

# CAPABILITY STATEMENT

GEO OCEANS

## 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 ROV capabilities.



VERITECH  
GROUP



GEO OCEANS



SONOMATIC

# COMBINED SERVICES

Vertech, Sonomatic, Geo Oceans and Abseil Access 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.

## OWNERSHIP STRUCTURE



## WE PRIDE OURSELVES ON OUR



# GEO OCEANS

Geo Oceans is a specialist provider of ROV inspection services and has developed asset deployed ROV technology to provide clients with reliable, safe and cost-effective alternatives to traditional manned inspection, commercial diving or work-class ROV inspection services. Geo Oceans regularly use this cutting-edge technology to complete facility deployed subsea surveys, asset inspections and ocean mapping throughout the Asia Pacific region for many of the largest oil and gas operators.

Geo Oceans works closely with its parent company, Vertech, to provide clients with industry-leading turnkey class inspection services on assets under Lloyds Register, Bureau Veritas, ABS and DNV GL classification society guidelines.

Group partner, Sonomatic, work with our techs on implementing advanced NDT inspection solutions. Being able to draw on their thirty years of industry experience is an invaluable resource, allowing us to create bespoke NDT tools for our ROV.



## GROUP ACCREDITATIONS



ISO 9001: 2015

ISO 14001:2015

ISO 29001:2010

ISO 45001:2018



ABS Hull Gauging Firm

ABS Remote Inspection Techniques (ROV)

ABS In-Water Survey

BV Thickness Measurements of Hull Structures

BV Remote Inspection Techniques



BV In-Water Survey

DNV Close up Survey

DNV NDT on Classification Projects

DNV Thickness Measuring

DNV In-Water Survey (ROV)

Lloyd's Register Remote Inspection Techniques (ROV)

Lloyd's Register Thickness Measurements of Hull Structure

NATA NDT Inspection





# GEO OCEANS SERVICES

## WATER BALLAST TANK SPECIAL SURVEYS

Our Mini-ROVs utilise a suite of high-definition cameras, photogrammetry and NDT technologies to collect tank inspection data in a cost efficient, safe and thorough manner. Our tank surveys are all class accredited and meet international standards.

A key advantage of using our specialised asset deployed ROVs is that the inspection can be performed without emptying the tank of fluid. This reduces facility downtime while also avoiding costly and dangerous Confined Space Entry (CSE) procedures.

This service can integrate seamlessly with others offered by our group partners. We have performed many successful campaigns working alongside Vertech's multi-disciplined hull inspection teams, who are experienced in rope access, UAV inspection, NDT and specialised maintenance.

## HULL, RISER & SUBSEA INSPECTION

Our ROVs are deployed directly over the side or off vessels of opportunity, eliminating the need for support vessels.

Having the expertise to develop our own proprietary technology, we have many subsea tools that allow us to perform close visual, general visual and marine growth inspections, as well as damage, coating and corrosion analysis.

## ADVANCED NDT INSPECTION

Geo Oceans has proven experience in NDT inspection planning, advising clients on NDT methods, and providing solutions to ensure compliance to international standards.

Working with Sonomatic, we can provide a complete collection of NDT services, from commonly used conventional methods right the way up to bespoke advanced solutions. The ROV tools are operated using topside-controlled actuator arms and our technicians have hundreds of hours of flight experience, being able manoeuvre a vehicle with millimetre accuracy.

Our advanced NDT attachments can perform Ultrasonic Testing (UT) and Alternating Current Field Measurement (ACFM). We can also deploy advanced NDT equipment in a payload capacity.



## IN-WATER SURVEY/UWILD

Our project managers, ROV teams and asset inspectors work with clients to perform subsea inspection campaigns tailored to suit the specific class requirements and facility needs.

A brand new innovation is our 'link-to-shore' capability which allows clients to see the inspection in real-time. This not only gives the client a completely new understanding of the work we do, it also keeps them much more involved.

Our survey planning process is continually refined to help our clients streamline operations and is key factor in obtaining the most favourable conditions. If weather or SIMOPS should prove an issue, our team are trained to quickly adapt, being able to perform tank and other on-board inspections to still remain useful during delays. Our target is zero downtime.

## MARINE GROWTH ASSESSMENT AND REMEDIATION

Geo Oceans conduct detailed jacket structure marine growth assessments and then model predictions of effective marine growth thickness for future periods, supporting asset life extension applications and engineering requirements.

Any areas of the jacket that are covered in marine growth or are badly corroded can be cleaned for coating assessments, CVI, CP, UTM or advanced NDT inspections. Marine fouling can be removed without damaging the coatings or infrastructure, using tools including mechanical scrapers, brushes and high-pressure water blasters.

## METROLOGY AND PHOTOGRAMMETRY

Our Mini-ROV inspection systems include imaging technologies for accurate size and area measurements. A camera array (stereo or mono) acquires high-definition video and images that can be processed for scaled measurements and 3D modeling.

The 3D models can be used to calculate size and area measurements for localised corrosion mapping purposes or quantitative assessment of anode remaining percentages. These 3D models can also be compared against the 'as built' (baseline) model of the anodes to create a 'deviation' model that displays the level of material loss.



# ROV SPECIFICATIONS

## SPECIALIST ROV UNITS

Geo Oceans' ROVs can be deployed anywhere! They are specifically designed to eliminate the need for ROV support vessels and can be deployed from an asset or vessel of opportunity. Each of our ROV systems has a different specialisation and we will work with our clients to deploy the right ROV for the job.



