

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>POLLUX</b>	Official Number	Nationality and Port of Registry <b>DUTCH. GEONINGEN.</b>	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <b>43.00</b> Breadth <b>7.70</b> Depth <b>3.20</b>					Date of Survey <b>JANUARY 1951.</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature
Coefficient of fineness for use with Tables <b>.706</b>					Particulars of Classification <b>+100 A1.</b>

**DEPTH FOR FREEBOARD (D).**

Moulded depth ... ..

Stringer plate ... ..

Sheathing on exposed deck

$$T \left( \frac{L-S}{L} \right) =$$

Depth for Freeboard (D) = **3.208**

**DEPTH CORRECTION.**

(a) Where D is greater than Table depth  
(D-Table depth) R = **+31 m.m.**

(b) Where D is less than Table depth (if allowed)  
(Table depth-D) R =

If restricted by superstructures

**ROUND OF BEAM CORRECTION.**

Moulded Breadth (B)

Standard Round of Beam =  $\frac{B \times 12}{50} =$

Ship's Round of Beam =

Difference

Restricted to

Correction =  $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right) = -6 \text{ m.m.}$

**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					
"  overhang					
Bridge enclosed					
"  overhang aft					
"  overhang forward					
F'cle enclosed					
"  overhang					
Trunk aft					
"  forward					
Tonnage opening aft					
"  "  forward					
Total					

Standard Height of Superstructure **1830 m.m.**

  "  "  R.Q.D. \_\_\_\_\_

Deduction for complete superstructure **511 m.m.**

Percentage covered  $\frac{S}{L} = 43.79.$

  "  "   $\frac{S_1}{L} = 43.75.$

  "  "   $\frac{E}{L} =$

Percentage from Table, Line A. **TIMBER. 65.34.** ✓  
(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 = **6534 × 511 = 334 m.m.**

**SHEER CORRECTION.**

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ...		1				1	
$\frac{1}{2}L$ from A.P. ...		4				4	
$\frac{2}{3}L$ " ...		2				2	
Amidships ...		4				4	
$\frac{2}{3}L$ from F.P. ...		2				2	
$\frac{1}{2}L$ " ...		4				4	
F.P. ...		1				1	
Total ...							

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

  "  "  aft of " =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = -6 \text{ m.m.}$

If limited on account of midship superstructure. **YES. Nil.**

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>3.208</b></p> <p>Summer freeboard = <b>.060</b></p> <p>Moulded draught (d) = <b>3.148</b></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = <math>\frac{d}{48} \text{ inches} = 66 \text{ m.m.} = 7 \text{ c.m.}</math></p> <p>Addition for Winter North Atlantic Freeboard (if required) = <math>\frac{d}{36} = 87 \text{ m.m.} = 9 \text{ c.m.}</math></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}{40 T}</math> inches = <b>6.45.</b></p>	<p><b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)</p> <p>Correction for coefficient <math>\frac{.706 + .68}{1.36} = 1.386</math></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>+</td><td>-</td></tr> <tr><td>31</td><td>334</td></tr> <tr><td>0</td><td>0</td></tr> <tr><td>6</td><td>6</td></tr> <tr><td>31</td><td>340</td></tr> </table> <p>Other corrections, scantlings, etc. ...</p>	+	-	31	334	0	0	6	6	31	340	<p><b>365 m.m.</b></p> <p><b>372 m.m.</b></p> <p><b>30.1.51.</b></p> <p><b>309</b></p> <p>Summer Freeboard = <b>63 m.m.</b></p>
+	-												
31	334												
0	0												
6	6												
31	340												

**TIMBER** SUMMER FREEBOARD amidships from ~~Centre of Disc~~ to top of Deck Line. ~~Wood~~, Steel, Deck:—

<p><b>TIMBER</b> Tropical Fresh Water Line above Centre of Disc <b>26 c.m.</b></p> <p>" Fresh Water Line <b>26 c.m.</b></p> <p>" Tropical Line <b>20 c.m. LIMITED</b></p> <p>" Winter Line <b>11 c.m.</b></p> <p>" Winter North Atlantic Line <b>11 c.m.</b></p> <p>SUMMER LINE <b>20 c.m.</b></p>	<p><b>TIMBER</b> Tropical Fresh Water Freeboard <b>6 c.m.</b></p> <p>" Fresh Water <b>NIL (LIMITED)</b></p> <p>" Tropical <b>NIL (LIMITED)</b></p> <p>" Winter <b>15 c.m.</b></p> <p>" Winter North Atlantic <b>37 c.m.</b></p>
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