Maximum Capability Document (MCD) for winch system

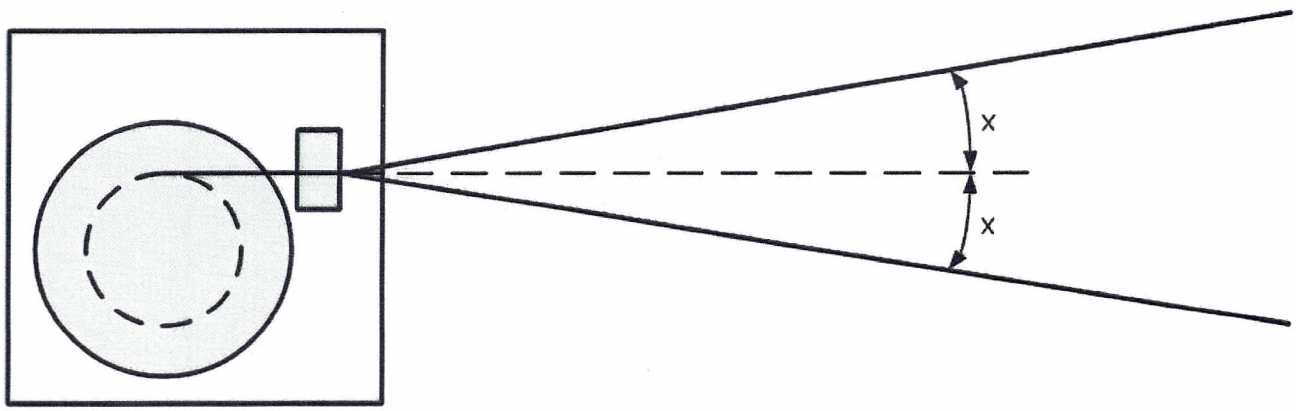
MASH 4000/12,65-15,5 (Medium duty)

The winch system supplied is capable of handling 4,000m ø0.5" (ø12,65mm) cable/wire and has been designed with constant tension and auto rendering to minimize potential damage of the cable/wire.

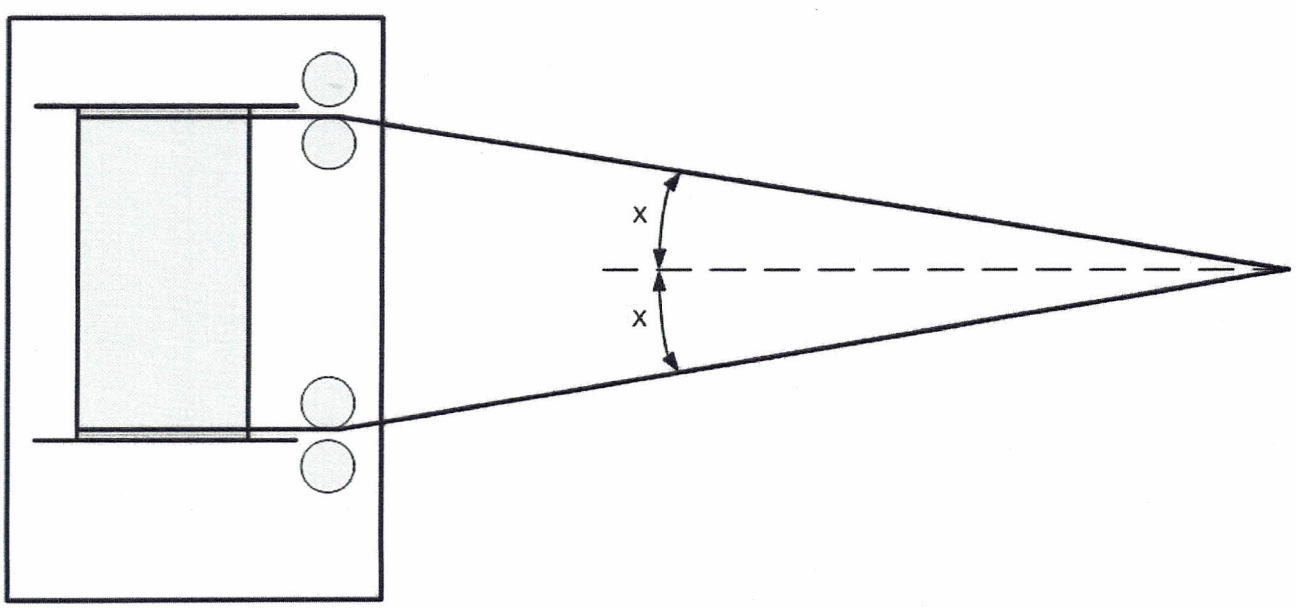
The winch can also handle smaller cable diameters than stated above, the system just needs to be programmed for the specific cable.

