

Work Class Remotely Operated Vehicle

Perry Slingsby Triton XLR 125 HP

Work Class Remotely Operated Vehicle (ROV) Perry Slingsby Triton XLR is equipped with the 125 HP HPU. The ROV is depth rated to 3,000 m and has 7 and 5-function manipulators to perform subsea operations.

The ROV system can be installed both in a specialized hangar and on the open deck of a vessel or a drilling rig. Topside equipment and ROV pilots workplaces are located in the 20 ft. control container.

Triton XLR have the 700 m of tether and 3,300 m of umbilical on the main winch.



The system was completely rebuilt in 2016.

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The vehicle can withstand high currents, due to the high power of the thrusters.

It is possible to connect a wide range of additional equipment. The reconfiguration of the system is quick due to the Innova Matrix Mk II MUX capabilities. Wide range of hydraulic tools and skids could be connected the vehicle.



The system includes launch and recovery system (LARS) to deploy ROV and TMS.

MAGE is ready to provide service across all types of ROV workscopes: drill support during construction of offshore wells, inspection of underwater pipelines, construction support, IRM, survey, cable/pipe lay support, decommissioning etc.

Tether Management System (TMS)

ROV spread include Perry Slingsby Type 5A TMS.

Manipulators

Schilling Titan 4, 7 function, position control Perry Slingsby TA60J, 5 function

Tooling interface

125 HP hydraulic power pack:

Main hydraulic system:

- 230 lpm nominal flow, 240 bar nominal pressure
- Main hydraulic manifold, 12 x NG3 valves (15 lpm solenoid DCV or 8 lpm proportional DCV)

Auxiliary hydraulic system:

- 70 lpm, 210 bar nominal pressure
- AUX hydraulic manifold, 12 x NG3 valves (15 lpm solenoid DCV 8 lpm proportional DCV)
- NG6 hydraulic manifold, 2 x NG6
- High flow hydraulic manifold, 2 x high flow P/O cartridge check

ROV control

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ICE real time control system with GHz optical link, Ethernet telemetry and graphical diagnostics.

The standard ROV includes the capability for simultaneously transmitting as a minimum:

- Eight (8) real time SD video signal (NTSC, PAL)
- One (1) Ethernet channel (devoted to vehicle control)
- Fifteen (15) each full duplex RS-232 data channels (software selectable to half duplex RS485 using surface and subsea local serial isolators)
- One (1) audio channel

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- Six (6) spare CWDM wavelengths (for high bandwidth survey equipment expansion HD cameras, multibeam and 3D sonars, sub bottom profilers, etc.)
- Dedicated Serial & Power Channels for Gyro, Digiquarts, Altimeter/DVL, Sonar, Manip, Responder Trigger, Manifolds

Extra data and video channels is accessible through the Innova Matrix MK II Fibre Optic Telemetry System



| ROV | |
|--------------------------------------|-------------------------------------|
| Manufacturer | Perry Slingsby Systems, Ltd. (UK) |
| Type and serial number of the spread | Triton XLR 03 |
| ROV frame serial number | TR 530/10 |
| Production year | 2010 |
| Depth rating | 3000 m |
| Length | 2.77 m |
| Width | 1.70 m |
| Height | 2.05 m |
| Weight in air | 4000 kg |
| Payload in seawater | 150 kg |
| Through frame lift | 3000 kg |
| ROV thrust | |
| Horizontal thrusters | 4 x Sub-Atlantic SA-380 |
| Vertical thrusters | 3 x Sub-Atlantic SA-380 |
| Horizontal and vertical bollard pull | 975 kgf |
| Surface speed | Horizontal 3.9 kn |
| | Latheral 3,4 kn |
| | Vertical 3,7 kn |
| HPU power | 125 HP |
| ROV controls | |
| Туре | ICE, real time |
| Compass | CDL TOGS fiber optic |
| Depth | Depth sensor |
| Altimer | 200 kHz range 30 m |
| System power requirements | |
| Main power | 420-480 V, 60 Hz, 3 phase, 350 kVA |
| Surface domestics | 420-480 V, 60 Hz, 1 phase, 32 A |
| Manipulators | |
| 7-function | Schilling Titan 4, position control |
| 5-function | PSSL TA60J, rate control |
| Emergence equipment | |
| Emergency xenon flasher | 1 pc |
| Subsea tracking beacon | 1 pc |



