SAAB

SEAEYE COUGAR-XT COMPACT

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The Seaeye Cougar-XT Compact is the shallow water compact version of the field proven and extremely powerful Cougar-XT.

Proven worldwide and recognised for its capability, operators now have the ability to undertake a range of demanding observation and light work tasks at much lower operating costs.

Saab Seaeye recognised the need for a high performance ROV in the renewable energy markets, for shallow water cable laying and inspection tasks, where strong tidal currents are experienced.

The smaller chassis results in a significantly lower profile to reduce drag, in combination with a high performance thruster arrangement and a low resistance tether, offers the market an ROV system with unrivalled performance for its size and class.

THE VEHICLE

CHASSIS

The extremely rugged polypropylene and stainless steel chassis is totally maintenance free, non corroding and self-supporting in seawater. Additional equipment can be bolted directly to the chassis for customisation.

BUOYANCY

The syntactic foam buoyancy block has apertures for a sonar, emergency strobe and tracking transponder.

PROPULSION

Four vectored horizontal and two vertical brushless SM7 500 Volt DC thrusters provide full three-dimensional control of the Cougar-XT Compact and one of the highest thrust to weight ratios in its class.

COMPASS, RATE GYRO & DEPTH SENSOR

A flux-gate compass and a solid-state rate sensor give superior azimuth stability.

Compass accuracy	±0.5°
Resolution	0.351º
Update rate	98 ms

The system uses an electronic depth sensor accurate to ±0.1% FSD accuracy.

AUTOPILOT FUNCTIONS

- Auto heading
- Auto depth
- Auto altitude (optional)

VIDEO SYSTEM

Up to four simultaneous video channels are available (transmitted via two multimode fibres).

EQUIPMENT INTERFACES

A wide range of standard or custom interfaces are available for:

- Cameras
- Manipulators, cutters
- Sonar systems (obstacle avoidance, multibeam, side scan)
- CP probe
- Auxiliary connections (RS232/RS485/STP and optional Ethernet)
- Emergency strobe
- Tracking system
- Tooling motor

TILT PLATFORM

The ±90 degree camera tilt platform accepts two cameras and a light. A proportional tilt feedback potentiometer provides an accurate tilt angle which is displayed on the video overlay.

LIGHTING

The Cougar-XT Compact is fitted with four long-life LED lamps (on two individually controlled channels). They provide excellent illumination with very low power consumption, are exceptionally robust and practically maintenance free.

VEHICLE ELECTRONICS POD

The vehicle has a watertight and anodised electronics pod machined from 6082 marine grade aluminium and fitted with leak and vacuum alarms.

CONNECTORS

The Cougar-XT Compact uses Seaeye's field proven range of metal shell connectors.

TETHER TERMINATION

The tether is electrically terminated in an oil-filled and pressure compensated vehicle junction box and mechanically supported by a cable-grip.

SURFACE CONTROL AND POWER SUPPLY

SURFACE CONTROL UNIT

Surface control equipment can either be installed directly in the customer's facility or integrated into a custom ISO control cabin.

The surface control system provides:

- AC and DC supply switching control
- DC current and voltage indication
- Control of video and video overlay
- A keypad for system configuration
- Interfaces for ancillary equipment
- ROV control system (via the hand control unit)

MONITORS AND VIDEO OVERLAY

The system comes with two 17" colour rack-mounted video monitors displaying the video signal from the cameras. One also displays the following overlay data:

- Heading
- Analogue compass rose
- Depth
- Tilt position
- Date and time
- Free text from keyboard
- CP probe readings (if fitted)
- Vehicle turns count
- Leak & vacuum alarms
- One string of live data, e.g. altitude or latitude/longitude (optional)

TELEMETRY MONITOR UNIT

A telemetry monitor unit allows the ROV data (heading, depth, etc) to be displayed on a PC and/or exported to a survey computer, and is also a useful diagnostics tool.

KEYBOARD

A rack-mountable keyboard is supplied for entering data and free text onto the video overlay.

HAND CONTROL UNIT

The hand control unit provides remote control of the ROV (propulsion, tilt unit, lights, autopilot functions, etc).

