

AS A FLUSH DECK STEAMER

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 25410
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Flush Deck

(Type of Superstructures)

Ship's Name SARANAC Nationality and Port of Registry Assumed Official Number 79 Gross Tonnage 85 Date of Build 4-06

Port of Survey 30-11-31

Date of Survey 30-11-31

Name of Surveyor +

Moulded Dimensions: Length 529.50 Breadth 66.15 Depth 42.06

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

Coefficient of fineness for use with Tables assumed .79 at 85 tons of 42.06

Particulars of Classification +100A1
Flush Deck with Freeboard
Carrying Petroleum in Bulk

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	42.06	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	66.15
Stringer plate	.08	(42.14 - 35.30) x 3.0 = +20.52		Standard Round of Beam = $\frac{B \times 12}{50}$	15.88
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	16.25
$T \left(\frac{L-S}{L} \right) =$				Difference	.37
Depth for Freeboard (D) =	42.14	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{.37}{4} \times 1 = .09$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						Standard Height of Superstructure
" overhang ...						" " R.Q.D.
R.Q.D. enclosed ...						Deduction for complete superstructure
" overhang ...						Percentage covered $\frac{S}{L} =$
Bridge enclosed ...						" " $\frac{S_1}{L} =$
" overhang aft ...						" " $\frac{E}{L} =$
" overhang forward						Percentage from Table, Line A.
F'cle enclosed ...						(corrected for absence of forecastle (if required))
" overhang ...						Percentage from Table, Line B.
Trunk aft ...						(corrected for absence of forecastle (if required))
" forward ...						Interpolation for bridge less than .2L (if required)
Tonnage opening aft ...						Deduction = <u>NIL</u>
" " forward						
Total ...						

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	62.95	1		62.95	36.00	36.00	1		36.00	Mean actual sheer aft = defective
1/4 L from A.P. ...	28.07	4		112.04	15.80	15.80	4		63.20	Mean standard sheer aft
1/2 L " ...	6.92	2		13.84	3.95	3.95	2		7.90	Mean actual sheer forward = defective
Amidships ...	-	4		-	-	-	4		-	Mean standard sheer forward
1/4 L from F.P. ...	13.84	2		27.68	9.77	9.77	2		19.54	Length of enclosed superstructure forward of amidships =
1/2 L " ...	56.02	4		224.08	39.10	39.10	4		156.40	" " aft of " =
F.P. ...	125.90	1		125.90	90.00	90.00	1		90.00	
Total ...				566.49					373.04	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{193.45}{18} \times .75 = +8.06$

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.

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

Deduction for Tropical freeboard and addition for

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

Addition for Winter North Atlantic Freeboard (if required =

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. ...

Summer Freeboard = 156.79

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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Foundation1906 { S 12-7 1/4
W 13-1 3/4Diff { S + 5 1/2
W + 6 1/4

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