



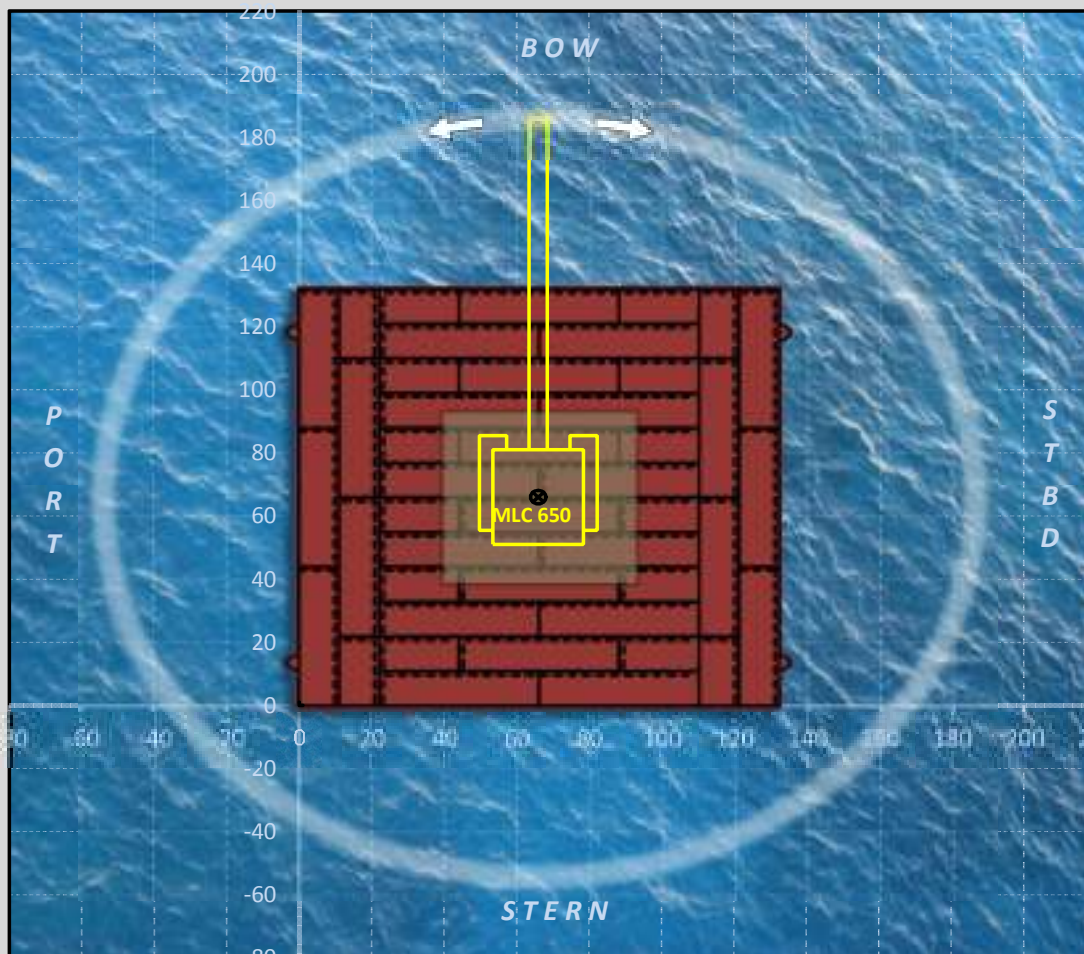
11/14/17

## BARGE CONFIGURATION AND ENGINEERING ANALYSIS

Library # 1680

DECK LOAD	Description	Weight (lbs)	Vertical CG (ft)	Dist from Centroid		Size (ft)	
				X (ft)	Y (ft)	Length	Width
	Manitowoc MLC 650 VPC MAX	1,033,498	50.0	0	0	25	30
	Crane Mat - 24" Thick	200,000	11.0	0	0	50	50
	Crane Pick Load	300,000	285.0				
	Misc deck load	100,000	15.0				

HULL WEIGHT		Weight (lbs)	Vertical CG (ft)	Alignment Angle Orientation (deg)	Range of Operation
Qty	Description				
28	P10 - 10 x 44 x 11 - Barge	1,311,324	5.0		full 360 degrees
16	P10 - 10 x 22 x 11 - Barge	405,792	5.0		
4	P10 - 10 - Spud Pocket	24,844	6.5		



P  
L  
A  
N  
  
V  
I  
E  
W

<b>Deck Load (lbs)</b>	1,633,498
<b>Hull Weight (lbs)</b>	1,741,960
<b>Total Weight (lbs)</b>	3,375,458
<b>Platform Centroid (ft)</b>	X = 66.00 Y = 66.00
<b>Lift Radius (ft)</b>	120
<b>Boom Length (ft)</b>	300
<b>Pick Height (ft)</b>	275
<b>Net Vert CG (ft)</b>	44.3