SYSTEM POWER SUPPLY

The power supply unit incorporates protection devices, interlocks and cooling fans. Safety features include both AC and DC line insulation monitors (LIMs) to monitor electrical leakage in the system (with trips and alarm indicators) and to test the isolation of the system.

3-PHASE 9 KVA TOOLING POWER SUPPLY UNIT

This unit provides a 3-phase 660V power supply at the vehicle for optional tooling, such as cutters or water jetting systems.

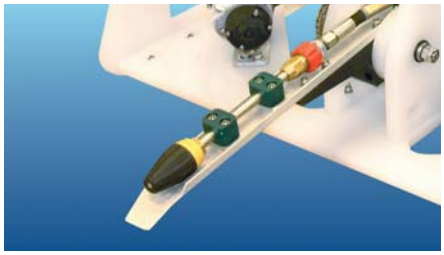
CABIN JUNCTION BOX

At the surface the umbilical cable is terminated inside a lockable cabin junction box, which also contains the fibre optic multiplexer(s) for transmission of the video signal.

OPTIONS, TOOLS AND ACCESSORIES

4-FUNCTION MANIPULATOR

CABLE CUTTER



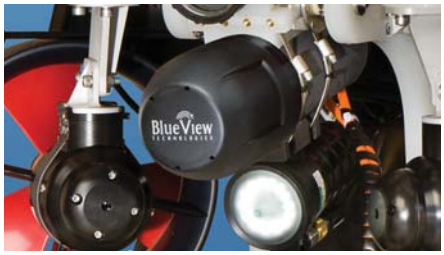
WATER JET

CP PROBE

CYGNUS UT GAUGE

CLEANING BRUSH

EMERGENCY STROBE



MULTIBEAM SONAR

PROFILING SONARS

SONAR

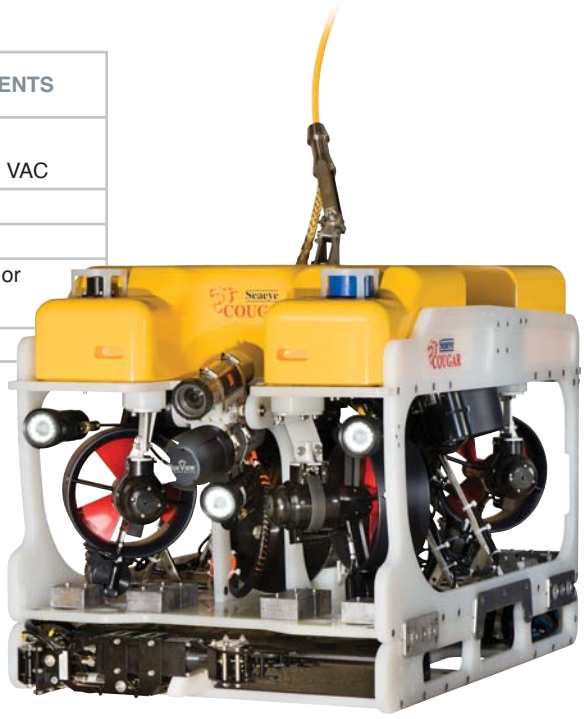
SIDE SCAN SONAR

LOCK LATCH

SEAEYE COUGAR-XT COMPACT SPECIFICATIONS

SPECIFICATIONS	
Depth rating	300 msw
Length	1300 mm
Height	784 mm
Width	900 mm
Launch weight	270 kg
Forward speed	3.8 knots
Thrust forward	170 kgf
Thrust lateral	120 kgf
Thrust vertical	110 kgf
Payload	60 kg

SYSTEM POWER REQUIREMENTS	
Input	3-phase 380-480 VAC
ROV	18 kVA
Tooling	9 kVA
LARS (typical) Winch	40 kVA, or 7.5 kVA
Cabin (typical)	12 kVA



COUGAR-XT COMPACT WITH MANIPULATOR SKID AND MULTIBEAM SONAR

COUGAR-XT COMPACT DEPLOYMENT AND OPERATION

The Cougar-XT Compact is designed as a high power free-swimming ROV deployed with soft tether for depth and excursion.

