalies.



04 PROCESS EFFICIENCY

Vertech engineers will work with our clients to evaluate key areas of a plants processes and identify potential issues & points of failure. Our team has the knowledge to identify the key indicators when critical areas of the plant process is upset.



05 CONDITIONAL MONITORING

The RDVI Conditional Monitoring package assists our clients to monitor specific degradation issues. Using specialised tooling and procedures that are developed in-house, we can ensure that the target areas are assessed in the same way each time, in the most efficient manner possible. These inspection results can then be collated, compared and evaluated by our analysis experts to ensure reproducibility.



06 HYDROCARBON ENRICHED ATMOSPHERE INSPECTIONS

Vertech has developed dedicated and specialised procedures, equipment and tooling that is designed to inspect pressure equipment and piping systems. By using RDVI, these hydrocarbon enriched atmospheres do not have to be purged, saving our clients time and money.

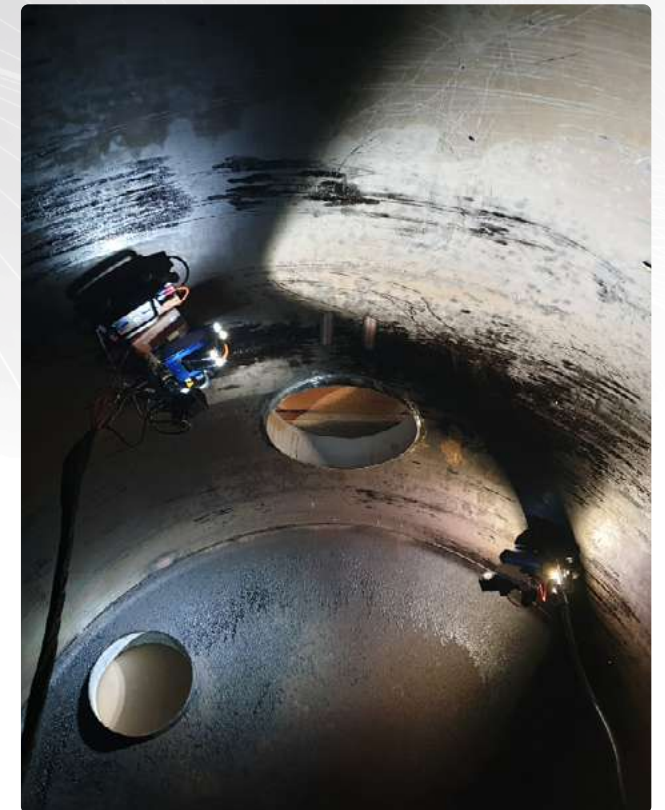
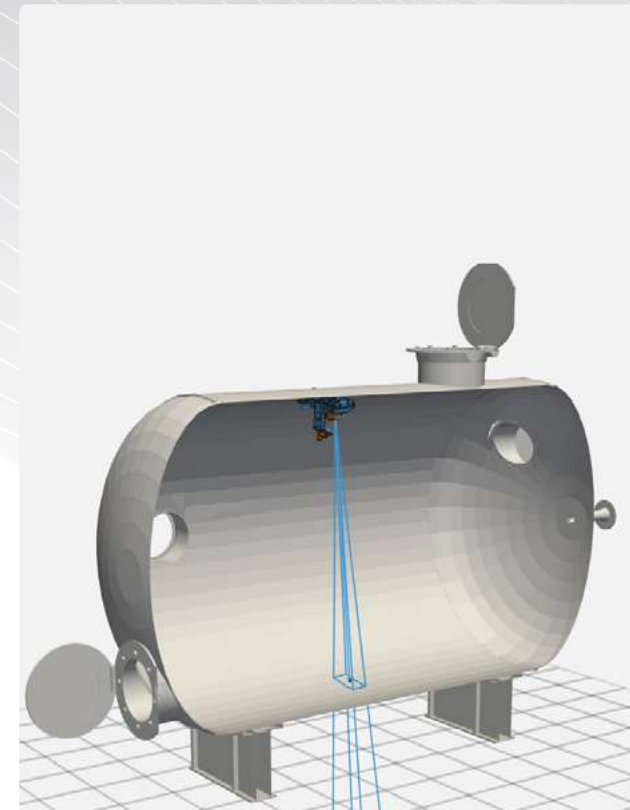


OUR TEAM

To get the right results you need the right people, with the right training. Vertech is proud to have the worlds most experienced RDVI technicians as part of their team, ensuring that you get an accurate outcome the first time, every time.

Our team of specialists have a combined 60+ years of in-field execution experience and are equipped with an extensive range of proprietary equipment. They can offer an integrated execution and inspection approach that meets the requirements of your engineers, planners and statutory inspectors, helping you get results even when your contracted day-to-day resources are stretched.

