

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

 Index. No. **38643**
 (For London Office only).

Ship's Name SERIGI	Official Number	Nationality and Port of Registry Brazilian Rio de Janeiro	Gross Tonnage	Date of Build	Port of Survey Marstrand
Moulded Dimensions: Length 180.78' Breadth 29.53' Depth 12.14'					Date of Survey
Moulded displacement at moulded draught = 85 per cent. of moulded depth 34825 cu ft					Surveyor's Signature
Coefficient of fineness for use with Tables .632' (take .68)					Particulars of Classification 100 A1 for boasting services between Rivers Amazon & La Plata.

Depth for Freeboard (D). 12.14' Moulded depth ... 12.14' Stringer plate2802' Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 12.16'	Depth correction. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(12.16 - 12.05) 1.39 = +.15$ (b) Where D is less than Table depth (if allowed) $(\text{Table depth} - D) R =$ If restricted by superstructures <input checked="" type="checkbox"/>	Round of Beam correction. Moulded Breadth (B) 29.53' Standard Round of Beam = $\frac{B \times 12}{50} =$ 7.09' Ship's Round of Beam = 1.18' Difference = - 5.91' Restricted to Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{5.91}{4} \times .1527 = +.23'$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	38.22'	38.22'	6.73'	✓	38.22'
.. overhang ...	1.12'	.56'			.56'
R.Q.D. enclosed					
.. overhang					
Bridge enclosed...	83.01'	83.01'	6.73'	✓	83.01'
.. overhang aft26'	.19'			.19'
.. overhang forward					
Fore enclosed ...	28.87'	28.87'	7.17'	✓	28.87'
.. overhang ...					
Trunk aft ...					
.. forward ...					
Tonnage opening aft ...	4.04'	2.33' = 1/2 diff			
.. forward					
Total ...	155.62'	153.18'			153.18'

Standard Height of Superstructure **6.00'**
 " " R.Q.D. ☒
 Deduction for complete superstructure **24.08"**
 Percentage covered $\frac{S}{L} =$ **86.02%**
 " " $\frac{S_1}{L} =$ **84.73%**
 " " $\frac{E}{L} =$ **81.17%**
 Percentage from Table, Line A. **81.17%**
 (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 = **24.08 × .8117 = - 19.55"**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	28.08'	1		28.08	27.80'	28.08	1		28.08
1/4 L from A.P. ...	12.50	4		50.00	10.32'	12.50	4		50.00
1/2 L " ...	3.09	2		6.08	1.46'	3.09	2		6.08
Amidships ...	-	4		-	-	-	4		-
3/4 L from F.P. ...	6.18	2		12.36	6.57'	6.57	2		13.14
1/4 L " ...	25.00	4		100.00	21.06'	21.06	4		84.24
F.P. ...	56.16	1		56.16	43.66'	43.66	1		43.66
Total ...				252.68					225.20

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{27.48}{18} \left(\frac{75-43.01}{21} \right) = +.49'$
 If limited on account of midship superstructure. ☒

Mean actual sheer aft = **Excess**
 Mean standard sheer aft = **Excess = 8.75"**
 Mean actual sheer forward = **Deficient**
 Mean standard sheer forward = **Deficient**
 Length of enclosed superstructure forward of amidships = **Deficient sheer**
 " " aft of " = **Deficient sheer**

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. CANT UP OF Depth to Freeboard Deck = 12.24' Summer freeboard = .25' Moulded draught (d) = 11.99' Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = NOT REQD. Addition for Winter North Atlantic Freeboard (if required) = NOT REQD.	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ 1191 Tons per inch immersion at summer load water line $T =$ 10.09 Deduction = $\frac{\Delta}{40 T}$ inches = 2.95 = 3"	TABULAR FREEBOARD corrected for Flush Deck (if required) 19.92' Correction for coefficient nil <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction ...</td> <td>.185</td> <td></td> </tr> <tr> <td>Deduction for superstructures ...</td> <td></td> <td>19.55</td> </tr> <tr> <td>Sheer correction ...</td> <td>.49</td> <td></td> </tr> <tr> <td>Round of Beam correction ...</td> <td>.23</td> <td></td> </tr> <tr> <td>Correction for Thickness of Deck amidships ...</td> <td>.98</td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc. ...</td> <td></td> <td></td> </tr> <tr> <td>18.65</td> <td>19.55</td> <td>17.69</td> </tr> </table> Summer Freeboard = 2.282		+	-	Depth Correction185		Deduction for superstructures ...		19.55	Sheer correction49		Round of Beam correction23		Correction for Thickness of Deck amidships98		Other corrections, scantlings, etc. ...			18.65	19.55	17.69
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: **CANT UP**

Tropical Fresh Water Line above Centre of Disc ... 3" Fresh Water Line " " ... 3" Tropical Line " " ... 3" (limited) Winter Line below " " ... ✓ Winter North Atlantic Line " " ... ✓	Tropical Fresh Water Freeboard ... 0'-3" (limited) Fresh Water " " ... 0'-0" Tropical " " ... 0'-3" (limited) Winter " " ... ✓ Winter North Atlantic " " ... ✓
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