

TIMBER DECK CARGO  
Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having Prop, Bridge & Deck  
(Type of Superstructures.)  
Port of Survey New Orleans La  
Date of Survey July 1<sup>st</sup> 1932  
Name of Surveyor \_\_\_\_\_  
Particulars of Classification + 100 A.1  
Ship's Name DALVANGEN Nationality and Port of Registry Norwegian Oslo Official Number 2412 Gross Tonnage 1931 Date of Build 10  
Moulded Dimensions: Length 289.50 Breadth 45.50 Depth 20.50  
Moulded displacement at moulded draught = 85 per cent. of moulded depth 5044 tons  
Coefficient of fineness for use with Tables .769

Depth for Freeboard (D)	Depth correction	Round of Beam correction
depth ... ..	(a) Where D is greater than Table depth (D - Table depth) R = <u>+ 2.81</u>	Moulded Breadth (B) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = Difference Restricted to Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right) =$ <u>- .05</u>
plate ... ..	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	
on exposed deck $\left(\frac{L-S}{L}\right) =$	If restricted by superstructures	
Depth for Freeboard (D) = <u>20.56</u>		

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
closed ... ..					
erhang ... ..					
nclosed ... ..					
verhang ... ..					
nclosed... ..					
verhang aft ... ..					
verhang forward ... ..					
closed ... ..					
erhang ... ..					
ft ... ..					
forward ... ..					
e opening aft ... ..					
" forward ... ..					
Total ... ..					

Standard Height of Superstructure \_\_\_\_\_  
" " R.Q.D. \_\_\_\_\_  
Deduction for complete superstructure 34.63  
Percentage covered  $\frac{S}{L} =$   
" "  $\frac{S_1}{L} =$   
" "  $\frac{E}{L} =$  51.27  
Percentage from Table, Line A.  
(corrected for absence of forecastle (if required))  
Percentage from Table, Line B. TIMBER 70.04 %  
(corrected for absence of forecastle (if required))  
Interpolation for bridge less than 2L (if required)  
Deduction = 34.63  $\times$  .7004 = - 24.25

SHEER CORRECTION.

	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
...		1				1	
P. ...		4				4	
...		2				2	
...		4				4	
L from F.P. ...		2				2	
L " ...		4				4	
.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 =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) =$  - 1.24  
If limited on account of midship superstructure.  
If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Reduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Ft. Depth to Freeboard Deck = <u>20.56</u> Summer freeboard = <u>1.73</u> Moulded draught (d) = <u>18.83</u> Deduction for Tropical freeboard and addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{3} = 6.28 = 160$ mm	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ <u>5532</u> Tons per inch immersion at summer load water line T = <u>27.14</u> Deduction = $\frac{\Delta}{40 T}$ inches = <u>5.10</u> = <u>130</u> mm	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{1.449}{1.36}$ Depth Correction ... .. <u>2.81</u> ✓ Deduction for superstructures ... .. ✓ <u>24.25</u> Sheer correction ... .. ✓ <u>1.24</u> Round of Beam correction ... .. ✓ <u>.05</u> Correction for Thickness of Deck amidships ... .. ✓ ✓ Other corrections, scantlings, etc. ... .. ✓ ✓ 2.81 25.54 + 22.73 Summer Freeboard = <u>20.82</u>	<u>40.88</u> <u>43.55</u>
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TIMBER SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—  
TIMBER Tropical Fresh Water Line above Centre of Disc 21.35 = 543 mm  
" Fresh Water Line " " 16.64 = 423 mm  
" Tropical Line " " 16.25 = 413 mm  
" Winter Line below above " 5.26 = 133 mm  
" Winter North Atlantic Line below " 5.02 = 128 mm  
" SUMMER ABOVE " 11.54 = 293 mm  
Tropical Fresh Water Freeboard ... .. 11.01 = 279 mm  
" Fresh Water ... .. 15.72 = 399 mm  
" Tropical ... .. 16.11 = 409 mm  
" Winter ... .. 27.10 = 689 mm  
" Winter North Atlantic ... .. 37.38 = 950 mm



med

18' - 10"

med. Dr.

15' - 4 1/2"

17' - 5"

19' - 5 3/4"

Ex A.

4424

5084

5738

TR1

26.4

26.8

27.1

$$\begin{array}{r} 17 \\ 24 \frac{3}{4} \end{array} \times 654 = \begin{array}{r} 448 \\ 5084 \\ \hline 5532 \end{array}$$

4

27.14



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