



ROTO TECH

Today's Experts in Tomorrow's Technology

Company Profile





Who We Are

Launched in 2021, Rototech Pte. Ltd. designs and builds innovative, robotically driven cleaning, inspection and repair devices for the maintenance of oil and gas platforms, pipelines, jetty piles and wind turbines.

With decades of experience in the offshore industry, our team brings a wealth of knowledge and hands-on expertise. It is with such experience that we were able to design and build our own technologies to advance the industry and introduce new methods to transform the way in which offshore assets are maintained.

Our goal is to increase the efficiency and productivity of such tasks, ultimately reducing time and cost for our customers. Crucially, our technologies drastically reduce and often eliminate the need for personnel to carry out these tasks by hand, in what can be extremely dangerous and hazardous areas.

At Rototech, we're revolutionizing the way oil and gas platforms, pipelines, jetty piles and wind turbines are inspected and maintained.

With the safety of personnel and the elimination of danger core to our approach, we've designed our robotic technologies to make repairs and maintenance as simple as possible.

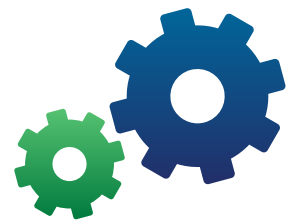
Each robotic unit has been designed to withstand the extreme conditions that are often found in offshore locations. Optimised to require low maintenance and repairs, our devices are built as lightweight and compact as possible, allowing for ease of installation and transportation.

The overarching goal to make using our technologies more simple, safer and cost-effective than any other solution.

Why Rototech?

Innovative Robotics

Our robotically driven cleaning and inspection devices have been designed and built by our own expert engineers.



Certified Experience

Rototech's team comprises of highly experienced experts in offshore engineering, including collaborative efforts with industry leading figures and institutions.



Expert Support

As designers, creators and experienced off-shore engineers, we provide unparalleled support for all customers of our technology.



Cost Effective

We promise to offer competitive pricing for all of our services and aim to reduce the overall cost of your inspection and maintenance needs.





Management Team and Contractors



Simon Hartog
CEO and Owner

1988: Started ICE Far East, and built revenue to S\$55M, driven by a network of regional agents.

1998: Founded CAPE Group Ltd London. Expanded into SE Asia and sold it to Acteon in 2008.

2008: Founded Construction and Piling Equipment (Thailand) and sold the assets to ICE Far East in 2015.



Steve McVey
General Manager Designate

25 years experience in the Offshore industry both Offshore and Onshore. Often as a Client representative offshore.

Previously M.D. of Bintang Subsea Group and G.M. of CAPE Group Ltd.



Mark Hinschen
Chief Financial Officer

Qualified accountant with 30 years CFO experience in Compliance and Controlling.

Experienced in Re-engineering at SME's and MNC's within Asia and Australia.

Worked with such companies as Stork NV, Marel Singapore, and was CFO of CAPE Group.



Jon McCarty
Commercial Manager Designate

Previously Commercial Manager of Mermaid Marine Co Ltd, Fraser Diving Commercial Manager.



Trone Solutions and Technologies Sdn. Bhd.

An ROV and Tools design company that has designed the Clamp Bypass Module and the new control system.

Reduce Your Maintenance Costs by up to 6.3 X with Rototech

Traditional estimated costs are based on Asian zones.
In the Middle East and North Sea these costs are higher.

Traditional

\$36.8k

Vessel daily rate, fuel and personnel costs.
Traditional methods are hazardous and carbon intensive.

Roto Climber MK 2

\$6.3k 5.8 x ▼ Cheaper

Personnel costs and equipment working rent.

Roto Climber MK 1

\$5.8k 6.3 x ▼ Cheaper

Personnel costs and equipment working rent.





Rototech Technology



Tools for Tomorrow’s World

Rototech is focused on the sustainability of tomorrow’s world. At the core of our industry, fossil fuels remain as prevalent as ever, that’s why we’ve developed technologies designed specifically at maintaining offshore assets to ensure the highest standards of safety are maintained, reducing the risk of oil spills and other ecological disasters as well as reducing the carbon footprint whilst performing the task.

Our technology also extends into the renewable energy industry, namely offshore wind turbines. In the harsh conditions at sea, it’s crucial that all assets, whether fossil fuel or renewable, are maintained at a low-cost and with as little environmental impact as possible.

At Rototech, we aim to make things as simple as possible so that repairs and maintenance to our systems are easy.

