

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey.....
Motor Trawler "GRÖNLAND"	9100	Swedish. Gravarné.	253	1905 - 12	Gravarné
Moulded Dimensions: Length	120'-0"	Breadth	21'-7"	Depth	12'-6"
Freeboard Length	120'-0"				
Moulded displacement at moulded draught = 85 per cent. of moulded depth	See cable				tons
Coefficient of fineness for use with Tables	Assume .68				
Surveyor's Signature					Particulars of Classification
					+100A1 Motor Trawler.

Depth for Freeboard (D).	12.50	Depth correction.	Round of Beam correction.	
Moulded depth	12'-6"	(a) Where D is greater than Table depth (D—Table depth) R =	Moulded Breadth (B)	21.52'
Stringer plate			Standard Round of Beam = $\frac{B \times 12}{50}$	5.16"
Sheathing on exposed deck	3"	(b) Where D is less than Table depth (if allowed) (Table depth—D) R =	Ship's Round of Beam	26"
$T \left(\frac{L-S}{L} \right) =$			Difference	.84"
Depth for Freeboard (D) =		If restricted by superstructures	Restricted to	
			Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$.84"

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	64'-6"	64.50	12"		
» overhang					
Bridge enclosed		5.63			
» overhang aft					
» overhang forward					
Fore enclosed	19'-3"		see sketch.		
» overhang					
Trunk aft					
» forward					
Tonnage opening aft					
» forward					
Total	83.75				

Standard Height of Superstructure	6.00
» R.Q.D.	3.133'
Deduction for complete superstructure	18.00"
Percentage covered $\frac{S}{L} =$	69.79
» $\frac{S_1}{L} =$	
» $\frac{E}{L} =$	
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 =	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	22.00	1		22.00	26.00	26.00	1		26.00
1/6L from A.P.	9.79	4		39.16	3.00	3.00	4		12.00
2/6L	2.42	2		4.84	-3.00	-3.00	2		-6.00
Amidships	✓	4		✓	✓	✓	4		✓
2/6L from F.P.	4.84	2		9.68	14.00	4.84	2		9.68
1/6L	19.58	4		78.32	40.00	19.58	4		78.32
F.P.	44.00	1		44.00	79.00	44.00	1		44.00
Total				198.00					164.00

Mean actual sheer aft	= Definit .5
Mean standard sheer aft	
Mean actual sheer forward	= excess
Mean standard sheer forward	
Length of enclosed superstructure forward of amidships	= } Definit Sheer
» aft of	= }

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{34.00}{18} \left(.75 - \frac{34.00}{40.00} \right) = +.76"$

If limited on account of midship superstructure. ✓

If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD
Depth to Freeboard Deck =	Displacement in salt water at summer load water line	Corrected for Flush Deck (if required)
Summer freeboard =	Δ =	Correction for coefficient
Moulded draught (d) =	Tons per inch immersion at summer load water line	Depth Correction
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =	T =	Deduction for superstructures
Addition for Winter North Atlantic Freeboard (if required) =	Deduction = $\frac{\Delta}{40 T}$ inches	Sheer correction
		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	»

[illegible]