1.3. Equipment Description

1.3.1. Capabilities and limitations.

The SEA·MAC model 3540EHLWR 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 - 90 inches

Depth - 78 inches (Includes level wind) Height- 78 inches (Includes level wind)

Drum dimensions Flange diameter - 64 inches
Drum diameter - 30 inches

Drum diameter - 30 inches
Drum width - 36 inches

Drum capacity

3,000' OF 1.0" diameter cable and 250M of 2.5" Diameter cable with an additional 3" of clear flange.

Construction

All welded steel with stainless steel hardware.

Finish

Sandblasted to near white metal, coated with inorganic zinc primer followed by one tiecoat of epoxy paint and two topcoats of SEA-MAC BLUE polyurethane paint.

Bearings

Sealed, self-aligning ball bearing type.

Drive system

40HP, 230/460VAC 3 phase, 60HZ, totally enclosed, fan cooled electric motor with single phase converter 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. The hydraulic reservoir is fitted into the base of the winch, so except for having to be supplied with electric . power, the unit is self-contained.

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 winc 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 NEMA 4X 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 contro handle or in the event of hydraulic pressure or electric power loss.

Performance

Bare drum rating of 5,000 lbs line pull at a line speed of 0-200 FPM.

Handling

Four points lifting eyes and fork lift accestubes are provided .

Options

See Section 2.3.

Line Pull