

# Timber Deck Cargoes FINNISH Lloyd's Register of Shipping. SURVEYS FOR FREEBOARD.

 Index No. **15591**  
 (For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker				Port of Survey	
having <u>poop - Bridge &amp; Deck</u>				Date of Survey <u>1. 6. 34</u>	
(Type of Superstructures.)					
Ship's Name <u>Atlanten</u>	Nationality and Port of Official Number <u>Finnish</u> <u>Abo</u>	Gross Tonnage <u>34.92</u>	Date of Build <u>1902/3</u>	Name of Surveyor	
Moulded Dimensions: Length <u>340.5</u> Breadth <u>47.32</u> Depth <u>26.08</u>				Particulars of Classification <u>+100 A1</u>	
Moulded displacement at moulded draught = 85 per cent. of moulded depth					
Coefficient of fineness for use with Tables <u>.820</u>					

<b>Depth for Freeboard (D)</b> Moulded depth ... .. <u>26.08</u> Stringer plate ... .. <u>.05</u> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <u>26.13</u>	<b>Depth correction</b> (a) Where D is greater than Table depth (D-Table depth) R = <u>+8.98</u> (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	<b>Round of Beam correction</b> 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>- .02</u>
--	--	---

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ... ..						Standard Height of Superstructure
" overhang ... ..						" " R.Q.D.
R.Q.D. enclosed ... ..						Deduction for complete superstructure <u>38.03</u>
" overhang ... ..						Percentage covered $\frac{S}{L} =$
Bridge enclosed ... ..						" " $\frac{S_1}{L} =$
" overhang aft ... ..						" " $\frac{E}{L} =$ <u>43.35</u>
" overhang forward ... ..						Percentage from Table, Line A.
Forecastle enclosed ... ..						(corrected for absence of fore-castle (if required))
" overhang ... ..						Percentage from Table, Line B. <u>Timber</u> <u>85.09</u>
Trunk aft ... ..						(corrected for absence of fore-castle (if required))
" forward ... ..						Interpolation for bridge less than .2L (if required)
Tonnage opening aft ... ..						Deduction = <u>-24.76</u>
" " forward ... ..						
Total ... ..						

## SHEER CORRECTION.

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

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( 75 - \frac{S}{2L} \right) =$  -41

If limited on account of midship superstructure.

Mean actual sheer aft =  
Mean standard sheer aft =

Mean actual sheer forward =  
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =  
L

" " aft of " =

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

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 26.13 Ft.  
 Summer freeboard = 3.60  
 Moulded draught (d) = 22.53  
 Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = 5.63 = 143 mm  
 Addition for Winter North Atlantic Freeboard (if required) =  $\frac{d}{3}$  = 7.51 = 191 mm

## Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta =$   
 Tons per inch immersion at summer load water line  
 $T =$   
 Deduction =  $\frac{\Delta}{40T}$  inches = 143 mm

## TABULAR FREEBOARD corrected for Flush Deck (if required)

## Correction for coefficient

	+	-
Depth Correction ... ..	<u>8.98</u>	
Deduction for superstructures ... ..	<u>-</u>	<u>24.76</u>
Sheer correction ... ..		<u>.41</u>
Round of Beam correction ... ..		<u>.02</u>
Correction for Thickness of Deck amidships ... ..		
Other corrections, scantlings, etc. ... ..		
	<u>8.98</u>	<u>25.18</u>
Summer Freeboard =	<u>43.18</u>	

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

*Committee minute 14. Jan 1935 as a Swedish Ship*

	Timber	Freeboard
Tropical Fresh Water Line above Centre of Disc	<u>.618</u>	
Fresh Water Line " "	<u>.475</u>	
Tropical Line " "	<u>.475</u>	
Winter Line <u>below</u> <u>above</u>	<u>.141</u>	
Winter North Atlantic Line <u>below</u>	<u>.102</u>	
" Summer <u>above</u>	<u>.332</u>	

	Freeboard
Tropical Fresh Water Freeboard ... ..	<u>811</u>
Fresh Water " ... ..	<u>954</u>
Tropical " ... ..	<u>954</u>
Winter " ... ..	<u>1288</u>
Winter North Atlantic " ... ..	<u>1531</u>

 MARKING FORM  
 RECEIVED 1 AUG 1934

W490-0168