Our recruiting process is extremely thorough, requiring each applicant to display skills across a wide range of areas in the initial stage before progressing. Our RDVI specific training program fully prepares our team for the field by being educated in six areas; systematic inspection procedures, degradation identification, tooling identification competency, tooling application competency, process optimisation training and safety training.



With our teams vast experience we bring more to each and every inspection. Being able to draw upon the years of global experience on degradation and operational issues, allows us to help you further reduce risk and increase your confidence in being able to operate the plant reliably and safely.

TO GET THE RIGHT RESULTS, YOU NEED THE RIGHT PEOPLE.

SYSTEMATIC INSPECTION PROCEDURES

RDVI technicians are trained in; systematic inspection procedures to enable higher levels of coverage; how to record, secure and prepare data in a logical format for communication; and how to correctly perform the post inspection review processes.

DEGRADATION IDENTIFICATION

Our team has been trained in degradation identification and detection utilising 2D imagery. This is important as technicians have to know what they are looking at to ensure all relevant data is captured.

TOOLING IDENTIFICATION COMPETENCY

Vertech technicians are trained across a range of digital camera systems so they know what camera is required & why, how to set it up correctly and what specific lenses need to be applied to get the best results.

TOOLING APPLICATION COMPETENCY

Our team is trained in the use and application of specialist support tooling that we design and build to ensure cameras are placed in the right focal ranges, giving the clearest view of possible degradation.

PROCESS OPTIMISATION TRAINING

Vertech RDVI technicians are trained in process and operational aspects to ensure they can detect and highlight indications of process reliability, helping your operational team run your facility at the highest efficiency.

SAFETY TRAINING

Our team have been trained to safely use, operate and get equipment into high level work environments without causing sim-ops conflicts, incidents and accidents.

CASE STUDIES

To assist in understanding more about our full capability, services, specialist packages and how these can drive safety, quality and cost efficiencies for your asset or challenges, we've made our case studies accessible via our website.

Woodside – North West Shelf



Woodside and our RDVI team have worked together to complete RDVI Inspections for over the ten years. In 2019, across three major Turnarounds at Karratha Gas Plant, Pluto Gas Plant and North Rankin B, a total of 50 items were inspected with RDVI techniques. Numerous amounts of debris ranging from steel coupons to loose internal fitments were retrieved without the need for a CSE.

Santos GLNG – Hydrocarbon Enriched Inspection



Santos GLNG had several vessels that required an internal inspection to assist with the NII assessment work being carried out by Sonomatic. Due to time constraints, Vertech was approached to execute this work in a hydrocarbon enriched atmosphere using traditional RDVI equipment which is not IS and EX rated. This meant the pressure vessel was not going to be vented, drained or cleaned.

Beach Energy – Kupe New Zealand



During the 2019 Kupe Production Station Turnaround, our team inspected a total of 37 items of pressure equipment ranging from heat exchangers to pressure vessels. During the turnaround, there were items of equipment containing debris. The highly skilled RDVI technicians were able to deploy the retrieval tools to help assist with the removal without the need for CSE (Confined Space Entry). Some of the items retrieved included pieces of rubber gaskets, tools and nuts & bolts.

INPEX – Facility Review and Planning



Inpex approached Vertech Group to review approx. 380 items of plant with Remote Digital Visual Inspection (RDVI) and generate the specific remote Internal Visual Inspection (IVI) work packs for the FPSO, CPF and onshore gas plant for their May 2021 Turnaround. The major goal was to remove Confined Space Entry (CSE) for IVI.

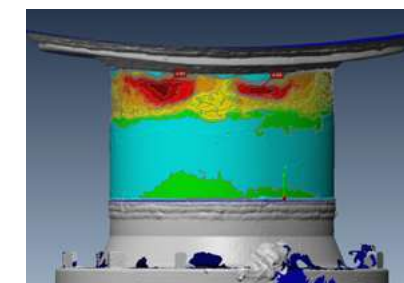
VERTECH SERVICE OVERVIEW

Vertech Australia, NZ, and USA deliver a comprehensive array of inspection, Non-Destructive Testing (NDT) and maintenance packages all underpinned by innovative specialist access systems.

Our group is made up of complementary and specialist service providers including; Geo Oceans an industry leader in Mini-ROV and subsea inspection services; Sonomatic who is recognised as a global leader in specialised NDT, both topside and subsea; and Abseil Access a specialist infrastructure, geotechnical, and demolition provider located in New Zealand.



