

*Moealang*  
*38775.1.*

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

28d7095

|   |                 |  |               |               |  |
|---|-----------------|--|---------------|---------------|--|
| Ship's Name<br><b>MOEARA.</b>   | Official Number | Nationality and Port of Registry<br><i>Netherlands</i> | Gross Tonnage | Date of Build | Port of Survey<br><i>London (Liverpool)</i>      |
| Moulded Dimensions: Length <u>24.384</u> Breadth <u>6.096</u> Depth <u>2.896</u> m.     |                 |  |               |               | Date of Survey<br><i>Whist-Bulding</i>           |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>260</u> tons |                 |  |               |               | Surveyor's Signature<br><i>Harry S. Nestor</i>   |
| Coefficient of fineness for use with Tables <u>.704</u>                                 |                 |  |               |               | Particulars of Classification<br><i>+150 A1.</i> |

| DEPTH FOR FREEBOARD (D).  | DEPTH CORRECTION.   | ROUND OF BEAM CORRECTION.  |
|---|---|--|
| Moulded depth ... .. <u>2.896</u> m.                            | (a) Where D is greater than Table depth<br>(D-Table depth) R = $8.33(2.904 - 1.626)6.157 = +66 \text{ m/m}$ | Moulded Breadth (B) <u>6.096</u>   |
| Stringer plate ... .. <u>.008</u>                               | (b) Where D is less than Table depth (if allowed)<br>(Table depth-D) R = $1.278$                            | Standard Round of Beam = $\frac{B \times 12}{50} = 122 \text{ m/m}$  |
| Sheathing on exposed deck<br>$T \left( \frac{L-S}{L} \right) =$ | If restricted by superstructures <input checked="" type="checkbox"/>  | Ship's Round of Beam = <u>Nil.</u>   |
| Depth for Freeboard (D) = <u>2.904</u>                          |   | Difference <u>122 m/m</u>  |
|   |   | Restricted to <u>Nil.</u>  |
|   |   | Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{122 \times .525}{4} = +16 \text{ m/m}$ |

**DEDUCTION FOR SUPERSTRUCTURES.**

|                            | Mean Covered Length (S) | Equivalent Enclosed Length (S <sub>1</sub> ) | Height       | Height Correction                   | Effective Length (E) |
|----------------------------|-------------------------|--|--------------|-------------------------------------|----------------------|
| Poop enclosed ... ..       |                         |  |              |                                     |                      |
| " overhang ... ..          |                         |  |              |                                     |                      |
| R.Q.D. enclosed ... ..     | <u>7.315</u>            | <u>7.315</u>                                 | <u>3'-0"</u> | <input checked="" type="checkbox"/> | <u>7.315</u>         |
| " overhang ... ..          |                         |  |              |                                     |                      |
| Bridge enclosed ... ..     |                         |  |              |                                     |                      |
| " overhang aft ... ..      |                         |  |              |                                     |                      |
| " overhang forward ... ..  |                         |  |              |                                     |                      |
| F'cle enclosed ... ..      | <u>4.267</u>            | <u>4.267</u>                                 | <u>7'-0"</u> | <input checked="" type="checkbox"/> | <u>4.267</u>         |
| " overhang ... ..          |                         |  |              |                                     |                      |
| Trunk aft ... ..           |                         |  |              |                                     |                      |
| " forward ... ..           |                         |  |              |                                     |                      |
| Tonnage opening aft ... .. |                         |  |              |                                     |                      |
| " " forward ... ..         |                         |  |              |                                     |                      |
| Total ... ..               | <u>11.582</u>           | <u>11.582</u>                                |              |                                     | <u>11.582</u>        |

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 x .2986 = -106 m/m.

**SHEER CORRECTION.**

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

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 = Deficient  
" " aft of " = shear.

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{4113}{18} \left( .75 - \frac{2374}{15726} \right) = +117 \text{ m/m}$   
If limited on account of midship superstructure.

If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.

|  |  |   |   |
|--|--|---|---|
| <b>Deduction for Tropical Freeboard.</b><br>Addition for Winter and Winter North Atlantic Freeboard.   | <b>Deduction for Fresh Water.</b><br>Displacement in salt water at summer load water line<br>$\Delta = 280$<br>Tons per inch immersion at summer load water line<br>$T = 3.4$<br>Deduction = $\frac{\Delta}{40 T}$ inches<br>$= 2.06$ "<br>$= 5 \text{ cm.}$ | <b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)<br>Correction for coefficient $\frac{1704 + 168}{1.36} = 1.584 / 1.36$  | <u>205</u> m/m.<br><u>207</u> "   |
| Depth to Freeboard Deck = <u>2.904</u><br>Summer freeboard = <u>.500</u><br>Moulded draught (d) = <u>2.604</u>   |  | Depth Correction ... .. <u>66</u><br>Deduction for superstructures ... .. <u>5</u> <u>106</u><br>Sheer correction ... .. <u>117</u><br>Round of Beam correction ... .. <u>16</u><br>Correction for Thickness of Deck amidships ... .. <u>v</u><br>Other corrections, scantlings, etc. ... .. <u>v</u> | <u>24.2.48</u><br><u>+93</u> m/m.<br>Summer Freeboard = <u>500</u> m/m. |
| Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{48}$ inches = $54.2 = 5 \text{ cm.}$<br>Addition for Winter North Atlantic Freeboard (if required) = $5.4 + 5.1 = 11 \text{ cm.}$ |  |   |   |

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

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

*3. 1948*

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) MOEBAI (Yard No 673)

Builder's name and yard number

Messrs J. Pambotta & Son - Yard No 674.

Owners

Fee £

4 : 0 : 0



© 2021

Lloyd's Register  
Foundation