

# TIMBER DK CARGO

## Lloyd's Register of Shipping.

### SURVEYS FOR FREEBOARD.

 Index. No. **3338**  
 (For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having POOP, BONDGE + 3'cle

Port of Survey Fredrikstad

Date of Survey 3/10/32

Name of Surveyor \_\_\_\_\_

Particulars of Classification + 100 A.1.

(Type of Superstructures.)

Ship's Name OTHANDER Nationality and Port of Registry Norwegian Fredrikstad Official Number 1873 Date of Build 1917/9

Moulded Dimensions: Length 251 Breadth 43.5 Depth 20.37

Moulded displacement at moulded draught = 85 per cent. of moulded depth 4326 tons

Coefficient of fineness for use with Tables .801

Depth for Freeboard (D)

Moulded depth ... ..

Stringer plate ... ..

Sheathing on exposed deck

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

Depth for Freeboard (D) = 20.41

Depth correction

(a) Where D is greater than Table depth (D-Table depth) R = +7.11

(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 =  $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right) =$  - .21

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poep 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

" " R.Q.D.

Deduction for complete superstructure 31.10

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

" "  $\frac{S_1}{L} =$

" "  $\frac{E}{L} =$  45.68 %

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, ~~Line B.~~ TIMBER 66.55 %

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 31.10 x .6655 = - 20.70

## SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ... ..		1				1	
$\frac{1}{8}L$ from A.P. ... ..		4				4	
$\frac{2}{8}L$ " ... ..		2				2	
Amidships ... ..		4				4	
$\frac{3}{8}L$ from F.P. ... ..		2				2	
$\frac{1}{8}L$ " ... ..		4				4	
F.P. ... ..		1				1	
Total ... ..							

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

If limited on account of midship superstructure.

$$+ .44$$

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 = 20.41

Summer freeboard = 1.83

Moulded draught (d) = 18.58

Deduction for Tropical freeboard and addition for

$$\text{Winter freeboard} = \frac{d}{4} \text{ inches} = \frac{4.64}{4} = 1.16 = 4\frac{3}{4}$$

Addition for Winter North Atlantic Freeboard (if required) =  $\frac{d}{3} = 6.19 = 6\frac{1}{4} = 159\frac{1}{4}$ 

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

$$= \frac{4\frac{3}{4}}{40 \times 159\frac{1}{4}} = 121\frac{1}{4}$$

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient

	+	-
Depth Correction ... ..	7.11	✓
Deduction for superstructures ... ..	✓	20.70
Sheer correction ... ..	44	✓
Round of Beam correction ... ..	✓	21
Correction for Thickness of Deck amidships ... ..	✓	✓
Other corrections, scantlings, etc. ... ..	✓	✓
	7.55	20.91

$$- 13.36$$

$$\text{Summer Freeboard} = 22.04$$

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 ... 19" = 483	Tropical Fresh Water Freeboard ... 1'-10" = 559
" Fresh Water Line " " ... 14 1/4" = 362	" Fresh Water " " ... 1'-9 1/2" = 317
" Tropical Line " " ... 14 1/4" = 362	" Tropical " " ... 1'-5 1/4" = 438
" Winter Line below above ... 3 1/4" = 82	" Winter " " ... 1'-5 1/4" = 438
" Winter North Atlantic Line below " ... 5" = 127	" Winter North Atlantic " " ... 2'-4 1/4" = 718
" " " " " " ... 9 1/2" = 241	" " " " " " ... 3'-0 1/2" = 927