

# OBSERVATION / INSPECTION CLASS ROV

# **SEAEYE LYNX 1146**

The Seaeye Lynx is widely regarded as the leading observation and inspection vehicle within the oil and gas industry. With a depth rating of 1500m, the Lynx is a very stable platform and is able to perform well in strong currents and under the harshest conditions, providing excellent handling and maneuverability. It's open frame construction and generous payload offer the possibility of adding a wide range of tools and sensors as well as interchangeable tool skids.



# SYSTEM HIGHLIGHTS

- System capable of conducting wide range of operations including Survey, Observation, Inspection and Touchdown Monitoring
- ▲ Capable of working in currents up to 2.5 Knots.
- System includes LARS with caged Type 8 TMS (tether length of 200 m).
- Pay load capacity of 34 kg.
- Fibre optic video (up-to 3 channels) and data multiplexer.
- Full set of optional survey and tooling skid.
- Small footprint, enabling operations to be conducted from small vessels of opportunity, fixed or floating platforms.
- System comes with a two channel digital video recording system, with built in overlay capabilities.

All specifications presented within this document are subject to change without notice.

## **VEHICLE SPECIFICATIONS**

1.500 m Depth Rating: Length: 1.230 m Width: 0.815 m Height: 0.605 m Weight: 200 Kg Forward Speed: >2.5 knots Forward Thrust: 66 kgf Lateral Thrust: 47 kgf Vertical Thrust: 43 kgf Payload: 34 kg

#### Propulsion:

Six Seaeye SM4M brushless 250 VDC thrusters propel Seaeye Lynx. The Thruster configuration is four vectored horizontal units and two vertical units providing full three-dimensional control.

#### **Auto-Functions:**

The Lynx standards auto functions include:

- Heading
- Depth
- · Auto altitude (optional)

## Umbilical/Main Lift:

Main Lift Length: 1,000 m Main Lift O/D: 31 mm

TMS (Seaeye Type 8)

Length:1.792 mWidth:1.491 mHeight (to lift eye):2.25 mWeight (in air):1.4 TonsDepth Rating:1,500 mTether Length:150 mTether OD:20.6 mm

Power Requirements: 380-440 VAC, 30, 50/60 Hz, (150 KVA)

# SYSTEM DIMENSIONS AND WEIGHTS

LARS with Winch:

 Length:
 7.1 m

 Width:
 2.75 m

 Height: (to lift eye):
 2.25 m

 Weight:
 17 Tons

 A-Frame Outreach:
 2.5 m

Control/Workshop Cabin - DNV 2.7-1 offshore container, A60 rated:

 Length:
 6.1 m

 Width:
 2.6 m

 Height:
 2.6 m

 Weight:
 7 Tons

Stores Container:

 Length:
 3.1 m

 Width:
 2.6 m

 Height:
 2.6 m

 Weight:
 4 Tons

## **EQUIPMENT FITTED AS STANDARD**

# Control System:

16 bit digital system providing easy interfacing to ancillary equipment by the operator. The Seaeye comprehensive video overlay is fitted as standard providing digital and analogue compass rose, tilt icon, date time group, depth (imperial or metric), CP value, TMS tether cable pay out counter, plus pre-titled and free text pages and an electronic QWERTY keyboard. Vehicle data may be exported to clients Survey or Navigation computer via the Seaeye telemetry monitor unit, which is supplied as part of the standard spares kit.

#### Chassis:

100% modular chassis manufactured in polypropylene. This extremely rugged material is totally maintenance free, non-corroding and self-supporting in seawater. Additional equipment may be bolted directly onto the chassis members. The Seaeye Lynx Chassis is designed to accommodate a range of standard or custom under slung tooling Skids.

#### **Buoyancy:**

Syntactic foam in a single moulded shape with apertures provided for sonar, Xenon strobe and tracking transponders.

#### Pressure Housings:

All pressure housings are machined from 6082 marine grade aluminium and hard anodised black. The electronics pod has water.

#### Tilt System:

 $1 \times +/-90$  degree camera tilt platform which accepts One camera and light.

#### Video System:

The standard video system allows for four video channels being multiplexed onto two fibres to the surface junction box, where they are converted back to electrical signals on coaxial cables to the system monitors.

#### Camera:

1 x Seaeye Colour Camera

1 x Seaeye Black and White Camera

Digital Video Recording System:

Digital video recording system (2 channel simultaneous recording), with video overlay for all channels.

## **Imaging Sonars:**

1 x Tritech Super Seaking DST avoidance Sonar

## Fluxgate Compass:

Accuracy:  $+/-1^{\circ}$  Resolution: 0.351° Update Rate: 200 Ms

Depth Sensor: 1 x Electronic sensor accurate to +/- 0.1% FSD

## Lighting:

The Lynx is fitted with four long-life LED lights with 600 watts (on four individually controlled channels).

## **Emergency Systems:**

1 x Electronic sensor accurate to +/- 0.1% FSD

# **OPTIONAL EQUIPMENT**

# Sensors/Equipment:

- Tritech Profilers
- 2D Real Time Sonar
- CP / UT Probes

# Optional Skids:

- · Manipulator skid
- Cable cutter skid
- FMD orientation skid