

Triton XL



Work Class Remotely Operated Vehicle

Manufactured by Perry Tritech Inc, Fugro Survey have a fleet of Triton XL heavy work class ROV systems (no. 21, 22, 26 & 27). Founded on the successful Triton pedigree, the Triton XL represents a successful work class ROV design. The Tritons have been produced in sufficient number and have created a well-established track record of performance in deep water.

Delivered with 200m tether plus 2000m of lift umbilical on a 2500 capacity winch, all of the systems are capable of operating in a water depth exceeding 2000m in their standard configuration. Provisions are in place to easily upgrade to the full 2500m quoted system rating.

The flexibility offered by all systems having this "off-the-shelf" depth capability, demonstrates Fugro Survey Ltd's commitment to lead the way in the provision of remote intervention solutions for out clients as their offshore development projects move progressively into deep waters.

Systems Features

- 100SHP electro-hydraulic motor generating ample hydraulic power/flowrate for tooling packages via 2 solenoid manifolds, each with 10 4-way valves, operating @ 3300psi, 20ltrs/min
- 200kg payload and 3000kg through-frame lift with movable lift point for adjustment of in-air trim.
- Nexus 10 comprising of 8 off Fibre optic video cameras, 16 off RS 232 data chambers HD band, 2 off RS485 data channels, 1 off ArcNet channel, 2 off multibeam channels set for Reson 8125 heads.
- Advanced ROV control system based on Pentium PC based surface and subsea processor architecture and operating real time database driven software.
- Schilling Titan III 7-function manipulator available for each system.
- Large, open frame layout optimised to provide free space for project specific equipment within the framework, plus usage of under-slung work packages.
- Perry Tritech XL @Top-Hat' Tether Management System with up to 200m tether capacity.
- LARS comprising skid-mounted @A@ Frame rated at 15T fully deployed on stops.
- Winch Capacity for 2500m of 46mm lift umbilical and 9.5T line pull @ outer wrap.
- Additional 4 valve tooling manifold. HYD pilot pos sov c/w press of flow control

Triton XL

Heavy Work Class Remotely Operated Vehicle

Dimensions		Propulsion		Umbilical Winch	
Length	2.46m (3.1m c/w manip tray)	HU Power	100SHP nom, 60Hz electric Motor driving hydraulic pump Delivery of 198l/min @ 224 bar 2 x 2,500ft, 38mm	Length	3.2m
Height	1.53m	Thrusters	Sub Atlantic SA-300 – Total 7 4 x vectored horizontal 3 x vertical	Width	2.2m
Width	1.86m (excl TMS)	Hydraulics	1 x 8-function servo (propulsion) 1 x Spare servo 2 x 10 function, 4-way 3 position, 3300psi 20lrs/min	Height	2.5m
Weight	3.15T (incl 200kg payload)	Manipulators		Weight	7.5T empty 20T incl umbilical
Construction				Speed	0-30m/min outer wrap Infinitely variable bidirectional 100HP
	Free-flooding, 'I'-Beam main frame 2 x power / Electronics Bottle 2 x Junction Boxes: Main Tether & Survey + Nexus 10 MUX			Power	Designed to fit onto LARS
Depth Rating				Layout	9.55T @ full drum
Design	2500m			SWL	2700m of 46mm umbilical, 12 layers, 24T
Operational	2000m			Drum cap	Trapezoidal screw shaft driven via hydraulics
Handling System				Level Wind	Focal Technology, model 176 Elector-optical 3 channel SM optical
Type	'A' Frame LARS			Slip rings	
Manufacturer	Lawsons			Umbilical	
Ratings	SWL 15T (fully deployed on stops)			Length	3000m
Docking	Snubber assembly complete with latch / rotate facility			Diameter	46mm
Skid Base	8m x 2.9m			Breaking strength	510kN
Skid Height	3.7m (stowed)			Type	Steel armoured
'A' Frame	2.3m between legs 7.9m leg length (nom)*			Conductors	17 x power 6 x optical fibres 3 x RG59 coax 4 x RG108 quads
Outreach	4.35m (std 1.7m insert)*			Tether	
Weight	14.7T (excl winch) * 'A' Frame height/outreach can be altered by addition / removal of 1.2m + 1.7m inserts.			Type	Nexais Bwt 2
Total System Power Requirements				Length	200m
Main Power	420-480Vac, 3 phase 60Hz 350kVa stable to ± 5%			Consists	RG59 coax 3 off Individual quads 3 off Power conductors 16 off Fibre optic (50/125µm x 8) 1off
Surface Domestics	240Vac 1-phase 32A			TMS	
Electric Motor	100HP wash-down rated			Dimensions	Top hat with winch and level wind
Power Demand	440Vac ± 10% 3 phase 60Hz 100A			Capacity	190m useable length
Performance				Dimensions	1.97m (d) 2.18m (h)
Bollard Pull (45°)	660kgf Forward/Aft 500kgf Lateral			Slip Rings	Focal Technology mod 190 Electrical Optical: 3 x quad / 2 coax 3 x fibre optic rotary joints SM Motor 5HP, 2400Vac, 3ph, 60Hz
Speed (45°)	Forward up to 3 knots Lateral up to 2 knots Vertical (up) up to 2 knots			Electric	
				Winch System	Empty Drum 163kg (approx) Full Drum 50kg (approx) 18.3m/min
				Pay-out Rate	13.7 / 30.5m/min
				Pay-in Rate	Magnetic Reed Switch Sensor
				Payout Indication	Operator-controlled hydraulic mechanical over-centre main latches with spring-loaded fail-safe latches. Sensors for latched indication provided
				Latching	

Fugro-Rovtech Ltd

Fugro House, Denmore Road, Bridge Of Don, Aberdeen, AB23 8JW

Tel: +44 (0) 1224 257600

Fax: +44 (0) 1224 853912

www.fugro.com

