



Maximum Capability Document

Hawboldt SPRE-3464 General Purpose – 1942-1

This document has been prepared in accordance with Appendices A and B from the UNOLS RVSS. This machine is primarily used with the following tension members:

Wire rope tension members of varying size and breaking strength

Synthetic tension members of varying size and breaking strength

0.322" Tension members, with a 11,600 lbf breaking strength

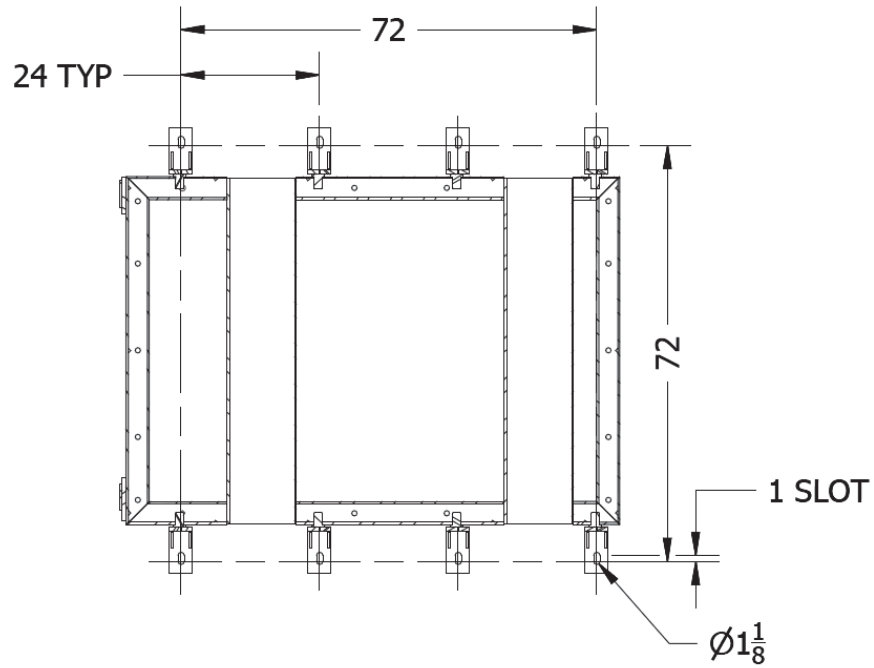
The machine's levelwind sheave has a sheave liner grooved for $\phi 1/2$ " wire. Other size sheave liners are available. Per Appendix A, Tables A.8.1 to A.8.4, the machine qualifies for the following Factor of Safety (FS) based on tension member breaking strength:

- FS = 1.5 when used with wire rope and matching sheave groove.
- FS = 2.0 when used with EM cable and matching sheave groove.
- FS = 2.5 when used with wire rope or EM cable and oversized sheave groove.

