Seaeye Tiger

The Industry Benchmark Inspection and Observation Vehicle

Widely regarded as the leading observation and inspection vehicle within the oil and gas industry, the Tiger is also increasingly chosen by defence and marine science seeking increased capability in deep water.

The Tiger is a very stable platform, with excellent manoeuvrability and performance in strong currents. Its open frame construction and generous payload offer the possibility of adding a wide range of tools and sensors as well as interchangeable tool skids.

The Tiger is available as a free-swimming vehicle down to depths of 450m. For greater depths down to 800m, a Tether Management System (TMS) is available.

Powerful

Five thrusters provide a stable platform for observation, inspection and diver support.

Reliable

Internationally regarded as the industry standard observation and inspection vehicle.

Flexible

Engineered design options to deliver results even for the most challenging of projects.

Seaeye Tiger

System Overview

- Surface Power Supply Unit and Surface Control Unit supplied as free standing units or fitted inside an air conditioned control container.
- Surface Equipment includes Hand Control Unit, keyboard and two colour monitors. Additional hand control units are included with ROVs fitted with a manipulator system.
- Cabin Junction Box for connections between the surface and subsea.
- Fibre Optic MUX with Video, Serial Data and Ethernet interfaces.
- Available as a free-swimming ROV or in conjunction with a Type 8 Tether Management System (TMS) for depths up to 800m.
- ROV rated to 800m fitted with four horizontal thrusters and one vertical thrusters supplied with 250 Volts DC. The ROV pod provides interfaces for Thrusters, LED lights, multiple cameras, a depth sensor and a solid state compass, supporting vehicle auto heading and auto depth. Auto altitude is available as an option when an altimeter is fitted.
- Deployment options include an electric winch for free swimming ROV or an A Frame Launch and Recovery System (LARS) for ROVs equipped with a TMS.

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Technical Specifications

General	
System Power Requirements	3-phase, 380-480 VAC 50/60Hz
Depth Rating	800m
Dimensions (LxWxH)	1030mm x 700mm x 590mm
Standard Launch Weight	Approximately 150 kg
Payload (Base / Std)	Approx. 32kg (bare ROV)

Mechanical	
Safe Working Load	235kg @ Sea State 6
Through Frame Lift	85kg @ Sea State 6

Performance	
Forward Speed	3 knots
Thrust Forward	62 kgf
Thrust Lateral	43 kgf
Thrust Vertical	22 kgf

Standard Instruments	
Tilt	24VDC, PWM Control, Pressure Compensated
Lighting	4x 250VDC PWM LED Lamps, Dimmable Daylight White 3520 Lumens
Depth Sensor	300 Bar, +/-0.01% FS accuracy
AHRS	Magneto-resistive Heading: 1.0° Typical Pitch/Roll 0.4° Typical

Hydraulic Tooling
Optional Hydrolek Gauntlet Plus 4 Function Manip skid (see Options Section)

Video and Electrical Interfaces	
Data Link	1x Single Mode Fibre
Video Camera Interfaces	2x SD (Composite) CAM1 Interface = Fixed Focus + RS232 CAM2 Interface = Zoom / Focus
Sensor Interfaces	Depth, Compass and Altimeter (compass sensor is in an external pod) CP Probe (Contact and Proximity Modes Supported) Sonar, 24VDC, Twisted Pair comms 1x Aux, 24VDC, RS232 comms & Altimeter IF 1x Aux, 24VDC, 1GB Ethernet 1x RS232 Serial channel routed to CAM 1
Light Interfaces	1x 250VDC PWM Interfaces supporting Saab Seaeye LED Lamps:, 2x Lamps via Y-Leads

Surface Equipment	
Standard Surface Control Equipment	PDU with: - Built in proprietary Overlay) - Control PCBs for ROV/TMS
	Hand Controller, Keyboard,
	Telemetry Monitor
	2x Monitors

Power Supply Units	
ROV PSU	9PSU @: 250-350Vdc 35A, 240/440Vac

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Options, Tools and Accessories

High resolution SD composite cameras, colour and monochrome / low light, fixed and zoom / focus

Cleaning brush incorporating a heavy duty brush and SM4 thruster motor fitted (typically Manip mounted).

High Definition (HD) camera for vehicle.

Cathode Potential Probe with either contact or proximity probe options available

Multi Beam Imaging Sonar and surface equipment options

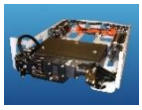
Ultrasonic thickness system available to determine the level of corrosion present in a structure.

Scanning Sonar and surface equipment options

Battery-operated Xenon emergency strobe used to locate the ROV.

Altimeter for measuring the height of the vehicle above the sea floor
Auto Altitude option available

Acoustic tracking system to calculate the position of vehicle fitted with an acoustic beacon.



Four-function Skid Mounted 250VDC manipulator system

Control cabin options include video recording units, video matrix switcher, communication systems, and high-back pilot seat.

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Deployment Systems and Control Cabins

Electric Winch with variable speed and directional control for free swimming configuration.

Running Lock Latch system used for launch and recovery to reduce the strain on the umbilical. Includes a latch release line to free the ROV from the lock latch.

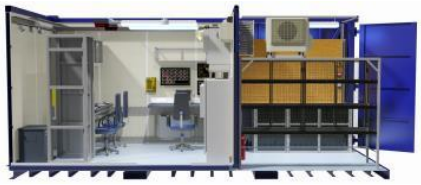
Tether Management System (TMS) Type 8 allowing for the deployment of the ROV at working depth and also providing protection.

Optional TMS Camera and LED Light.

A-Frame Safe Area Launch and Recovery System (LARS) with Lock Latch and Snubber Rotator.

Additional Options include: LED Lamps, Foldable working platform, Telescoping A-Frame, Active Heave, Zone II upgrade.

Safe Area Control Cabin (16 ft) fitted with electric power distribution panels, lighting, air conditioning, and 19 inch racks. A Zone II upgrade option is available.



Safe Area 20ft split Control Cabin with a Pilot Control section and a separate workshop section. Fitted with electric power distribution panels, lighting, air conditioning, heating, 19 inch racks and installed escape hatch. Also available as is a Zone II upgrade.

Saab UK - World leader in electric underwater robotics

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