General fleet angle information

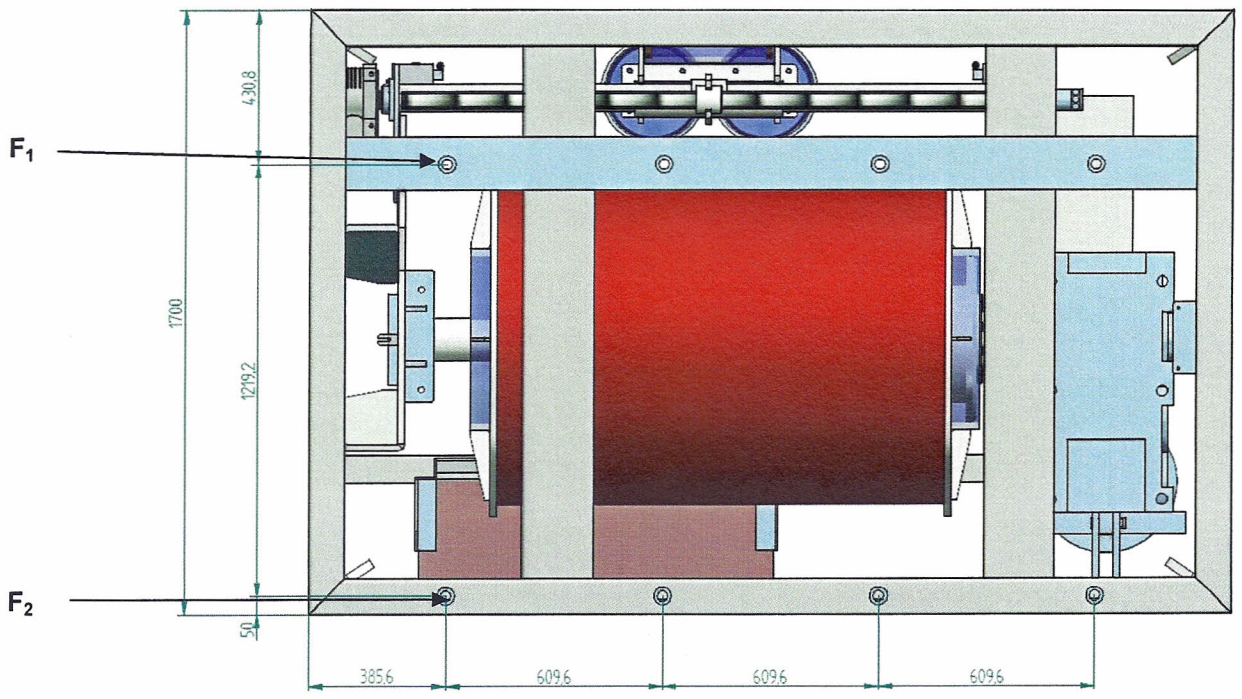
The vertical fleet angle x is: -5° to +15°