Project & Program Management



In-Service Inspection



Non-Destructive Testing



Marine Class Inspection



RDVI



Specialist Access Systems



Specialist Maintenance



IRATA Training



[vertech.com.au/downloads](https://www.vertech.com.au/downloads)

PEOPLE, SAFETY, QUALITY AND INNOVATION

VERTECH CORE VALUES

SONOMATIC OVERVIEW

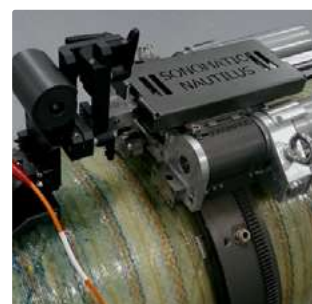


Sonomatic is a worldwide organisation whose expertise in ultrasonic inspection design, development and application, dates back more than 30 years to our roots in the nuclear sector. Today the company has widened its focus and provides proven yet pioneering services to customers in defence and power generation, but our largest client base is in the challenging oil and gas industry, both upstream and downstream.

Sonomatic's capabilities for the development of software, systems and scanners, often for bespoke applications, coupled with the expertise of our engineers, means we are among the leaders within this highly specialised field.

Sonomatic pioneered industrial application of a range of inspection methods now widely used, e.g. Time of Flight Diffraction (TOFD), and continues with active development of innovative inspection and deployment methods that are applied by our own team of experienced field service engineers.

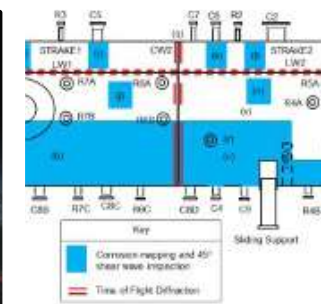
Sonomatic also provides Integrity Services, supporting our clients with planning and evaluation of inspections and using advanced statistical methods to maximise the value of data obtained. Integration of our integrity and inspection services for non-intrusive inspection (NII) benefits the client by allowing vessels and equipment suitable for NII to be identified and reduces the need for costly plant shut downs to assess the internal condition.



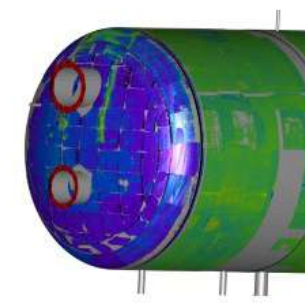
Advanced NDT Inspection



Subsea Inspection



Integrity Services



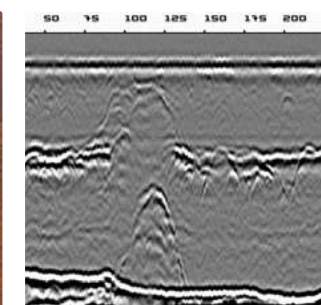
Non Intrusive Inspection



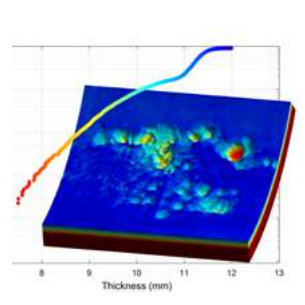
Research and Development



Robotics Inspection



Welding Engineering



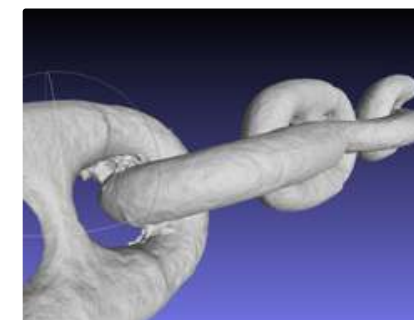
Data Science

GEO OCEANS OVERVIEW



Geo Oceans develops innovative mini-ROV technology to provide clients with asset deployed ROV inspection services. The Mini-ROV Class Survey System (CSS) consists of advanced sensor, tooling and manipulator technology that has been developed by Geo Oceans to provide cost savings compared to traditional diver and work-class ROV methodologies.

Geo Oceans also work with Vertech to provide our clients with industry-leading and turnkey Class inspection services using Remote Access technologies. Sonomatic compliment this team by bringing Specialist Advanced NDT services which are deployed using the mini-ROV CSS.



3D Component Modelling Services



Advanced Subsea NDT Services



Asset Deployed Inspections



Light Tooling Services



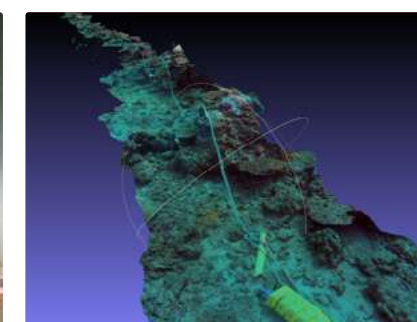
Unmanned (ROV) Hull Survey Package



Fixed Platform Mini-ROV Package



Unmanned (ROV) Class Tank Inspection & NDT Package



Unmanned Marine Science & Survey Package



Subsea Construction and Decom Support Services

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