

Preliminary

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index. No. 34425
 (For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Port of Survey

(Type of Superstructures.)

Date of Survey

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Name of Surveyor

Moulded Dimensions: Length 460

Breadth 59

Depth 34

Moulded displacement at moulded draught = 85 per cent. of moulded depth 17900 tons

Coefficient of fineness for use with Tables .799

Particulars of Classification + 100 A1.

Carrying Petroleum in Bulk

Depth for Freeboard (D)

Moulded depth ... 34.00

Stringer plate06

Sheathing on exposed deck

 $T \left(\frac{L-S}{L} \right) =$ ✓

Depth for Freeboard (D) = 34.06

Depth correction

(a) Where D is greater than Table depth

(D-Table depth) R = (34.06 - 30.67) 3.00

= + 10.17" ✓

(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) 59.00

Standard Round of Beam = $\frac{B \times 12}{50} = 14.16"$ ✓

Ship's Round of Beam = 14.00

Difference + .16" deficiency

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.16}{4} \times .5935 = +.02"$

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|-------------------------|-------------------------|--|--------|-------------------|----------------------|
| Poop enclosed ... | 93.00 | 93.00 | | 7'-6" | 93.00 |
| " overhang ... | | | | | |
| R.Q.D. enclosed ... | | | | | |
| " overhang ... | | | | | |
| Bridge enclosed ... | 46.00 | 46.00 | | 7'-6" | 46.00 |
| " overhang aft ... | | | | | |
| " overhang forward ... | | | | | |
| F'cle enclosed ... | 48.00 | 48.00 | | 7'-6" | 48.00 |
| " overhang ... | | | | | |
| Trunk aft ... | | | | | |
| " forward ... | | | | | |
| Tonnage opening aft ... | | | | | |
| " " forward ... | | | | | |
| Total ... | 187.00 | 187.00 | | | 187.00 |

Standard Height of Superstructure 7'-6"

" " R.Q.D. ✓

Deduction for complete superstructure 42.00"

Percentage covered $\frac{S}{L} = 40.65\%$ " " $\frac{S_1}{L} = 40.65\%$ " " $\frac{E}{L} = 40.65\%$ Percentage from Table, Line A. Tanker.
(corrected for absence of forecastle (if required)) 31.65%Percentage from Table, Line B.
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $42 \times .3165 = -13.29"$ ✓

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|------------------------------|-------------------|---|---|---------|-----------------|--------------------|---|---|---------|
| A.P. ... | 56.00 | 1 | | 56.00 | 56.00 | 56.00 | 1 | | 56.00 |
| $\frac{1}{4}L$ from A.P. ... | 24.88 | 4 | | 99.52 | 24.90 | 24.90 | 4 | | 99.60 |
| $\frac{2}{4}L$ " ... | 6.22 | 2 | | 12.44 | 6.20 | 6.20 | 2 | | 12.40 |
| Amidships ... | ✓ | 4 | | ✓ | ✓ | ✓ | 4 | | ✓ |
| $\frac{2}{4}L$ from F.P. ... | 12.44 | 2 | | 24.88 | 12.40 | 12.40 | 2 | | 24.80 |
| $\frac{1}{4}L$ " ... | 49.76 | 4 | | 199.04 | 49.80 | 49.80 | 4 | | 199.20 |
| F.P. ... | 112.00 | 1 | | 112.00 | 112.00 | 112.00 | 1 | | 112.00 |
| Total ... | | | | 503.88 | | | | | 504.00 |

Mean actual sheer aft = Standard
Mean standard sheer aftMean actual sheer forward = Standard
Mean standard sheer forwardLength of enclosed superstructure forward of amidships = }
" " aft of " = } Tanker.Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{.12}{18} (.75 - .2032) = \text{NIL}$

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 = 34.06

Summer freeboard = 6.79

Moulded draught (d) = 27.27

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = $6.82 = 6\frac{3}{4}"$

Addition for Winter North Atlantic Freeboard (if required) = 11.42

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 16976$

Tons per inch immersion at summer load water line

T = 56.20

Deduction = $\frac{\Delta}{40T}$ inches

= 7.55"

= 7 $\frac{1}{2}"$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.799 + .68}{1.36} = \frac{1.479}{1.36}$

Depth Correction ... 10.17

Deduction for superstructures ... 13.29

Sheer correction ...

Round of Beam correction02

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

10.19 13.29 - 3.10

Summer Freeboard = 81.40

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

Tropical Fresh Water Line above Centre of Disc ... 14 $\frac{1}{4}"$ Fresh Water Line " " ... 7 $\frac{1}{2}"$ Tropical Line " " ... 6 $\frac{3}{4}"$ Winter Line below " " ... 6 $\frac{3}{4}"$ Winter North Atlantic Line " " ... 11 $\frac{1}{2}"$ Tropical Fresh Water Freeboard ... 5'-9 $\frac{1}{2}"$

Fresh Water " " ... 6'-2"

Tropical " " ... 6'-2 $\frac{3}{4}"$ Winter " " ... 7'-4 $\frac{1}{4}"$

Winter North Atlantic " " ... 7'-9"