

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
					Date of Survey
Moulded Dimensions: Length <u>90.00</u> Breadth <u>13.5</u> Depth <u>9.0 - 2.286</u>					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>5060</u> tons					Particulars of Classification <u>100 AT</u> <u>W. Gled.</u>
Coefficient of fineness for use with Tables <u>.750</u>					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth <u>6.714</u>	(a) Where D is greater than Table depth (D - Table depth) R = $8.33 \times (6.723 - 6.0) = 2.273 = 737$	Moulded Breadth (B) <u>13.5</u>
Stringer plate <u>.009</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 270$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <u>280</u>
Depth for Freeboard (D) = <u>6.723</u>		Difference = <u>10</u>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \text{Nil}$

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure
Poop enclosed					<u>1969</u>
„ overhang					R.Q.D. <u>890</u>
R.Q.D. enclosed					Deduction for complete superstructure
„ overhang					Percentage covered $\frac{S}{L} =$
Bridge enclosed					„ $\frac{S_1}{L} =$
„ overhang aft					„ $\frac{E}{L} =$
„ overhang forward					Percentage from Table, Line A. (corrected for absence of forecastle (if required))
F'clé enclosed					Percentage from Table, Line B. (corrected for absence of forecastle (if required))
„ overhang					Interpolation for bridge less than .2L (if required)
Trunk aft					Deduction = <u>890</u>
„ forward					
Tonnage opening aft					
„ „ forward					
Total					

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product	Mean actual shear aft
A.P.		1		<u>1060</u>	<u>1377</u>	1	<u>1377</u>	Mean standard shear aft =
$\frac{1}{8}L$ from A.P.		4		<u>460</u>	<u>613</u>	4	<u>2452</u>	Mean actual shear forward
$\frac{2}{8}L$ „		2		<u>120</u>	<u>151</u>	2	<u>302</u>	Mean standard shear forward =
Amidships		4		-	-	4	-	Length of enclosed superstructure forward of amidships =
$\frac{2}{8}L$ from F.P.		2		<u>240</u>	<u>268</u>	2	<u>536</u>	„ „ aft of „ =
$\frac{1}{8}L$ „		4		<u>920</u>	<u>1085</u>	4	<u>4340</u>	
F.P.		1		<u>2120</u>	<u>2437</u>	1	<u>2437</u>	
Total			<u>9033</u>	<u>311</u>			<u>11444</u>	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{2411}{18} \times .25 = 34$

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = <u>6.723</u> Ft.</p> <p>Summer freeboard = <u>327</u></p> <p>Moulded draught (d) = <u>6396</u></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =</p> <p>Addition for Winter North Atlantic Freeboard (if required) =</p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta =$</p> <p>Tons per inch immersion at summer load water line</p> <p>T =</p> <p>Deduction = $\frac{\Delta}{40 T}$ inches</p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient $730 + .68 = 1411.36$</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> <tr> <td style="text-align: center;">+</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Depth Correction</td> <td style="text-align: center;">137</td> </tr> <tr> <td>Deduction for superstructures</td> <td style="text-align: center;">890</td> </tr> <tr> <td>Sheer correction</td> <td style="text-align: center;">34</td> </tr> <tr> <td>Round of Beam correction</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td style="text-align: center;">-</td> </tr> <tr> <td></td> <td style="text-align: center;">137 924</td> </tr> </table> <p>Summer Freeboard = <u>327</u></p>			+	-	Depth Correction	137	Deduction for superstructures	890	Sheer correction	34	Round of Beam correction	-	Correction for Thickness of Deck amidships	-	Other corrections, scantlings, etc.	-		137 924
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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 „ „

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.

6.60
2.4
9.0
2.286
6.714 7.5/3.2807

90 x 3.2807 = 29.526

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £



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Foundation