

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

aving

Port of Survey

(Type of Superstructures.)

Date of Survey **17.12.84**

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Name of Surveyor

Moulded Dimensions: Length **384.6** Breadth **51.8?** Depth **28.0.**

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

Coefficient of fineness for use with Tables **.805 assumed**

Particulars of Classification

+ 100 AT Awaiting deck with 1st.

Depth for Freeboard (D)

Moulded depth **28.00**
 Stringer plate **0.4**
 Weathering on exposed deck
 $T \left(\frac{L-S}{L} \right) =$ **0**

Depth for Freeboard (D) = **28.04**

Depth correction

(a) Where D is greater than Table depth

(D - Table depth) R =

(28.04 - 25.64) x 2.959 = + 7.10

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

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop 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 **7.346**„ „ R.Q.D. **✓**Deduction for complete superstructure **40.97**Percentage covered $\frac{S}{L} =$ **100**„ „ $\frac{S_1}{L} =$ **100**„ „ $\frac{E}{L} =$ **100**

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = **- 40.97**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	48.46	1	48.46	50.00	57.85	1	57.85
$\frac{1}{8}L$ from A.P. ...	21.565	4		21.33	25.74	4	102.96
$\frac{2}{8}L$ „ ...	5.33	2		5.33	6.36	2	12.72
Amidships ...	-	4		-	-	4	-
$\frac{3}{8}L$ from F.P. ...	10.66	2		12.05	12.96	2	25.92
$\frac{4}{8}L$ „ ...	43.13	4		48.18	52.44	4	209.76
F.P. ...	96.92	1		110.00	117.85	1	117.85
Total ...			436.14	47.85			527.06

Correction = $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) = \frac{90.92}{18} \times 25 = -1.26$

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 = **28.04**
 Summer freeboard = **3.14**
 Moulded draught (d) = **24.90**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches =

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

=

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient

Depth Correction **7.10**Deduction for superstructures **40.97**Sheer correction **1.26**

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

Summer Freeboard =

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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