CABIN

A range of control cabins/workshops are available and can be adapted to suit customer-specific requirements. Exterior colours and vinyl graphics with customer logos can be added.

ROV IN A BOX

The ROV system can be installed into a single partitioned 20 ft cabin. The partitioned bulkhead separates the ROV piloting and control area from a 600 metre integral spooling winch. Additionally enough space is available to securely place maintenance tools and servicing spares in the cabin. Mobilisation times are drastically reduced for the single cabin uplift and setting down.

LAUNCH AND RECOVERY SYSTEM (LARS)

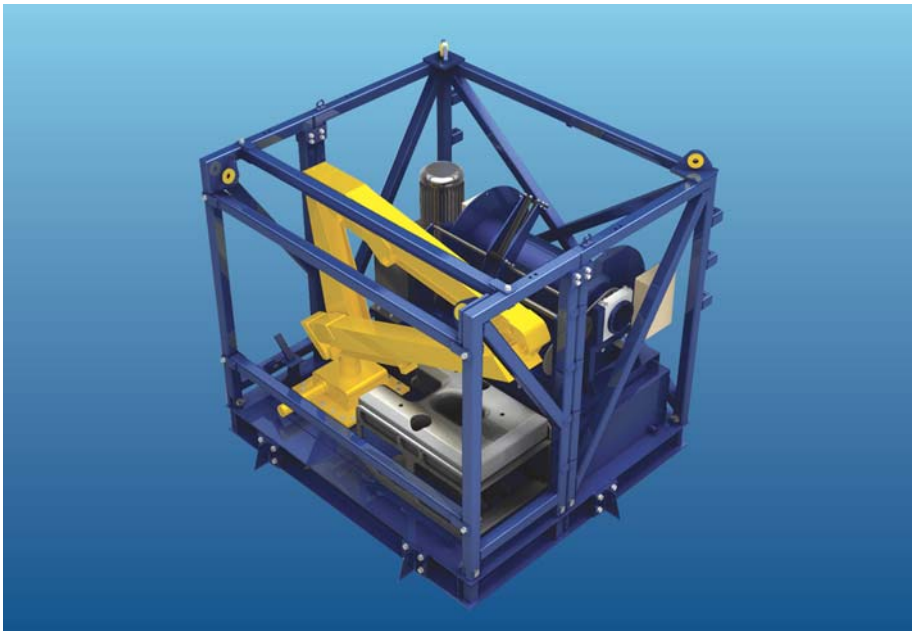
A range of different configurations and winch sizes are available to accommodate different cable lengths and applications.

An A-frame, LARS and winch with soft umbilical is a typical launch and recovery system.

An alternative telescopic crane-based LARS is available or for where deck space is limited a compact crane LARS can also be integrated within the ROV system.

Additionally a winch is available for use with the deployment vessel's A frame or crane.

All cabin and LARS can be built to Safe Area or Zone 2 ratings.



SAAB SEAEYE LTD

THE WORLD'S LEADING MANUFACTURER OF ELECTRIC ROVS

With over 25 years experience and 700 vehicle systems sold, the company is at the forefront of design, technology, manufacturing process and support for ROVs across the world.

Providing a range of systems from inshore observation level to full deep-sea work class, Saab Seaeye has pioneered the use of ROVs for many applications, providing customised solutions, developing tools and integrating advanced technologies to achieve results for its customers.

Saab Seaeye is a wholly owned subsidiary of Saab Group, a major supplier of services and solutions to the global defence sector and celebrating its 75th birthday.

Based in the UK with a worldwide network of experienced representatives, Saab Seaeye's 24,000 sq ft headquarters in Fareham, includes in house design using the latest computer aided technology, prototyping, workshops, test tanks, pressure testing, motor rooms, machine shop, electronics and PCB sections, vehicle assembly area, stores, training rooms, offices and meeting facilities.

Accredited with DNV ISO 9001, Saab Seaeye is committed to a safe, clean and efficient working environment, coupled with experienced project management, high quality customer service/offshore support, including 24h emergency contact number and comprehensive stock holding.

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