Rototech’s innovative robotic devices are therefore designed to be compact, lightweight and robust enough to work in some of the most challenging offshore environments, allowing for more thorough inspections and repairs in the hardest to reach, and most dangerous areas whilst being Zone 2 compliant where needed.

The lightweight, modular designs further help to reduce the cost of transportation, maintenance and the number of personnel necessary to install and operate the devices effectively, paving the way for far more sustainable offshore maintenance.



Roto Climber MK 1

The Roto Climber MK1 was designed and built specifically for the cleaning, visual inspection and wall thickness measurements on conductors, piles, risers and Caissons. It comes at a time when ageing offshore platforms are in constant need of maintenance to ensure maximum safety and reliability.

The lightweight, easy to assemble and simple device is structurally robust and easy to deploy in the dangerous ‘Splash Zone’ areas of oil and gas platforms, therefore eliminating the high risk faced by off-shore divers and other maintenance personnel when trying to maintain some of the most difficult locations to access.



Key Features

- Operational up to a depth of 200 meters below sea level and up to the platform deck.
- Single/double Stoneage Barracuda nozzle or Caviblaster, delivering seawater up to a pressure of 3,000 bars and flows of up to 28 L per minute.
- UVS 100RL equipped for an ultra-compact, high resolution colour camera solution.
- Cygnus Dive Mk 2 Ultra Sonic Thickness Gauge for measuring wall thickness loss without removing coatings.
- Optional corrosion assessment probe: Eddyfi Lyft pulsed eddy current single probe, changeable depending on wall thickness and coating properties.
- Middle East and Asian Zone 2 compliant.

Roto Climber MK 2

The modular design of the Roto Climber MK 2 allows it to perform a multitude of functions necessary during the lifetime of an offshore conductor, riser, Caisson or platform leg. This highly adaptable device can be assembled to meet the need of even the most specific tasks, with work packages that can be attached above, below or on both ends of the Traction Module.

The end result means that the Roto Climber MK 2 can clean, perform Close Visual Inspection and Phased Array mapping, and re-coat a surface all in one operation, with high attention to detail and unrivalled precision in all areas. This provides platform owners with considerable savings both in time and cost.



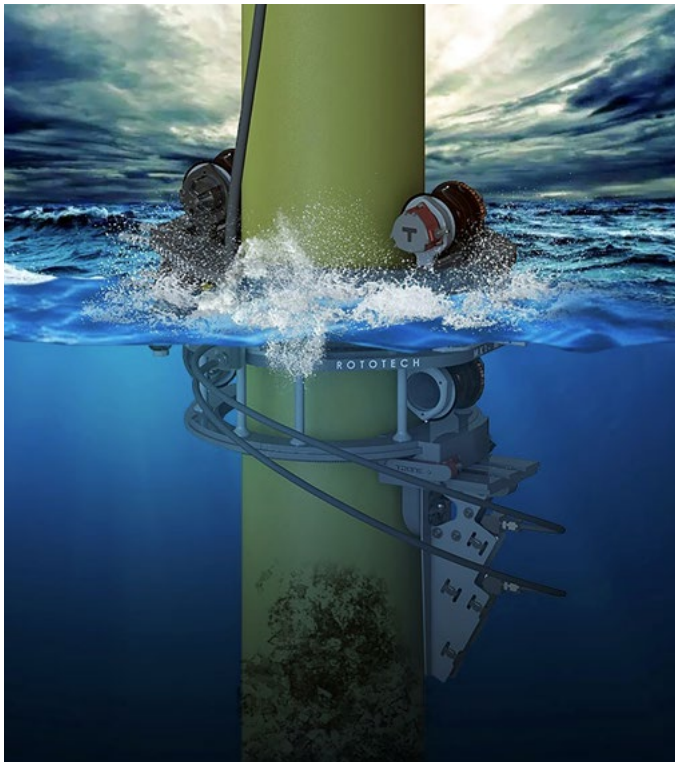
Key Features

- Operational up to a depth of 200+ meters below sea level as well as above the waterline.
- Equipped with movement sensors to allow exact replications of movements, to easily enable it to return to exact defect locations.
- Single / double StoneAge Barracuda nozzle or Caviblaster delivering seawater to a pressure of 3,000 bars and flows up to 28 litres per minute per nozzle.
- Fitted with Cygnus ROV Mountable 2K ultrasonic thickness gauge.
- Optional Polatrak Deep C Meter 300 CP Probe.
- Optional clamp by-pass module for travel over riser or caisson clamps.
- Optional Olympus Focus PX with HydroForm buggy phased array system for corrosion or weld defect mapping.
- Optional corrosion assessment probe: Eddyfi Lyft pulsed eddy current single probe or array, changeable depending on wall thickness, coating properties and scanning type required.
- Compatible with a UHP abrasive cutting head for cutting through steel.
- Optional drilling module and optional laser scanning module.
- System ATEX Zone 2 rated for hazardous areas.

