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# STR OpTow

STR offer an extensive range of field-proven electric winch systems for marine applications.

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The STR OpTow is a latest generation three-phase electric winch optimised for use with armoured hybrid electrical and fibre-optic tow cable.

This package is well-suited for operation of ROTV (Remotely Operated Towed Vehicle) systems requiring high bandwidth communications combined with power delivery. The gearmotor is designed for high speed recovery and provides optimal working load limit, making it ideal for ROTV operations. The STR OpTow is packed full of technology to allow ease of operation, reliability and excellent levels of safety as well as high performance. The electronic control system allows full control via external input / Remote Operations Centre, whilst maintaining local control of all safety systems.

Provision is made to allow external active heave compensation systems to control the winch and remove vessel motion in order to improve seabed tracking and extend the operational weather window.



Utilising the same proven platform as the SeaTow 2000, this variant has been optimised for use with ROTV systems requiring high bandwidth fibre-optic based communications over 1Gbps, along with high voltage power delivery. The system is optimised further for high speed recovery and deployment, whilst offering high load rating required for ROTV operations. The STR OpTow is typically deployed with 1000m of 13mm armoured towcable, but can easily support other lengths and types as required.

### Key Features

- Optimised for ROTV Operation
- Hybrid Fibre & Electrical Umbilical
- Low Loss Fibre Slipping
- Remote and local joystick control
- Remote Operations Centre interface
- High speed operation

### Key Benefits

- Low maintenance electrical drive
- Reduced operating cost
- Easy Installation-Compact & Fully Integrated

### TECHNICAL SPECIFICATIONS

PROPERTIES	DESCRIPTION
Motor	12kw 440V 3 phase, 50/60Hz
Brake	Electrical disc brake integral with motor
Drum Capacity	Up to 2000m of 11.5mm cable
Drum Dimensions	Drum Ø460mm, Drum Width 810mm, Cheek Ø 900mm
Line Speed (at Drum)	0 to 53m/min
Line Speed (at top)	0 to 91m/min (based on max cable capacity)
Line Pull WLL	1150kg
Handling	Load tested 4 point lift eyes
Level Wind	Electronically controlled lead screw
Motor Regeneration	Internal resistive load to avoid regeneration onto input supply
Construction	Steel with marine grade paint coating to ISO 12944 -5/A5M
Slip Ring	<ul style="list-style-type: none"> <li>• STR Internal Sealed unit.</li> <li>• 1 pass single mode fibre &lt;3.5dB loss</li> <li>• 6 pass electrical @ 2A/400V</li> </ul>
Joysticks	Local and remote joystick control. Coupled with LCD user configuration and status interface, Emergency Stop Button, 50m Remote Cable
Safety Features	<ul style="list-style-type: none"> <li>• Multiple Emergency stop buttons at operator stations</li> <li>• Moving parts contained within cage</li> <li>• Sounder beacon indicating operation</li> <li>• Low voltage control circuitry</li> <li>• Fail safe brake</li> </ul>
Weight	1300kg (bare drum)
Dimensions	1.71 x 1.7 x 1.71m (WxDxH)
Remote Interface	<ul style="list-style-type: none"> <li>• Client remote control and diagnostic interfaces supported via Modbus 485, example software provided for remote applications</li> <li>• Easy to integrate with external active heave compensation systems</li> <li>• Tried and tested with Scantrol mTrack</li> </ul>
Standard Towcable	<ul style="list-style-type: none"> <li>• 1000 m STR08422 13.1mm Armoured Fibre Hybrid</li> <li>• 2 off 1.5mm<sup>2</sup> power conductors (high power delivery)</li> <li>• 2 off 0.34mm<sup>2</sup> twisted screened pair (TTL/ADSL Comms)</li> <li>• 2 off steel tube reinforced single mode fibre</li> </ul>
Standard Termination	<ul style="list-style-type: none"> <li>• STR2040 Mechanical Tow Termination</li> <li>• Optolink Single fibre BCR and MCBH4F / Optolink Single fibre CCP &amp; MCIL4M</li> </ul>