Maximum Capability Document (MCD) for winch system

MASH 2000/8,18-10,6 (Light duty)

The winch system supplied is capable of handling 2,000m ø0.322" (ø8.18mm) cable/wire and has been designed with constant tension and auto rendering to minimize potential damage of the cable/wire.

The winch can also handle smaller cable diameters than stated above, the system just need to be programmed for the specific cable.

General fleet angle information

The vertical fleet angle $x$ is: -5° to +20°

The horizontal fleet angle $x$ is: +/- 8°
The following sketch indicates the general layout of the foundation reaction forces on the winch.

\[ F_1 = 16.8 \text{ kN} \]
\[ F_2 = 4.2 \text{ kN} \]
\[ F_3 = 7.2 \text{ kN} \]
The following information characterizes the system:

- Maximum amount of cable on the drum: 2000m ø0.322" (A301592)
- Maximum speed (top layer): 55 m/min (180 ft/min)
- Maximum speed (bottom layer): 39 m/min (128 ft/min)
- SWL: 2,374 lbf (10.6 kN)
- Maximum pull at the Bottom layer / MPT: 3,360 lbf (15.0 kN)
- Maximum brake force: 5,052 lbf (22.5 kN)
- Auto rendering function: 0 – 4,200 lbf (0 – 18.75 kN)
- Temperature classification: -4° to +113°F (-20° to +45°C)
- Maximum gross weight: 6,615 lb (3,000 kg)
- Tension member NBL / ABL (A301592): 10,000 lbf (44.5 kN)
- Maximum allowed structure load / DLT: 14,370 lbf (64 kN)
  (This is based on the ø0.322", A301592 Rochester cable)
- Motor power requirements: 3x480VAC 60 Hz
- Weight for shipping, excluding cable/wire (kg): 1700 kg (3748 lb)