

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

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

Computation of Freeboard for Steamer, Sailing Ship, Tanker

POOP; RAISED QUARTERDECK; BRIDGE; FORECASTLE.

(Type of Superstructures.)

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
MINNA	ESTONIAN KÄSMU	146	1365	1923 4
Dimensions: Length 234.25 Breadth 35.33 Depth 18.58				
Displacement at moulded draught = 85 per cent. of moulded depth				
Percentage of fineness for use with Tables = 159				

Port of Survey

Date of Survey 7-11-32

Name of Surveyor

Particulars of Classification +100 A1

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Depth	(a) Where D is greater than Table depth (D-Table depth) R = 5.41	Moulded Breadth (B)
ate	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50}$ =
on exposed deck (-S) =	If restricted by superstructures	Ship's Round of Beam =
Depth for Freeboard (D) = 18.62		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times (1 - \frac{S_1}{L})$ = 61.04

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
nclosed					
verhang					
enclosed					
overhang					
enclosed... ..					
overhang aft					
overhang forward					
nclosed					
verhang					
aft					
forward					
e opening aft					
" forward					
Total					

Standard Height of Superstructure _____
 " " R.Q.D. _____
 Deduction for complete superstructure 29.42
 Percentage covered $\frac{S}{L}$ =
 " " $\frac{S_1}{L}$ =
 " " $\frac{E}{L}$ = 67.46
 Percentage from Table, Line A. _____
 (corrected for absence of forecastle (if required)) TIMBER
 Percentage from Table, Line B. 49.98
 (corrected for absence of forecastle (if required))
 Interpolation for bridge less than 2L (if required)
 Deduction = 49.98 x 29.42 = 23.53

SHEER CORRECTION.

Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
...	1				1	
...	4				4	
...	2				2	
...	4				4	
...	2				2	
...	4				4	
...	1				1	

Mean actual sheer aft =
Mean standard sheer aft =

Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
 " " aft of " =

on = $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) =$

ed on account of midship superstructure.

-1.51

If limited to maximum allowance of 1½ ins. per 100 ft.

for Tropical Freeboard.
for Winter and Winter North Freeboard.

Depth to Freeboard Deck = 18.62
 Summer freeboard = 1.02
 Moulded draught (d) = 17.60
 Tropical freeboard =
 Winter Freeboard =
 = $\frac{d}{3} = 5.84$

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 = 4.40

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.

+	-
5.41	23.53
	.51
	.04
5.41	24.08

30.96

Summer Freeboard = 12.29

SUMMER FREEBOARD amidships from top of Deck Line, Steel, Deck:—

TIMBER Tropical Fresh Water Line above Centre of Disc 38.3%
 Fresh Water Line " " 27.1
 Tropical Line " " 27.1
 Winter Line " ABOVE, 10.2
 Winter North Atlantic Line " BELOW, 15.4

TIMBER Tropical Fresh Water Freeboard
 Fresh Water " " 200
 Tropical " " 200
 Winter " " 461
 Winter North Atlantic " " 630

See later computation

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