System Characterizations

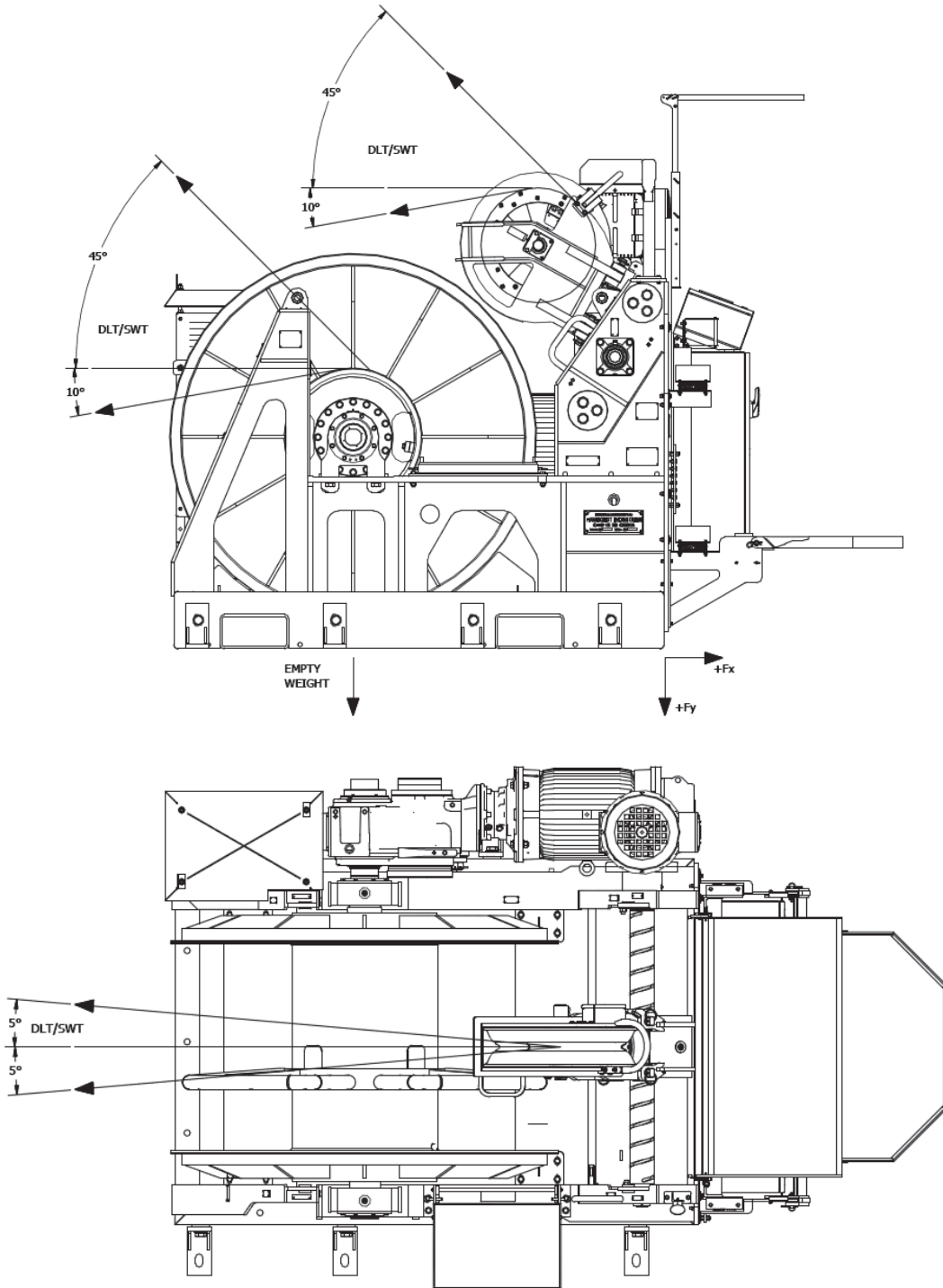
Empty Weight	9,200 lbf
SWT of Winch	10,000 lbf
SWT Fleet Tolerance	+45°/-10° vertical, +/- 5° horizontal
DLT of Winch	20,000 lbf
Max. Line Speed @ Bare Drum	92 ft/min
Power Requirements	480VAC/3PH/60HZ
Bare Drum Pull	10,000 lbf
Full Drum Pull	3,950 lbf

Bolt Pattern



The winch can be mounted with 8 bolts on a UNOLS 2'x2' bolt pattern using the Hawboldt supplied mounting brackets shown in the image above. Alternative mounting brackets can be used however the installer is responsible for re-calculating the bolt loads.

Free Body Diagram



Forces are maximum forces per bolt, at SWT & DLT, for the 8 bolt pattern. The analysis is valid for a vertical fleet angle of +45°/-10° and horizontal fleet angle of +/-5°. The analysis is also valid for both reeving options shown, with and without levelwind.

	Reaction @ SWT	Reaction @ DLT	Mounting Fasteners
Fx [lbf]	1,250	2,500	1"-8 UNC
Fy [lbf]	2,450	6,650	316 SS ($\sigma_y=40$ ksi)

Mounting fasteners shall be lubricated and torqued to 273 ft.lb (K=0.15).