

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 28031.
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

Port of Survey

(Type of Superstructures.)

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Date of Survey

Name of Surveyor

Particulars of Classification

Dimensions: Length 300.0 Breadth 43.6 Depth 24.46

Displacement at moulded draught = 85 per cent. of moulded depth

Percentage of fineness for use with Tables

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Moulded Breadth (B)

Standard Round of Beam = $\frac{B \times 12}{50} = 10.46$

Ship's Round of Beam = 10.75

Difference = $.29$

Restricted to

Correction = $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L}) = \frac{.29^2}{4} \times .5212 = -.02$

Depth for Freeboard (D) = 24.50

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Used ...	28.16	28.16	7'6"	✓	28.16
Chang ...					
closed ...					
erhang ...					
closed... ..	81.00	81.00	7'0"	✓	81.00
erhang aft ...					
erhang forward	2.25	1.12			1.12
Used ...	33.33	33.33	7'0"	✓	33.33
hang ...					
ward ...					
pening aft ...					
forward					
al ...	144.74	143.61			143.61

Standard Height of Superstructure

" " R.Q.D.

Deduction for complete superstructure

Percentage covered $\frac{S}{L} = 48.25\%$

" " $\frac{S_1}{L} = 47.88\%$

" " $\frac{E}{L} = 47.88\%$

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 34.19

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) $.27$

Deduction = $35.33 \times .3419 = -12.08$

SHEER CORRECTION.

Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
40.00	1	40.00	24.00	24.00	24.00	1	24.00	24.00
17.80	4	71.20	1.50	1.50	1.50	4	6.00	6.00
4.40	2	8.80	0	0	0	2	-	-
-	4	-	-	-	-	4	-	-
8.80	2	17.60	0	0	0	2	-	-
35.60	4	142.40	9.00	9.00	9.00	4	36.00	36.00
80.00	1	80.00	72.00	72.00	72.00	1	72.00	72.00
		360.00					138.00	

Difference between sums of products $(.75 - \frac{S}{2L}) = \frac{222}{18} \times .5088 = +6.27$

account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Tropical Freeboard.

Winter and Winter North Freeboard.

Freeboard Deck = 24.50

Freeboard = 4.25

Moulded draught (d) = 20.25

Tropical freeboard and addition for

ard = $\frac{d}{4}$ inches = 5.1

er North Atlantic Freeboard (if

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

Depth Correction 10.39

Deduction for superstructures 12.08

Sheer correction 6.27

Round of Beam correction $.04$

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

Summer Freeboard = 51.11

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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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway									
Dimensions of Hatchway									
COAMINGS	Height above Deck								
	Thickness								
	Sides								
	Ends								
	Stiffeners								
	Brackets, Stays								
HATCH BEAMS	Number								
	Spacing								
	Scantling and Sketch								
	Bearing Surface								
FORE AND AFTERS	Number								
	Spacing								
	Unsupported Lengths								
	Scantling* and Sketch								
	Bearing Surface								
HATCH COVERS	Material								
	Thickness								
	How fitted								
	Bearing Surface								
Spacing of Cleats									
Number of Tarpaulins									

*Are wood fore and afters steel shod at all bearing surfaces?
 Are battens and wedges efficient and in good condition?
 Are tarpaulins in good condition and in accordance with rule requirements?
 Are lashings provided in accordance with rule requirements?

Particulars of fiddle, funnel and ventilator coamings:—

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways:—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

Particulars of Gangway Cargo and Coaling Ports:—

Particulars of Scuppers and Sanitary Discharge Pipes —

Particulars of Side Scuttles:—

Particulars of Guard Rails:—

Particulars of Gangways, Lifelines, etc.:—

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well						
Forward Well						

State position of each freeing port (F. and A. position and height above deck edge) { After Well:—
 { Forward Well:—
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—
 Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead								
Raised Quarter Deck Bulkhead								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								
Exposed Machinery Casings on Superstructure Decks								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	
Raised Quarter Deck Bulkhead	
Bridge, After Bulkhead	
Bridge, Forward Bulkhead	
Forecastle Bulkhead	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	
Exposed Machinery Casings on Superstructure Decks	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships	