

CHAPTER 2.0 General Specification and Technical Data

2.1 60T Hydraulic winch with Auto Spool

The 60Ton Hydraulic Winch to be installed on the main working deck of the vessel. Winch is used for utility purpose and are also equipped with an automatic spooling device employed in front of the towing drum to ensure trouble-free winding up or releasing of the wire rope. It is driven by a "diamond" screw with chain transmission connected to each of the drum shaft. This spooling carriage can be disengaged or engaged by mean of a manual clutch.

This drum is engaged to the hydraulic motor drive via engagement of through a hydraulic operated claw type clutch. A hydraulic system provides 80ton of braking force on the first layer of wire rope on the drums. A manual override is incorporated in the event of power failure or brake down of the hydraulic enforcing system. Power and control fluid are supplied from a Electro-Hydraulic power pack.

Winch Specifications:

Winding Pull:	60Ton @ 08 M/min @ 1st layer 30Ton @ 20 M/min @ 1st layer
Drum Capacity:	2 x 1000 M x Ø 52 mm wires
Wire Spooling:	2 x De-clutch able Auto-spool mechanism
Brake Holding:	2 x 130 Ton Hydraulic operated band type c/w manual override.
Clutch	2 x Hydraulic-operated claw type
Hydraulic Motor:	1XHMC280 Staffa Radial Piston type
Winch Control:	Manual lever hydraulic Local control (Control valve fixed winch itself)

2.2 250Kw Diesel drive engine Hydraulic Power Pack

The central power pack consists of 1x250kw diesel engine drive with one set of piston pump providing full pulling power to the winch and the control for the brake and clutch of the winch. Also one set of vane pump connected to the piston pump for hydraulic oil circulation in to the cooler for oil cooling purpose. The one diesel engine / pump set are mounted on the top of 3000L oil tank with the full set of accessories(Oil filter, Pressure gage, Oil level gage, Relief valve, unloading valve Air cooler etc.) . The starter / control box is to be mounted on the power pack.

Power pack Specifications:

Diesel engine	:	DEUTZ –TCD 2013L064V
Power and Speed	:	250Kw @ 1800rpm
Hydraulic Piston Pump	:	Rexroth 1x450L/Min
Pressure Setting	:	250 Bar
Hydraulic vane pump	:	Auxiliary pump for cooling system
Oil Cooler/ Air	:	OK-ELD6H/3.1/24v/1/S
Max. Pressure	:	16 Bar