

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>MONOWA I</b>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <b>499.2</b> Breadth _____ Depth <b>37.5</b> <i>assumed 29.5</i>					Date of Survey <b>25-8-43</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature _____
Coefficient of fineness for use with Tables <b>assumed .68</b>					Particulars of Classification <b>+100 A1 with freeboard</b>

<b>Depth for Freeboard (D).</b> Moulded depth ... <i>assumed 29.50</i> Stringer plate ... <i>.04</i> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <b>29.54</b>	<b>Depth correction.</b> (a) Where D is greater than Table depth (D - Table depth) R = (b) Where D is less than Table depth (if allowed) (Table depth - D) R = $(33.28 - 29.54) 3 = -11.22$ $\frac{3.74}{3.74}$ If restricted by superstructures	<b>Round of Beam correction.</b> Moulded Breadth (B) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = Difference <b>assumed standard</b> Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <b>Nil</b>
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### DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure
Poop enclosed ...					<b>7.5</b>
.. overhang ...					" " R.Q.D.
R.Q.D. enclosed ...					Deduction for complete superstructure <b>42</b>
.. overhang ...					Percentage covered $\frac{S}{L} =$
Bridge enclosed ...					" " $\frac{S_1}{L} =$
.. overhang aft ...					" " $\frac{E}{L} =$
.. overhang forward ...					Percentage from Table, Line A.
F'cle enclosed ...					(corrected for absence of forecastle (if required))
.. overhang ...					Percentage from Table, Line B.
Trunk aft ...					(corrected for absence of forecastle (if required))
.. forward ...					Interpolation for bridge less than .2L (if required)
Tonnage opening aft ...					Deduction = <b>-42</b>
" " forward ...					
Total ...					

### SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product	Mean actual shear aft =
A.P. ...		1				1		Mean standard shear aft
$\frac{1}{4}L$ from A.P. ...		4				4		Mean actual shear forward =
$\frac{2}{8}L$ ..		2				2		Mean standard shear forward =
Amidships ...		4				4		Length of enclosed superstructure forward of amidships =
$\frac{3}{8}L$ from F.P. ...		2				2		" " aft of " =
$\frac{1}{8}L$ ..		4				4		
F.P. ...		1				1		
Total ...								

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) =$  **-.50**  
If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <b>29.54</b> Summer freeboard = <b>4.03</b> Moulded draught (d) = <b>25.51</b> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = Addition for Winter North Atlantic Freeboard (if required) =	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line $T =$ Deduction = $\frac{\Delta}{40T}$ inches =	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;"></th> <th style="width: 10%;">+</th> <th style="width: 10%;">-</th> <th style="width: 80%;"></th> </tr> <tr> <td>Depth Correction</td> <td></td> <td>11.22</td> <td>✓</td> </tr> <tr> <td>Deduction for superstructures</td> <td></td> <td>42.00</td> <td>✓</td> </tr> <tr> <td>Sheer correction</td> <td></td> <td>.50</td> <td>✓</td> </tr> <tr> <td>Round of Beam correction</td> <td></td> <td>-</td> <td></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td></td> <td>-</td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td></td> <td>-</td> <td></td> </tr> <tr> <td></td> <td></td> <td><b>53.72</b></td> <td><b>-53.72</b> ✓</td> </tr> </table> Summer Freeboard = <b>48.34</b>		+	-		Depth Correction		11.22	✓	Deduction for superstructures		42.00	✓	Sheer correction		.50	✓	Round of Beam correction		-		Correction for Thickness of Deck amidships		-		Other corrections, scantlings, etc.		-				<b>53.72</b>	<b>-53.72</b> ✓
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### SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc ...	Tropical Fresh Water Freeboard ...
Fresh Water Line " " ...	Fresh Water " " ...
Tropical Line " " ...	Tropical " " ...
Winter Line below " " ...	Winter " " ...
Winter North Atlantic Line " " ...	Winter North Atlantic " " ...

