

of Shipping.
OR FREEBOARD.Index. No. 32846
(For London Office only.)

Freeboard for Steamer, Sailing Ship, Tanker

Port of Survey

(Type of Superstructures.)

Date of Survey 15 / 5 / 33

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Name of Surveyor

Particulars of Classification

Moulded Dimensions: Length 150.2 Breadth 27.50 Depth 10.75

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

Coefficient of fineness for use with Tables .70 (assumed)

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Moulded depth ... 10.75

Ringer plate03

Catching on exposed deck

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

Depth for Freeboard (D) = 10.78

(a) Where D is greater than Table depth

(D-Table depth) R = $(10.78 - 10.01) / 1.1337$

= + .89"

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

(Table depth-D) R = \checkmark If restricted by superstructures \checkmark

Moulded Breadth (B)

27.50

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

6.60"

Ship's Round of Beam =

7.00

Difference

.40" excess

Restricted to

Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{.40}{4} \times .218 = -.02"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Peep enclosed ...	78.50	78.50	7.5460		78.50
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Roof enclosed equi ...	23.40	23.40	7.5		23.40
" overhang ...					
Trunk ...		15.27	6.0		15.27
" forward ...					
Tonnage opening aft ...					
" " forward ...	101.90				.17
Total ...	102.45	117.42			117.42

Standard Height of Superstructure 6.00

" " R.Q.D. 3.334

Deduction for complete superstructure 21.02

Percentage covered $\frac{S}{L} =$ $\frac{68.01}{78.50} = 67.84\%$ " " $\frac{S_1}{L} =$ $\frac{78.20}{78.50} = 99.62\%$ " " $\frac{E}{L} =$ $\frac{78.20}{78.50} = 99.62\%$

Percentage from Table, Line A. Tanker 72.96

(corrected for absence of forecastle (if required)) 73.08

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required)

Deduction = $21.02 \times \frac{72.96}{73.08} = -15.36$

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
P. ...	25.02	1	25.02	24.00	24.00	1	24.00
from A.P. ...	11.13	4	44.52	5.60	5.60	4	22.40
" ...	2.75	2	5.50	0	0	2	0
amidships ...	\checkmark	4	\checkmark	\checkmark	\checkmark	4	\checkmark
from F.P. ...	5.58	2	11.00	0	0	2	0
" ...	22.26	4	89.04	8.80	8.80	4	35.20
" ...	58.04	1	58.04	43.00	43.00	1	43.00
Total ...			225.12				124.60

Mean actual sheer aft = Deficient

Mean actual sheer forward = Deficient

Length of enclosed superstructure forward of amidships = } Sheer

" " aft of " = } deficient

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{100.52}{18} (.75 - .34) = + 2.29$ If limited on account of midship superstructure. \checkmark If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. \checkmark

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 10.78

Summer freeboard = .29

Moulded draught (d) = 10.49

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = $2.62 = 2\frac{3}{4}"$

Addition for Winter North Atlantic Freeboard (if required) =

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

=

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.70 + .68}{1.36} = \frac{1.38}{1.36}$

Depth Correction89

Deduction for superstructures ... 15.38

Sheer correction ... 2.29

Round of Beam correction02

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

Summer Freeboard = 3.588

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

Tropical Fresh Water Line above Centre of Disc
Fresh Water Line " "
Tropical Line " "
Winter Line below " "
Winter North Atlantic Line " "

Tropical Fresh Water Freeboard
Fresh Water " "
Tropical " "
Winter " "
Winter North Atlantic " "

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