

TIMBER DK CARGO FBDS

Rpt. C.11.

Index. No. 17150
(For London Office only.)

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey <u>Helsingfors</u>
having <u>Prop, Bridge & Deck</u>					Date of Survey <u>9th Nov 1932</u>
(Type of Superstructures.)					Name of Surveyor
Ship's Name <u>OTAVA</u>	Nationality and Port of Registry <u>Finnish Helsingfors</u>	Official Number <u>685</u>	Gross Tonnage <u>1296</u>	Date of Build <u>1904/5</u>	Particulars of Classification <u>+100 A.1.</u>
Moulded Dimensions: Length <u>70.71</u> Breadth <u>10.61</u> Depth <u>5.740</u>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>3402 ³/₁₀₀</u>					
Coefficient of fineness for use with Tables <u>.79</u>					

Depth for Freeboard (D) Moulded depth Stringer plate Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <u>5.750</u>	Depth correction (a) Where D is greater than Table depth (D-Table depth) R = <u>+154 ^m/₁₀₀</u> (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 = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <u>-1 ^m/₁₀₀</u>
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	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>743 ^m/₁₀₀</u>
„ overhang ...						Percentage covered $\frac{S}{L} =$
Bridge enclosed ...						„ „ $\frac{S_1}{L} =$
„ overhang aft ...						„ „ $\frac{E}{L} =$ <u>47.26 %</u>
„ overhang forward ...						Percentage from Table, Line A.
F'cle enclosed ...						(corrected for absence of forecastle (if required))
„ overhang ...						Percentage from Table, <u>Line B. TIMBER</u> <u>67.53 %</u>
Trunk aft ...						(corrected for absence of forecastle (if required))
„ forward ...						Interpolation for bridge less than .2L (if required)
Tonnage opening aft ...						Deduction = <u>743 x .6753 = -502 ^m/₁₀₀</u>
„ „ forward ...						
Total ...						

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		
$\frac{3}{8}$ L from F.P. ...		2					2		
$\frac{1}{4}$ 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 = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ +8 ^m/₁₀₀

If limited on account of midship superstructure.

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 = 5.750
Summer freeboard = 451
Moulded draught (d) = 5.299

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{48}$ inches = 110 ^m/₁₀₀
Addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{36}$ = 147 ^m/₁₀₀

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 = 110 ^m/₁₀₀

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

$\frac{1.47}{1.36}$

Depth Correction
Deduction for superstructures
Sheer correction
Round of Beam correction
Correction for Thickness of Deck amidships
Other corrections, scantlings, etc.

	+	-
154	✓	
502		✓
8	✓	
1	✓	
✓		✓
✓		✓
✓		✓

162 503 - 341
Summer Freeboard = 451.7

TIMBER SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:— 451 ^m/₁₀₀

TIMBER Tropical Fresh Water Line above Centre of Disc 468 ^m/₁₀₀
„ Fresh Water Line „ „ 358 ^m/₁₀₀
„ Tropical Line „ „ 358 ^m/₁₀₀
„ Winter Line below above 101 ^m/₁₀₀
„ Winter North Atlantic Line below „ 160 ^m/₁₀₀

TIMBER Tropical Fresh Water Freeboard
„ Fresh Water „ „ ..
„ Tropical „ „ ..
„ Winter „ „ ..
„ Winter North Atlantic „ „ ..

5m, 3.32.

SUMMER ABOVE „ 248 ^m/₁₀₀



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