Roto Climber MK 1 Mini

The Roto Climber MK 1 Mini is the natural progression of its larger counterparts, designed for the cleaning and inspection of smaller pipes from 6” to 12” in diameter. The lightweight and compact design means the battery powered unit is delivered in just three pelican cases and requires no platform deliverables.

Built with new composite materials, the Roto Climber MK 1 Mini is fitted with an array of sensors and tools, including three high resolution cameras, sensors to detect and map defects as well as a Caviblaster cleaning system to protect coatings. Entirely self-contained, each unit is effortless to install and recover.



Key Features

- Operational up to a depth of 50 meters below sea level.
- Single / double StoneAge Barracuda nozzle or Caviblaster delivering seawater to a pressure of 3,000 bars and flows up to 28 litres per minute per nozzle.
- 3 x DWE Explorer HD 2.0 Cameras.
- Fitted with Cygnus ROV mountable 2K ultrasonic thickness gauge.
- Optional corrosion assessment probe:
- Eddyfi Lyft pulsed eddy current single probe, changeable depending on wall thickness and coating properties.
- Optional Polatrak Deep C Meter 300 CP Probe.
- ATEX Zone 2 rated with minimal platform footprint.

Wind Climber

The Wind Climber meets the growing demand for the inspection of off-shore wind turbine towers. When such assets reach the end of their warranty periods, new owners are oftentimes unaware of the structural integrity of their towers. As such, there have been numerous cases of tower collapses, a highly problematic situation in which Rototech seeks to solve.

The Wind Climber is a larger iteration of the Roto Climber, designed specifically for the inspection of off-shore wind turbine towers. Our patented design allows Rototech to sustainably provide maintenance services across both the oil, gas and renewable energy industries.



Key Features

- Dual trolleys for tooling and inspection equipment.
- Multiple drive wheels that can be placed to avoid obstacles such as doorways.
- Phased Array C scan mapping.
- Cleaning and re-coating.
- As a work platform for personnel working on the tower exterior.

Roto Crawler

The Roto Crawler is another innovative, modular design, taking many of the benefits and use-cases of the Roto Climber MK 2, and instead adapting them to horizontal pipelines.

Positioned using sonar, the Roto Crawler requires no divers for installation, allowing for much safer and easier use.

It operates by using traction modules that connect with the same modules as used in the Roto Climber MK 2, meaning customers can use the same work modules for several tasks over the course of maintaining their offshore platforms, therefore greatly reducing the cost of maintenance and spare parts.



Key Features

- Operational up to a depth of 300 meters below sea level.
- Provides real-time data.
- Detects both corrosion and cracks in the pipeline and/or welded joints.
- Extendable, meaning any new technology could be fitted in the future.
- Optional cleaning and coating module.
- Optional pipe wrapping module.
- Optional weight coat removal module.
- Optional corrosion assessment probe:
- Eddyfi Lyft pulsed eddy current single probe or array, changeable depending on wall thickness and coating properties and scanning type required.

Roto Piler

The Roto Piler has been designed with ease of use and convenience at its forefront. Thanks to an onboard battery unit, the device requires no external power supply, with a battery life of up to 12 hours. Not only is it easy to install and recover, the Roto Piler also needs minimal space for operation and works in depths of up to 50m below water level.

At Rototech, we're revolutionizing the way oil and gas platforms, pipelines, jetty piles and wind turbines are inspected and maintained. Our robotic systems reduce time and cost, while increasing safety for personnel and guaranteeing the highest standards across all types of service.



Key Features

- Operational up to a depth of 50 meters below sea level.
- Single / double StoneAge Barracuda nozzle or Caviblaster delivering seawater to a pressure of 3,000 bars and flows up to 28 litres per minute per nozzle.
- Fitted with Cygnus ROV Mountable 2K ultrasonic thickness gauge.
- Floatation system, with twin floats of coated high density foam, enabling pile batter angle changes to be accommodated.
- Optional Polatrak Deep C Meter 300 CP Probe.
- Optional corrosion assessment probe: Eddyfi Lyft pulsed eddy current single probe, changeable depending on wall thickness and coating properties.

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