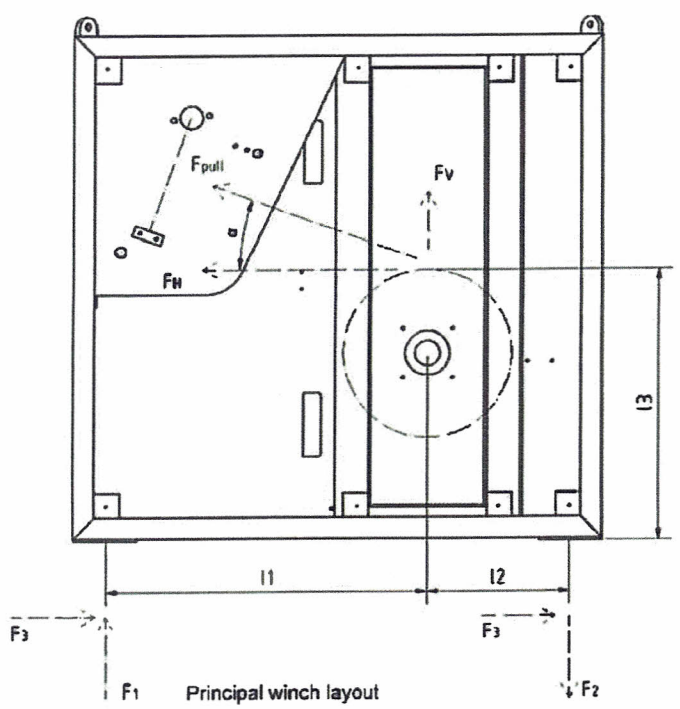


The horizontal fleet angle x is: +/- 8°



The following sketch indicates the general layout of the foundation reaction forces on the winch on each bolt hole. Dimensions given are metric.





Principal winch layout

The following bolt holes reactions are calculated using MPT and valid for each individual bolt hole.

F_1 = 25.6 kN (5,755 lbf)

F_2 = 17.6 kN (1,794 lbf)

F_3 = 6.8 kN (1,528 lbf)

Prepared by: KBR
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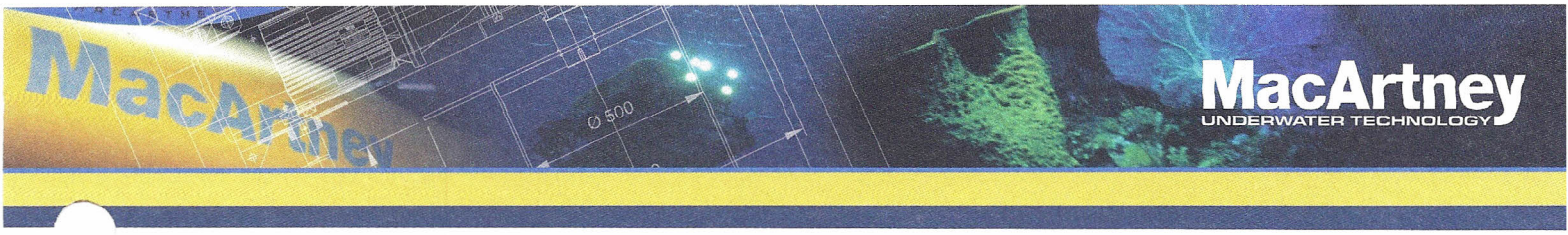
Approved by:
Date:
Revision: B



The following information characterizes the system:

• Maximum amount of cable on the drum:	4000m ø0.5"	(A301301)
• Maximum speed (top layer):	80 m/min	(262 ft/min)
• Maximum speed (bottom layer):	45 m/min	(147 ft/min)
• Maximum pull at the Bottom layer / MPT:	6,294 lbf	(28.0 kN)
• Maximum brake force:	9,441 lbf	(42.0 kN)
• Auto rendering function:	0 – 7,868 lbf	(0 – 35.0 kN)
• Temperature classification:	-4° to +113°F	(-20° to +45°C)
• Maximum gross weight:	14,409 lb	(6,400 kg)
• Tension member NBL / ABL (A301301):	20,007 lbf	(89 kN)
• Maximum allowed structure load / DLT:	29,899 lbf	(133.0 kN)
(This is based on the ø0.5", A301301 Rochester cable)		
• Motor power requirements:	3x480VAC 60 Hz	
• Operating current (maximum)	60 Amp	
• Weight for shipping, excluding cable/wire (kg):	(5,732 lb)	2600 kg