AFT DECK HANDLING SYSTEMS
FOR SEISMIC VESSELS

www.seismicwinch.com
We deliver different types of storage drums. These drums have a light weight and compact design.

The aux. Winches are compact with capacity between 2—5 tons. Typical units have internal multidisc brake. The winch have a narrow drum to ease spooling. The winch have a flexible foundation to easy installation onboard.
We deliver different sizes of streamer winches. The largest type can be used for 16000m long streamer. The pull capacity can be up to 30 tons at first layer. The control system for it is made for an accurate operation for the drums.

The winches are made compact and of light weight.

The drums can be delivered with a bandbrake or a stainless steel disc brake system. The unit can be designed for use with one slipring or two slipring configurations.

The streamer winches are delivered both as single and double drum configuration.

We can deliver the units high pressure hydraulic driven or frequency controlled AC driven.

The winches have an encoder for exact speed control and positioning. This is important for synchro operation of different winches.

The units can be delivered with static and dynamic tension monitoring system.
We design and manufacture a wide range of spooling devices for rope and cable.

The spooling devices are flexible and can be installed on most types of drums.

The spooling devices are high pressure hydraulic driven but can be delivered with frequency control AC drive.

Most spooling devices is delivered with an automatic spooling system. This system is operated by touch panel or remote control panel. The automatic spooling can be adjusted during operation. The spooling devices can be delivered as single unit or double units. Double spooling units can be independent operated. We can supply horizontal and vertical adjustable spooling devices.

Stainless steel duct system.

SPOOLING UNITS

We deliver different types of spooling units. These units is to spool cable sections on storage. These units is delivered both high pressure hydraulic, air or electrical driven.

We do rental of such spooling units.
We deliver different types of towpoint. These are both telescopic and monobox type towpoint.

The towpoint is delivered with different sizes and work radius. The units are designed for remote operation. The towpoints can be delivered with inductive sensors for positioning.

We deliver different types of traction winches. Both single capstan and multigrove systems and vertical and horizontal units.

This can be complete units like on picture below or smaller units.

We supply traction winches with pull capacity from 2 tons to 30 tons pull.

We deliver units that can handle cable or rope.
The wide tow winches can be delivered with different configurations. The winches can be delivered with automatic spooling device. The pull capacity of the winches is typical between 10–80 tons.

The winches can be delivered with static and dynamic tension and length monitoring. The winches

**WIDE TOW WINCHES**

**GUN WINCHES**

The gunwinches we deliver are of different sizes. The winches are made compact and light weight.

The winches can be designed for different types of sliprings and airswivles.

We deliver the winches in a single or a double drum configuration. The foundation is made for easy installation and easy maintenance.
We design a wide range of lifting and handling systems for seismic vessels. The hydraulically driven deck cranes with capacity up to 30 tons at 20 m.

The cranes is delivered both with monobox, knuckle or telescopic jib type. Typical operated by remote control system.

The cranes can be delivered with special tools, traction blocks, interfaces towards the item the crane shall lift up. The cranes can be delivered with compensation.

We deliver different types of source handling systems. Boom and davits. The units can be delivered from all types of sources.

The A-frames can be delivered with integrated winches and powerpack. We can also deliver units with tension and length compensation systems both passive and active.

Transvers stern handling systems are delivered with lifting capacity up to 7 tons.

The active heave compensated winches are delivered with sizes from 5 tons up to 250 tons. The winch package is delivered with powerpack, motion reference unit, overboard system and control system.
Our control system is based on PLC control connected with Radio control and operating panels (touch screens).

The equipment is made for control of all equipment on deck from radiocontrol and touch screens. You can choose between manual or automatic/syncro control.

On the radiocontrol unit You can choose what equipment to operate., There are a display showing system data, synchro control and alarms.

The control systems can be special designed for each vessel. The systems can be accessed via internet for system control / monitoring and service. The systems are delivered to many vessels both towed and bottom seismic operation.

The system integrate all deck machinery onboard: streamer winches, gun winches, towing points, spooling devices, aux winches, wide tow winches and powerpack. The system is flexible and can communicate with other systems onboard, example power-management systems.

The number of radio remotes and touch panels are flexible. The radio remotes can be delivered with 2-way communication and LCD-panel

The system have Synchro operation function for all streamer winches on deck. We have a video on our website showing synchro operation www. seismicwinch.com.

Updating control systems on existing vessels

We can update the control-system on existing vessels. The system is flexible and can be used on most manufactures equipment. We can supply a complete package of both the control system and installation and start up.
Our new version control system integrates a new aft deck monitoring system.

Camera and Graphic information is shown on the touch panels, on the color panel on the LCD radio remote. The information can also be monitored online from maintenance and service center onland.

The monitoring system consist of monitoring cameras and ir and laser sensors ,angular sensors and tension sensors.

The objective of the system is to monitor operation of many different types of equipment , winches , spooling devices, towpoints simountainlously and give information and alarms to system operator on deck. Some functions are:

- Alarm , Automatic shutdown when personnel close to winch.
- Cable direction , spooling and monitoring. Slack cable alarm.
We can offer both design, fabrication, assembling and testing of equipment special design to full customer needs. Our fabrication department can fabricate constructions with weight up to 100 tons.

We can deliver winches and equipment containerized for easy transport and fast installation.

The large diameter streamer drums can be dismantled and shipped by 40ft containers.

The containers can be delivered in packages as a complete gun system.

**TOWING BLOCK**

**CABLE HANDLING BLOCKS**

We are developing a new innovative towing block.

These blocks are of special compact design to give support to sensitive cable with a large bending diameter. Our aim is that the new block will have less friction and less needed maintenance as the existing blocks in the marked.

**FAIRLEADS**

We deliver all types of sheaves and fairleads. The fairleads can be special made for the special rope. The blocks can be delivered with line load monitoring system.

Fairlead for wide tow rope. The 40” dia. special sheave is installed in a balanced hinge.
► MS Bergen Surveyor, a streamer winch, spooling device, control system

► MS Oceanic Phenix streamer winches, widetow winches control system

► MS Geowave Commander, streamer winches, widetow winches control system

► MS Caspian Maria: streamer winches, traction machine, aux winches.

► MS Polarstern, streamer winch control system, power pack

► MS GeoArtic, spooling device, power pack

► MS WG Amundsen, Multisheave spooling blocks.

► MS Seisquest, two aux. winches

► RS Geolog Dimitry Nalivkin, streamer winch

► MS Ramform Challenger two aux. winches

► MS Geowave Commander, streamer winches, widetow winches control system

► MS Ocean Pearl, streamer winches. Winches. Spooling system, control system.

► MS Polar Duke, aux. winch

► MS Akademik Lazarev, spooling device, power pack

► MS Sanco Star, Streamer winches, control system, aux winches, powerpack

► MS Geco Emarald, tagline winches

some deliveries
Karmøy Seismic use a production plant that can build constructions of size 30m x 15m x 16m and weight of 200tons. There is a deepwater quay for shipping of products direct from the company.

**Service**

**WorldWide - 365/24h**

We have a service department that do world wide service. All critical spareparts stored at our large warehouse.

The service and warehouse department is operational 24H/365.

We have a regional sales and service company in Shanghai, China. This office will do sales, service and after sales in the Far-East and Oceania region.

**Training**

Karmøy Seismic AS arranges training courses for operation of the different products. The different training programs and have courses in operation of winches and machineries, maintenance of equipment.