The RAP-ROV system is designed for rapid deployments on time-sensitive and low-risk ROV campaigns. This highly portable system can be operated by a small team of highly trained specialists. Speed and size haven't come at a cost of quality as this ROV system contains HD cameras and LED lighting for high quality image acquisition.

- ✓ HD visual inspections
- ✓ UTM NDT
- ✓ Light cleaning sheltered waters
- ✓ 15kg



The Class Survey System (CSS) is Geo Oceans' most versatile asset deployed ROV system. This ROV has the flexibility to perform NDT & cleaning in many hazardous environments and is ideal for internal tank inspections or external jacket, hull, mooring and pipeline inspections.

- ✓ Spot cleaning for inspection
- ✓ Light tooling
- ✓ UTM, CP, FMD NDT
- ✓ 30kg



This system is the latest ROV technology for projects where dexterity and finesse are critical to the subsea task. The ADV-ROV systems have 5-function robotic arms that can perform fine motor function, making it perfect for controlling highly sensitive NDT tools on the sea floor or on the bottom of tanks.

- ✓ Advanced manipulation NDT & cleaning
- ✓ Pitch control



Our most biggest and powerful ROV. The HPV excels in campaigns that requires a cumbersome payload, such as light tooling or high-pressure water blasters for bulk marine growth removal. Despite their size, these ROVs can still be deployed from assets or vessels of opportunity.

- ✓ Heaviest payload
- ✓ Longest excursions



# SONOMATIC OVERVIEW

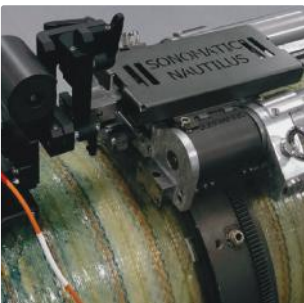


Sonomatic is a worldwide organisation whose expertise in ultrasonic inspection design, development and application dates back more than 30 years to our roots in the nuclear sector. Today the company has widened its focus and provides proven yet pioneering services to customers in defence and power generation, 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.

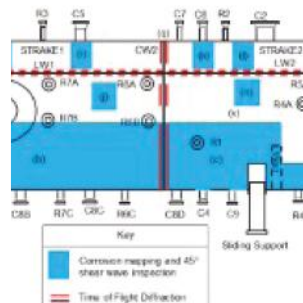
Sonomatic also provides Integrity Services, supporting our clients with planning and evaluation of inspections and using advanced statistical methods to maximise the value of data obtained. Integration of our integrity and inspection services for Non-Intrusive Inspection (NII) benefits the client by 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



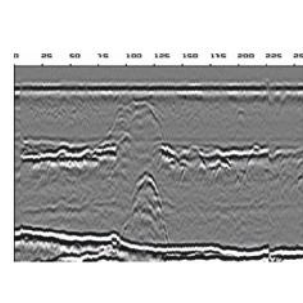
Non Intrusive Inspection



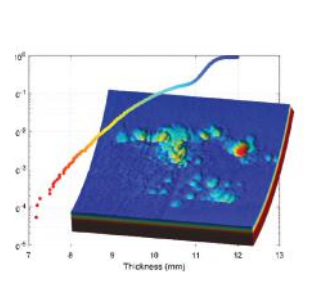
Research and Development



Robotics Inspection



Welding Engineering



Data Science

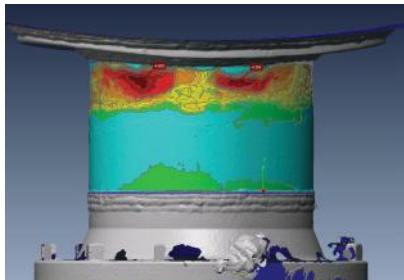
# VERTECH OVERVIEW



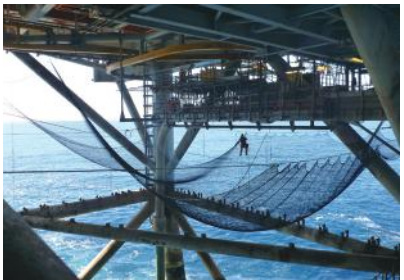
Vertech are a Specialist Access, Inspection and Maintenance provider. We pride ourselves on our client focus with an emphasis on supplying high value, innovative and quality services to achieve excellence in all the projects we execute. We apply world's best practice on the basis of extensive industry experience to excel in industries where safety, quality and reliability are of the highest importance. The core value we place above all others is our care for each other, our clients and the environment.



Project Delivery



Integrity Management



Specialist Access



NDT Inspection Services



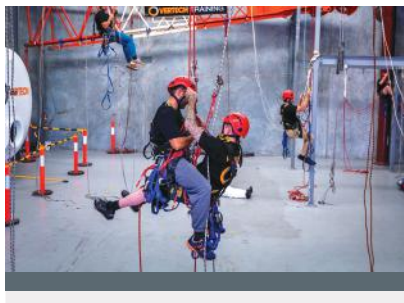
Marine Class Survey



Remote Digital Visual Inspection



Specialist Maintenance Packages



IRATA Training



[verttechgroup.com.au/downloads](http://verttechgroup.com.au/downloads)

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