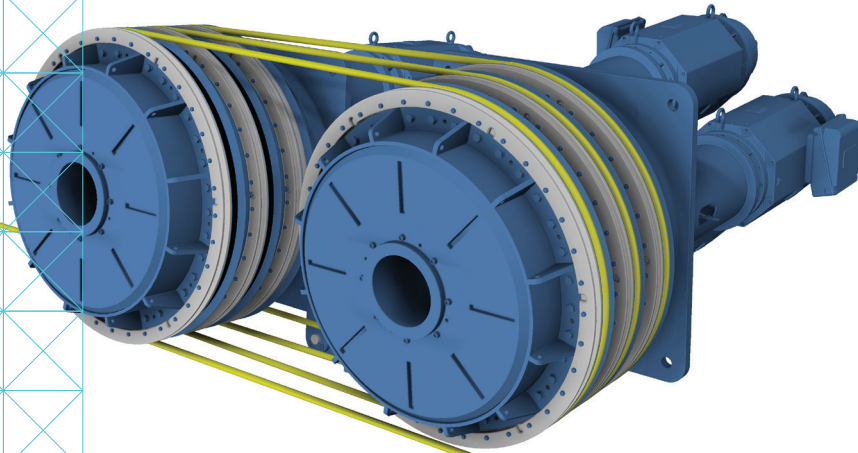


COMPACT CABLE TRACTION CONTROL UNIT



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Compact cable traction control unit

The unique CTCU-technology, developed through a comprehensive joint offshore industry effort, offers superior performance for fibre rope applications.

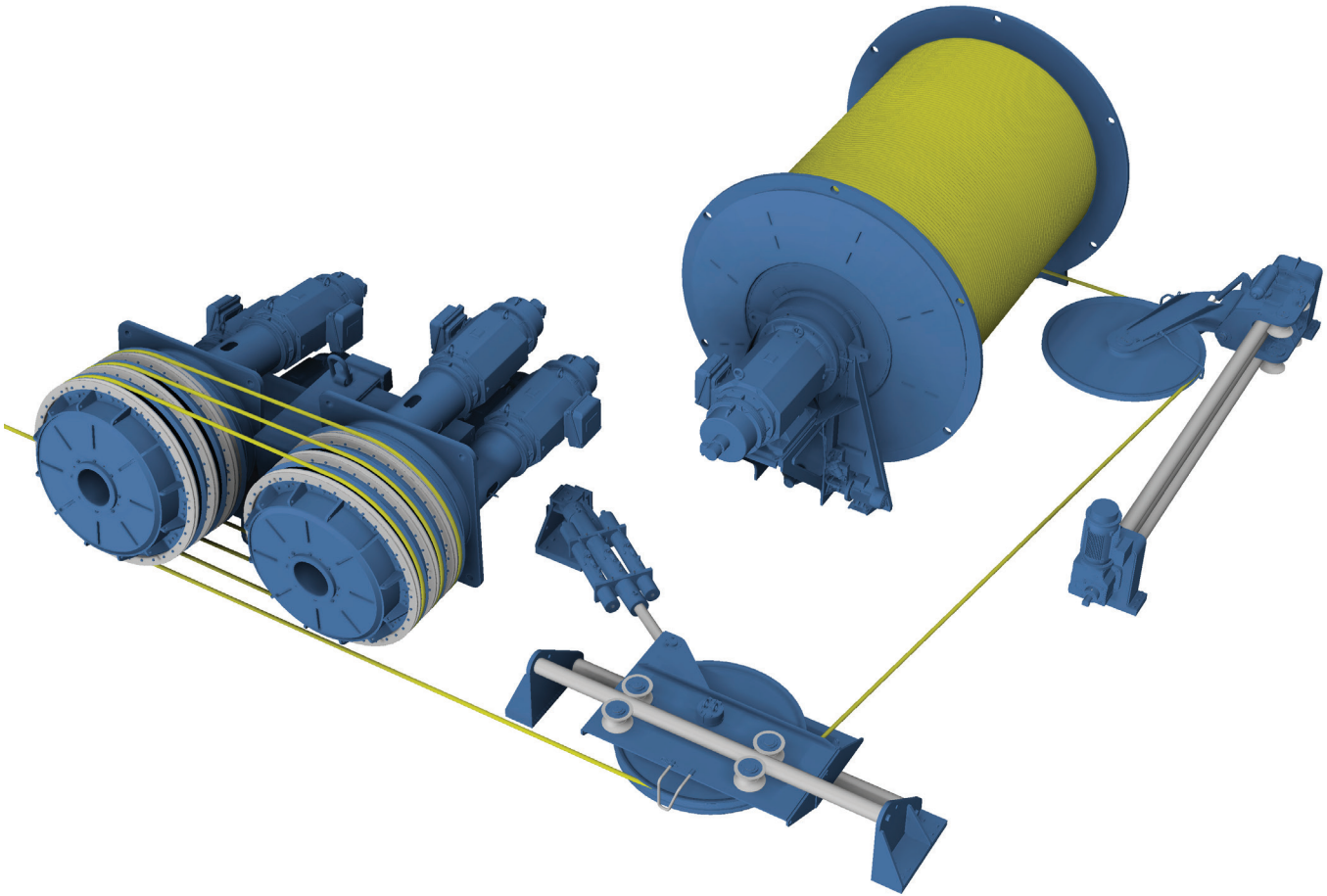
Originally developed to maximise utilization of synthetic fibre ropes to accommodate lifting capacities required to install subsea equipment safely and effectively to the seabed in increasingly deeper waters, the CTCU enhances the traction winch principle further and addresses the problem with rope extension under load. The CTCU consists of multiple individually driven sheaves, the speed and torque of each sheave being controllable to avoid accumulated slip due to rope elongation. De-tensioning of the rope is done gradually in a user pre-defined pattern within the physical limitations as defined by frictional capacity and drive system performance for each sheave.

The resulting system, centred around the CTCU, provides the gentlest possible handling of fibre ropes or any other cable or wire capable of handling tractive forces, yielding superior flexibility and performance over conventional traction winch systems. In addition, splices and other objects along the rope, which are not easily run through a traditional traction winch, are effortlessly handled by the CTCU.

Synthetic fibre ropes are lightweight, splice-able and repairable, and offer great benefits in a range of applications, which previously have relied on heavy steel wire. Fibre rope enables use of smaller and lighter equipment, reduced power consumption and no reduction of effective payload capacity at any depth.

Field-proven units with a long record of accomplishment and a wide range of capacities are operating in areas such as oceanography, seismic and subsea equipment installation.

The system may be delivered with high performance active heave compensation, proven to compensate for more than 95% of vessel motions. Additional features like constant tension, pull limit and specially developed landing and lift-off functions, and a dedicated rope management system for monitoring rope bend fatigue, can be included on request to tailor the control system to the exact requirements of the customer and their operations.



The complete system, comprising cable traction control unit (CTCU), storage winch, spooling device and damper unit.

KEY DATA

Work load limit
 Maximum dynamic load
 Line speed at WLL
 Line speed at 50% WLL
 Rope diameter
 Storage winch capacity *
 Peak power consumption *

VALUE

30.0 Te (line tension)
 48.0 Te
 1.0 m/s
 2.0 m/s
 30 mm (typical)
 10 000 m +
 450 kW

* Performance can be adapted to customer requirements.

