

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Moealangi
38775.1.

Ship's Name MOEARA.	Official Number	Nationality and Port of Registry <i>Netherlands.</i>	Gross Tonnage	Date of Build	Port of Survey <i>Liverpool</i>
Moulded Dimensions: Length <i>24.384</i> Breadth <i>6.096</i> Depth <i>2.896 m.</i>					Date of Survey <i>Whitby Building</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>260</i> tons					Surveyor's Signature <i>Harry S. Nestor</i>
Coefficient of fineness for use with Tables <i>.704</i>					Particulars of Classification <i>+100 A1.</i>

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... <i>2.896</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>8.33(2.904-1.626)6.157 = +66 m/m.</i>	Moulded Breadth (B) <i>6.096</i>
Stringer plate ... <i>.008</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <i>1.278</i>	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{6.096 \times 12}{50} = 1.22 \text{ m/m.}$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = <i>2.12</i>
Depth for Freeboard (D) = <i>2.904</i>		Difference <i>1.22 m/m</i>
		Restricted to <i>✓</i>
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{1.22^2 \times .525}{4} = +16 \text{ m/m.}$

DEDUCTION FOR SUPERSTRUCTURES.				
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Effective Length (E)
Poop enclosed ...				
" overhang ...				
R.Q.D. enclosed ...	<i>7.315</i>	<i>7.315</i>	<i>3'-0"</i>	<i>7.315</i>
" overhang ...				
Bridge enclosed ...				
" overhang aft ...				
" overhang forward ...				
F'ole enclosed ...	<i>4.267</i>	<i>4.267</i>	<i>7'-0"</i>	<i>4.267</i>
" overhang ...				
Trunk aft ...				
" forward ...				
Tonnage opening aft ...				
" " forward ...				
Total ...	<i>11.582</i>	<i>11.582</i>		<i>11.582</i>

Standard Height of Superstructure *1.830 m.*
" " R.Q.D. *.91 m.*
Deduction for complete superstructure *356 m/m.*
Percentage covered $\frac{S}{L} =$
" " $\frac{S_1}{L} =$ } *47.49*
" " $\frac{E}{L} =$
Percentage from Table, Line A. *29.86*
(corrected for absence of forecastle (if required))
Percentage from Table, Line B. *✓*
(corrected for absence of forecastle (if required))
Interpolation for bridge less than .2L (if required) *✓*
Deduction = *356 × .2986 = -106 m/m.*

SHEER CORRECTION.							
Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ...	<i>457</i>	1	<i>457</i>	<i>Nil</i>		1	
$\frac{1}{8}$ L from A.P. ...	<i>203</i>	4	<i>812</i>			4	
$\frac{2}{8}$ L " ...	<i>51</i>	2	<i>102</i>			2	
Amidships ...	<i>✓</i>	4	<i>✓</i>			4	
$\frac{3}{8}$ L from F.P. ...	<i>102</i>	2	<i>204</i>			2	
$\frac{4}{8}$ L " ...	<i>406</i>	4	<i>1624</i>			4	
F.P. ...	<i>914</i>	1	<i>914</i>	<i>✓</i>		1	
Total ...			<i>4113</i>				<i>Nil.</i>

Mean actual sheer aft = *Nil.*
Mean standard sheer aft = *Nil.*
Mean actual sheer forward = *Nil.*
Mean standard sheer forward = *Nil.*
Length of enclosed superstructure forward of amidships = *2.2986*
" " aft of " = *2.2986*
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{4113}{18} \left(.75 - \frac{2.2986}{2 \times 24.384} \right) = +117 \text{ m/m.}$
If limited on account of midship superstructure. ☒
If limited to maximum allowance of 1½ ins. per 100 ft. ☒

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	corrected for Flush Deck (if required)
Depth to Freeboard Deck = <i>2.904</i>	$\Delta = 280$	Correction for coefficient $\frac{1704 + 168}{1.36} = 1.584/1.36$
Summer freeboard = <i>.500</i>	Tons per inch immersion at summer load water line	
Moulded draught (d) = <i>2.604</i>	T = <i>3.4</i>	
Deduction for Tropical freeboard and addition for	Deduction = $\frac{\Delta}{40 T}$ inches	
Winter freeboard = $\frac{d}{48} \text{ inches} = 54.2 = 5 \text{ cm.}$	= <i>2.06"</i>	
Addition for Winter North Atlantic Freeboard (if required) = <i>5.4 + 5.1 = 11 cm.</i>	= <i>5 cm.</i>	

+	-
Depth Correction ... <i>66</i>	<i>✓</i>
Deduction for superstructures ... <i>5</i>	<i>106</i>
Sheer correction ... <i>117</i>	<i>✓</i>
Round of Beam correction ... <i>16</i>	<i>✓</i>
Correction for Thickness of Deck amidships ... <i>✓</i>	<i>✓</i>
Other corrections, scantlings, etc. ... <i>✓</i>	<i>✓</i>
<i>199</i>	<i>106</i>

Summer Freeboard = *500 m/m.*

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc ... <i>10 cm.</i>	Tropical Fresh Water Freeboard ... <i>20 cm.</i>
Fresh Water Line " " ... <i>5 "</i>	Fresh Water " " ... <i>25 "</i>
Tropical Line " " ... <i>5 "</i>	Tropical " " ... <i>25 "</i>
Winter Line below " " ... <i>5 "</i>	Winter " " ... <i>35 "</i>
Winter North Atlantic Line " " ... <i>11 "</i>	Winter North Atlantic " " ... <i>41 "</i>

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

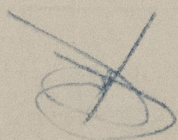
Trade of ship

Names of sister ships MOEALANG (Yard No 672) MOEBAL (Yard No 673)

Builder's name and yard number Messrs J. Pimblott & Son Yard No 674.

Owners

Fee £ 4 : 0 : 0





© 2021

Lloyd's Register
Foundation