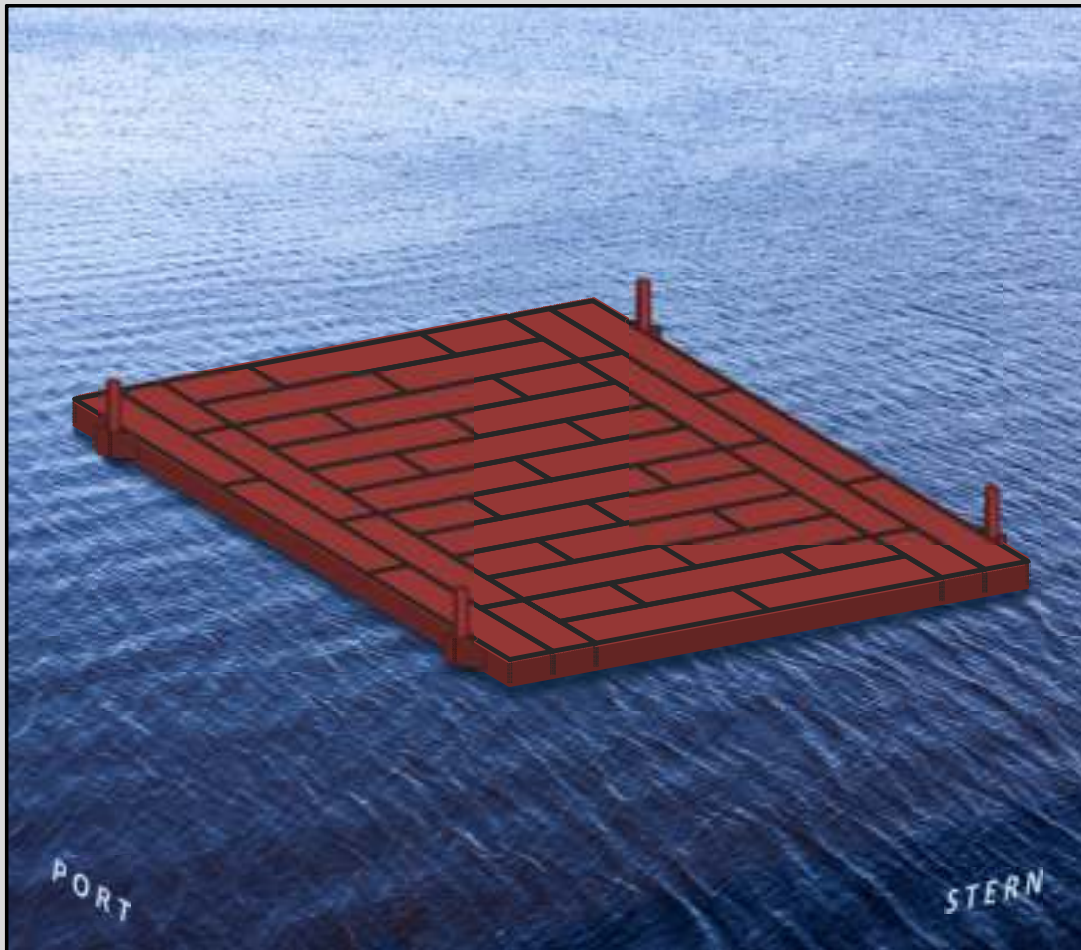
## BARGE CONFIGURATION AND ENGINEERING ANALYSIS

HYDROSTATICS		Description	
Displaced Volume in Saltwater (ft <sup>3</sup> )	52,742	Average Draft in Saltwater (ft)	3.03
Displaced Volume in Freshwater (ft <sup>3</sup> )	54,094	Average Draft in Freshwater (ft)	3.10
Longitudinal Moment of Inertia (ft <sup>4</sup> )	25299648	Waterplane Area (ft <sup>2</sup> )	17424
Transverse Moment of Inertia (ft <sup>4</sup> )	25299648	Vertical Center of Buoyancy (ft)	1.55

STABILITY METRICS		Working over end of platform		Working over side of platform	
Trim Moment (ft lbs)	36000000	List Moment (ft lbs)	36000000		
BM <sub>L</sub> (ft)	467.7	BM <sub>T</sub> (ft)	467.7		
GM <sub>L</sub> (ft)	424.9	GM <sub>T</sub> (ft)	424.9		

**Note - Negative moments and angles are towards the Port and Stern.**

ISOMETRIC VIEW



<b>Width (ft)</b> <b>Port to Stbd</b>
132.0

<b>Length (ft)</b> <b>Bow to Stern</b>
132.0

<b>List Angle (deg)</b> <b>Port to Stbd</b>
1.4

<b>Trim Angle (deg)</b> <b>Bow to Stern</b>
1.4

<b>Average Draft (ft)</b> <b>freshwater</b>
3.1

This analysis is provided for the evaluation of buoyancy and stability based upon the project parameters submitted to Poseidon Barge Corp. There are project and worksite conditions and variables which are unforeseeable and beyond the control of Poseidon Barge Corp. and therefore, we cannot accept responsibility and specifically deny any liability for the safe use of Poseidon Barge Corp. equipment. This analysis is a guideline and does not constitute a guarantee that there will not be circumstances that prevent and do not allow for the intended use of the equipment. Approval of the analysis and ultimate project engineering is the sole responsibility of the contractor/lessee. Please review our website for further information concerning our Disclaimer of Warranties. [www.poseidonbarge.com](http://www.poseidonbarge.com)