

50 TON ROPE TENSIONERS



KONGSBERG



DECK MACHINERY

Fiber rope back tension system 50 ton rope tensioners

ADVANTAGES

- Timesaving and environment friendly mobilisation of fiber ropes at the offshore base and in open sea
- No need for re-spooling between drums to achieve tight spooling
- Reduced risk for damaging the rope due to penetration between drum layers
- Built for easy connection to existing hydraulic circuit
- The system is suitable for installation on sailing ships

The system provides adjustable back tension when spooling rope into a working drum from a storage reel onshore, from another vessel or from onboard the same vessel.

Fiber rope back tension system consists of:

- Two LP CX1270 motors winstalled below main deck
- Two gear boxes installed in line with main deck
- Two rubber coated V-shaped sheaves of 1500 mm bottom diameter for back tension generation
- One rubber coated V-shaped sheave of 1500 mm bottom diameter for idler spooling
- Three steel covers for protection of gear boxes when sheaves are demobilised
- Lifting sling with guide pins for handling and installation of sheaves and covers
- Portable remote control unit for tensionand speed control
- Tension reading for back tension systemon bridge



Island Vanguard is the first vessel with the equipment installed

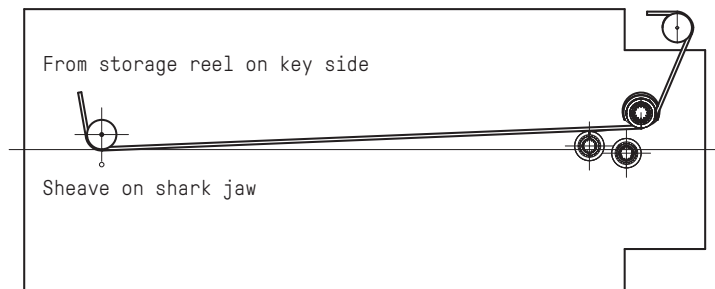


Mounting of rope tensioners at Island Vanguard

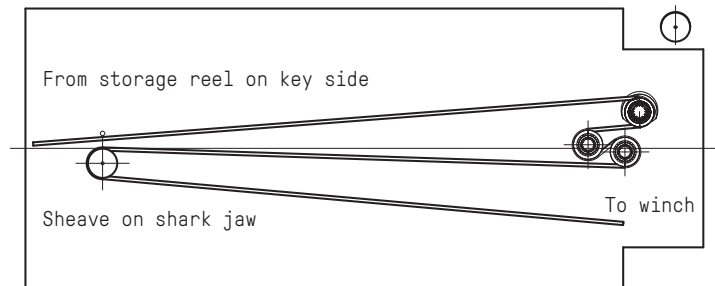
TECHNICAL SPECIFICATIONS

• Pitch diameter with 203 mm fiber rope	1900 mm
• Max fiber rope dimension	ø260 mm
• Max speed on fiber rope	30 m/min.
• Max back tension force	50 tons
• Existing cooling system	
• Heat transfer rate	252 kW
- at inlet oil temp.	65oC
- at oil flow	44.6 m3/h (740 l/min.)
• Oil type	ISOVG 100
• Pressure drop, oil side	0.70 bar
• Max oil inlet pressure	6 bar
• Cooling medium seawater	
• Flow rate SW	29.4 m3/h (490 l/min.)
• Pressure drop SW	0.09 bar
• Inlet temp. seawater	32oC
• Max water inlet pressure	6 bar
• Weight dry	16200 kg

Case 1 To rope reel under deck



Case 2



Case 3