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| Tether management system - TMS | |
|--------------------------------|--|
| Manufacturer | Perry Slingsby Systems, LTD (UK) |
| Туре | TMSL 135 |
| Serial number | TR1053/11 |
| Production year | 2011 |
| Cable length | 700 m (for 35 mm tether) |
| Size | Diameter 2025 mm, height 2215 mm |
| Slip ring | Electrical Optical Focal Technology mod 190 |
| | 3 x quad / 2 coax / 3 fiber optical rotary joints SM |
| HPU | Motor 5 HP, 2400 V, 3 phase 60 Hz |

| Control container | |
|-------------------------------|------------------------------------|
| Manufacturer | BNS Container AS (Norway) |
| Serial number | BNSU 209011 0 |
| Production year | 2015 |
| Standard compliance | A60, DNV 2.7-1, CSC |
| Length, Width, Height, Weight | 6.058 m, 2.438 m, 2.743 m, 8600 kg |
| HVAC | 17 kW |
| Incoming supplies | 1 x 440 V 60 Hz, 3 phase |

| Control container components | |
|--|------|
| ROV control console (joystick, switchers, buttons) | 1 pc |
| Touchscreens (in ROV control console) | 2 pc |
| Clearcomm (in ROV control console) | 1 pc |
| Video matrix (in ROV control console) | 1 pc |
| ROV control PC (in ROV control console) | 2 pc |
| Object avoidance sonar control PC (in ROV control console) | 1 pc |
| Visual Soft Video recording PC (in ROV control console) | 1 pc |
| Uninterrupted Power Supply (in ROV control console) | 2 pc |
| ROV control Rack | 2 pc |
| Widescreen monitors (ROV video feed) | 4 pc |
| Navigation monitor | 3 рс |
| ROV Electric distribution | 1 pc |
| ROV electric transformers (Separate compartment) | 1 pc |
| ROV supervisor workplace | 1 pc |



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| Workshop container | |
|-------------------------------|------------------------------------|
| Manufacturer | BNS Container AS (Norway) |
| Serial number | BNSU 209017 0 |
| Production year | 2015 |
| Standard compliance | A60, DNV 2.7-1, CSC |
| Length, Width, Height, Weight | 6.058 m; 2.438 m; 2.743 m; 8600 kg |
| HVAC | 17 kW |
| Incoming supplies | 1 x 440 V 60 Hz, 3 phase |
| Main winch | |
| Manufacturer | CETIX AS (Norway) |
| Туре | Weverunner 13R AHC electric |
| Serial number | 500164 |
| Production year | 2010 |
| Length, Width, Height, Weight | 4.8 m; 3.7 m; 3.2 m; 36,000 kg |
| Drum Capacity | 3300 m (35 mm cable in 12 layers) |
| Electric cabinet | |
| Manufacturer | CETIX AS (Norway) |
| Туре | Reel Control Cabinet |
| Serial number | 500164-01A |
| Production year | 2010 |
| Length, Width, Height, Weight | 3.2 m; 1.0 m; 2.7 m; 2820 kg |
| Breaking resistor | |
| Manufacturer | A.C. Smith & Co AS (Norway) |
| Туре | GAD – Breaking Resistor |
| Serial number | 7775-10 |
| Production year | 2010 |
| Length, Width, Height, Weight | 1.55 m; 1.335 m; 2.152 m; 1800 kg |



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| Launch and recovery system - LARS | |
|-----------------------------------|-------------------------------|
| Manufacturer | Sepro technology AS, SH Group |
| Туре | HPL12-A-N |
| Serial number | 4555 |
| Production month, year | 06.2010 |
| Length | 10.5 m |
| Width | 2.5 m |
| Height | 3.3 m |
| Weight | 25,500 kg |
| SWL | 12,000 kg |
| Reach | 5.9 m |
| Power supply | 440 V AC, 60 Hz |
| Power | 55 kW |

ROV Spread contains spares and tools for repair for maintenance on remote location.

