

*Timber*

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No. \_\_\_\_\_  
(For London Office only).

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>"HALVARD BRATT"</b>	Official Number 7621	Nationality and Port of Registry <i>Swedish Gothenburg</i>	Gross Tonnage 1023	Date of Build 1921	Port of Survey
Moulded Dimensions: Length <b>224.2</b> Breadth <b>33.46</b> Depth <b>16.04</b>					Date of Survey <b>31.10.45</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>2325</b> tons					Surveyor's Signature
Coefficient of fineness for use with Tables <b>.796</b>					Particulars of Classification

<p><b>Depth for Freeboard (D).</b></p> <p>Moulded depth ... ..</p> <p>Stringer plate ... ..</p> <p>Sheathing on exposed deck <math>T \left( \frac{L-S}{L} \right) =</math></p> <p>Depth for Freeboard (D) =</p>	<p><b>Depth correction.</b></p> <p>(a) Where D is greater than Table depth (D - Table depth) R = <b>+1.95</b> ✓</p> <p>(b) Where D is less than Table depth (if allowed) (Table depth - D) R =</p> <p>If restricted by superstructures</p>	<p><b>Round of Beam correction.</b></p> <p>Moulded Breadth (B)</p> <p>Standard Round of Beam = <math>\frac{B \times 12}{50} =</math></p> <p>Ship's Round of Beam =</p> <p>Difference</p> <p>Restricted to</p> <p>Correction = <math>\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right) =</math> <b>Nil</b></p>
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**DEDUCTION FOR SUPERSTRUCTURES.**

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	<b>14.00</b>		<b>7.0</b>		
.. overhang ... ..					
R.Q.D. enclosed ... ..					
.. overhang ... ..					
Bridge enclosed... ..	<b>59.25</b>		<b>7.0</b>		
.. overhang aft ... ..					
.. overhang forward	<b>.58</b>				
F'cle enclosed ... ..	<b>25.00</b>		<b>7.0</b>		
.. overhang ... ..	<b>3.00</b>				
Trunk aft ... ..					
.. forward ... ..					
Tonnage opening aft ...					
.. " forward					
Total ... ..					

  

Standard Height of Superstructure	<b>6.00</b>
.. " R.Q.D.	
Deduction for complete superstructure	<b>28.42</b> ✓
Percentage covered $\frac{S}{L} =$	
.. " $\frac{S_1}{L} =$	
.. " $\frac{E}{L} =$	<b>41.98</b>
Percentage from Table, <b>Line A. Timber</b>	<b>64.24</b>
(corrected for absence of forecastle (if required))	
Percentage from Table, <b>Line B.</b>	
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	
Deduction =	<b>28.42 × .6424 = -18.25</b> ✓

**SHEER CORRECTION.**

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..		1					1		
$\frac{1}{4}L$ from A.P. ... ..		4					4		
$\frac{2}{8}L$ .. ..		2					2		
Amidships ... ..		4					4		
$\frac{2}{8}L$ from F.P. ... ..		2					2		
$\frac{1}{4}L$ .. ..		4					4		
F.P. ... ..		1					1		
Total ... ..									

  

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) =$  **-0.69**

If limited on account of midship superstructure.

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

<p><b>Deduction for Tropical Freeboard.</b></p> <p><b>Addition for Winter and Winter North Atlantic Freeboard.</b></p> <p>Depth to Freeboard Deck = <b>16.07</b> Ft.</p> <p>Summer freeboard = <b>1.06</b></p> <p>Moulded draught (d) = <b>15.01</b></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = <math>\frac{d}{4}</math> inches = <b>3.75 = 95</b></p> <p>Addition for Winter North Atlantic Freeboard (if required) = <math>\frac{d}{3} = 5.01 = 127</math> inches</p>	<p><b>Deduction for Fresh Water.</b></p> <p>Displacement in salt water at summer load water line</p> <p><math>\Delta =</math></p> <p>Tons per inch immersion at summer load water line</p> <p>T =</p> <p>Deduction = <math>\frac{\Delta}{40T}</math> inches = <b>98</b> ✓</p>	<p><b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)</p> <p>Correction for coefficient</p> <table border="1"> <tr> <td></td> <td>+</td> <td>-</td> </tr> <tr> <td>Depth Correction</td> <td>1.95</td> <td>-</td> </tr> <tr> <td>Deduction for superstructures</td> <td>-</td> <td>18.25</td> </tr> <tr> <td>Sheer correction</td> <td>-</td> <td>.69</td> </tr> <tr> <td>Round of Beam correction</td> <td>-</td> <td>-</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td>-</td> <td>-</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td>-</td> <td>-</td> </tr> <tr> <td></td> <td><b>1.95</b></td> <td><b>18.94</b></td> </tr> </table> <p>Summer Freeboard = <b>12.75</b></p>		+	-	Depth Correction	1.95	-	Deduction for superstructures	-	18.25	Sheer correction	-	.69	Round of Beam correction	-	-	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	-	-		<b>1.95</b>	<b>18.94</b>
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*Timber* **SUMMER FREEBOARD** amidships from Centre of Disc to top of Deck Line, **Wood, Steel, Deck:**

<i>Timber</i> Tropical Fresh Water Line above Centre of Disc ...	<b>446</b> inches	Tropical Fresh Water Freeboard ...	<b>131</b> inches
" Fresh Water Line " " ...	<b>351</b> inches	" Fresh Water " " ...	<b>226</b> inches
" Tropical Line " " ...	<b>348</b> inches	" Tropical " " ...	<b>229</b> inches
" Winter Line " " ...	<b>426</b> inches	" Winter " " ...	<b>451</b> inches
" Winter North Atlantic Line " " ...	<b>140</b> inches	" Winter North Atlantic " " ...	<b>717</b> inches
<i>Summer</i> <b>Summer</b> ...	<b>253</b> inches		

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