With over 90 Seaeye Tiger ROV systems in operation, the Tiger design has built up a strong reputation for performance, flexibility and reliability and is well established as the industry standard inspection ROV. This small, but powerful vehicle, has been designed to undertake a broad range of inspection tasks and the combination of its payload, auxiliary power and communications channels allows the vehicle to carry a wide range of additional inspection systems.

The highly manoeuvrable design features four vectored horizontal thrusters that provides an excellent power/size ratio making it the system of choice in strong tidal currents. The Fugro group operates a fleet of 13 Seaeye Tiger systems in 600msw or 1000msw depth ratings and continues to invest in this model as a result of growing market demand. The Fugro Subsea Services Limited fleet of Tiger systems are all equipped with garage TMS and are designed for platform-based operations supplied as Zone 2 systems with a gravity-base Launch & Recovery system that obviates the need for welding.

**System Features:**
- Vehicle rated to 600msw or 1,000msw
- SM4 Brushless DC thrusters.
  4 Vectored units in horizontal plane plus 1 vertical unit
- 2 Simultaneous Cameras plus 1 switchable
- Fibre-optic video and data transmission on most Tiger systems
- 32kg payload
- Hydraulic Manipulator/Tooling Skid (optional)
- Side entry TMS (Tether Management System) with 150m or 250m tether capacity
- Crane or A-frame based deployment system rated for Sea State 6. Gravity base and Zone 2
- A60 Control Container (Zone 2)
SEAEGE TIGER

Technical Specifications

Vehicle Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>1.03m</td>
</tr>
<tr>
<td>Height</td>
<td>0.59m</td>
</tr>
<tr>
<td>Width</td>
<td>0.70m</td>
</tr>
<tr>
<td>Weight</td>
<td>150kg</td>
</tr>
<tr>
<td>Depth Rating</td>
<td>600msw or 1000msw</td>
</tr>
<tr>
<td>Payload</td>
<td>32kg</td>
</tr>
<tr>
<td>Thrusters</td>
<td>5 x Seaeye SM4 Brushless DC motors configured as 4 x Vectored horizontal and 1 x vertical</td>
</tr>
<tr>
<td>Chassis type</td>
<td>Open frame constructed from polypropylene with stainless steel reinforcement</td>
</tr>
<tr>
<td>Buoyancy</td>
<td>Syntactic PVC foam</td>
</tr>
</tbody>
</table>

Performance

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fore/aft</td>
<td>62 kgf</td>
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<tr>
<td>Lateral</td>
<td>43 kgf</td>
</tr>
<tr>
<td>Vertical</td>
<td>22 kgf</td>
</tr>
</tbody>
</table>

Speed

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fore/aft</td>
<td>3.0 knots</td>
</tr>
<tr>
<td>Lateral</td>
<td>2.0 knots</td>
</tr>
</tbody>
</table>

Power

380-480Vac 50/60Hz, 60KVA nominal

Standard Equipment

- Video Channels: 2 simultaneous Video Channels & 1 switchable
- Cameras: 1 x lowlight monochrome, 1 x colour
- Tilt Unit: Electrical Tilt unit ± 90 degrees
- Lighting: 2 x dimmable LED (2 mounted under tilt unit)
- Sonar: Kongsberg 1071/1171
- Compass: Flux-gate with solid-state rate stabilisation sensor
- Accuracy: ±1°, Resolution: 0.35°
- Depth gauge: Electronic pressure sensor
- Accuracy: ± 0.1%
- Auto Pilot: Auto Depth and Auto Heading
- Other Options: Digital Stills Camera, CP System, FMD, minibeacon, UT system, Leak Detection System, Survey Gyro and Survey grade depth sensor.

Tether

- Type: Thermoplastic Polyester (TP)
- Diameter: 17mm
- Length: 150m, 200m or 250m depending on TMS used
- Weight in water: Neutral
- Weight in air: 330kg/km

Tether Management System (TMS)

Seaeye Marine garage Type 2; 4; or 5 TMS with excursion ranges from 150m to 250m dependant on TMS type and project requirement.

Control Container

- Dimensions: (Typical)
  - Length: 4.6m
  - Width: 2.4m
  - Height: 2.6m
  - Weight: 10 Te
- Classification: DNV 2.7-1 / EN 12079
- Equipment Fit: Zone 2
- Transformers: 1 x isolation for ROV
- 1 x domestic supplies
- ROV Control Unit: Rack mounted control system with ROV Hand Controller
- Sonar Processor: Rack mounted PC-based
- Video System: 6 x Monitors, 2 x HDD-DVD recorders, Optional DVR system
- Video Overlay: Date, time, heading, depth, tilt angle, autofunctions, turns counter, CP

Launch System

The Tiger and its accompanying garage TMS are deployed from a LARS skid consisting of an integral Winch, Crane / A-Frame and Hydraulic Power Pack.

This gravity base LARS is designed to be rapidly mobilised and is even able to work from a fixed platform without the need for a welded attachment to deck to a depth of 300msw.

General skid particulars (typical)

- Dimensions: 4.1m (L) x 2.74m (W)
- Weight: 11 tonnes
- Weather Limits: Seastate 6
- Classification: EN 12079, Zone 2, Lloyd’s Register CLAME

Tooling Skid / Packages

- Tooling Skid Options comprising, 4F Manipulator Skid, FMD Orientation Skid, Cleaning Brush Skid and cable cutting skid.