

1.3. Equipment Description

1.3.1. Capabilities and limitations.

The DT model 3025EHLWR is a self-contained, electro-hydraulic, hydrostatic drive variable speed, cable handling system specially designed for the marine environment. Its hydrostatic drive gives it the most efficient size-to-horsepower ratio

1.3.2 Specifications and descriptive data.

Overall dimensions	Width - 62 inches Depth - 50 inches (Includes level wind) Height- 52 inches (Includes level wind)
Drum dimensions	Flange diameter - 38 inches Drum diameter - 20 inches Drum width - 24 inches
Drum capacity	3,000 Meters of 0.45" diameter cable with an additional 2" of clear flange.
Construction	All welded steel with stainless steel hardware.
Finish	Sandblasted to near white metal, coated with one coat of inorganic zinc primer followed by one tiecoat of epoxy paint and a topcoat of DT Blue epoxy paint.
Bearings	Sealed, self-aligning ball bearing type.
Drive system	25HP, 230/460VAC 3phase, 60HZ, totally enclosed fan cooled electric motor driving an axial piston variable displacement pump. This in turn drives an axial piston fixed displacement hydraulic motor connected in a closed loop configuration. The hydraulic motor is coupled to the drum through a planetary gear reducer that is attached directly to the winch drum. A multiple disc, fail-safe brake is incorporated into the final drive and is located between the hydraulic motor and the gear reducer. A brake release valve is used to sense loop operating pressure and control release of the brake.
Controls	A self-centering, single lever, "Joy-Stick" type electrical controller is mounted on a sloping panel on the drive housing cabinet. This controller operates a linear actuator that is attached to the pump swashplate and affords variable speed by varying the

displacement of the pump. Also mounted on the sloping panel of the housing cabinet are a system pressure gauge for monitoring the hydraulic loop operating pressure, a LOCAL/REMOTE selector switch and the two level wind override switches. A power control switch is located directly below the sloping panel and provides control of a full voltage across the line motor starter that is housed in a NEMA4X enclosure located inside the drive housing cabinet.

Braking system	A fail-safe multiple disc brake is incorporated into the final drive and is actuated at the center position of the control handle or in the event of hydraulic pressure or electric power loss. A manually applied, handwheel operated 3" band brake is also located on the winch drum for an added measure of safety.
Hydraulic Reservoir	The hydraulic reservoir is fitted in the base of the winch, so except for having to be supplied with electric power the unit is self-contained.
Slip-Ring	Internal shaft mounting of customer's supplied focal slip-ring assembly.
Performance	Bare drum rating of 4,000 lbs line pull at a line speed of 0-150 feet per minute.
Handling	Four points lifting eyes and fork lift access tubes are provided .
Options	See Section 2.3.