

Rpt.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 166-4 30064
 Index. No.
 (For London Office only.)

W460-0210

Computation of Freeboard for Steamer, Sailing Ship, Tanker

a complete superstructure

Port of Survey Kobe

Date of Survey 18, 19, 21 Jan. 1935

(Type of Superstructures.)

Name of Surveyor M.M. Parker

Ship's Name

MIONE

ex Maharaon

Nationality and Port of Registry

Norwegian

Bergen

Official Number

/

Gross Tonnage

3359

Date of Build

1921-4

Moulded Dimensions: Length 330.5 Breadth 47.75 Depth 26.08

Moulded displacement at moulded draught = 85 per cent. of moulded depth 7868 tons

Coefficient of fineness for use with Tables 787

Particulars of Classification +100A1

with freeboard

Depth for Freeboard (D)

Moulded depth ... 26.08

Stowage plate ... 03

Shoal on exposed deck

 $\frac{L-S}{L} =$

Depth for Freeboard (D) = 26.11

Depth correction

(a) Where D is greater than Table depth

(D - Table depth) R =

 $(26.11 - 22.03) \times 2.542 = +10.37$

(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) 47.75

Standard Round of Beam = $\frac{B \times 12}{50} = 11.46$

Ship's Round of Beam = 12.00

Difference 0.54

Restricted to

Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{0.54}{4} \times (1 - 0.9926) = \text{Nil}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Roop enclosed ...	28.00	28.00	7'-1 1/4"	✓	28.00
overhang ...	1.00	.50			.50
Q.D. enclosed ...					
overhang ...					
Bridge enclosed ...	271.50	271.50	7'-6 3/4"	✓	271.50
overhang aft ...					
overhang forward ...					
Fore enclosed ...	26.00	26.00	7'-1"	-	26.00
overhang ...					
Trunk aft ...		$4.5 \times \frac{20}{243}$			
forward ...					
Tonnage opening aft ...	4.00	= 2.09			2.09
forward ...					
Total ...	330.50	328.09			328.09

Standard Height of Superstructure 6.805

R.Q.D.

Deduction for complete superstructure 37.37

Percentage covered $\frac{S}{L} = 100.00$ $\frac{S_1}{L} = 99.26$ $\frac{E}{L} = 99.26$

Percentage from Table, Line A. 99.09

(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 = $37.37 \times 99.09 = 37.03$

SHEER CORRECTION.

Actual height of superstructure = 7.562

Standard = 6.805

7.562 - 6.805 = .757

.757 - .908 = -.151

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
P. ...	43.05	1		43.05	62.25	71.33	1		71.33
from A.P. ...	19.16	4		76.64	12.00	21.08	4		84.32
" ...	4.74	2		9.48	-	7.85	2		15.70
amidships ...	-	4		-	-	-	4		-
from F.P. ...	9.48	2		18.96	-	9.08	2		18.16
" ...	38.32	4		153.28	22.00	31.08	4		124.32
P. ...	86.10	1		86.10	100.00	109.08	1		109.08
Total ...				387.51					422.91

Correction = $\frac{\text{Difference between sums of products}}{18} = \frac{35.4}{18} \times 25 = -49$

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.

Depth to Freeboard Deck = 26.11

Summer freeboard = 2.33

Moulded draught (d) = 23.78

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 5.94 = 6

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 8585$

Tons per inch immersion at summer load water line

T = 32.58

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

= 6.59

= 6 1/2

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{787 + .68}{1.36} = 1.467$ $\frac{1.467}{1.36} =$

Depth Correction ... 10.37

Deduction for superstructures ... 37.03

Sheer correction ... 0.49

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

10.37 37.52

-27.15

Summer Freeboard = 28.01

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc ... 12 1/2 = 317

Fresh Water Line " " ... 6 1/2 = 165

Tropical Line " " ... 6 = 152

Winter Line below " " ... 6 = 152

Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard ... 1'-3 1/2" = 394

Fresh Water " " ... 1'-9 1/2" = 546

Tropical " " ... 1'-10" = 559

Winter " " ... 2'-10" = 863

Winter North Atlantic " " ...