

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 35501.
(For London Office only).

Bureau 1035420

Ship's Name **NAMBOIA COAST**
ex m/v DALNESS

Official Number **159380**

Nationality and Port of Registry **South Africa Cape Town.**

Gross Tonnage **246**
known just.

Date of Build **1937**

Port of Survey **Rotterdam**

Date of Survey **Building**

Surveyor's Signature *J. H. H. H.*

Particulars of Classification **+100 A1**
Contemplated.

To centre of water stock

Moulded Dimensions: Length **97' 6 1/2"** Breadth **23.5'** Depth **11' 0"**

Moulded displacement at moulded draught = 85 per cent. of moulded depth **446.5** tons

Coefficient of fineness for use with Tables **.729**

Depth for Freeboard (D).		Depth correction.	Round of Beam correction.
Moulded depth ...	11' 0"	(a) Where D is greater than Table depth (D - Table depth) R = (11.03 - 6.50) x .750 = +3.40'	Moulded Breadth (B) 23.5'
Stringer plate30"	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = ✓	Standard Round of Beam = $\frac{B \times 12}{50} = 5.64"$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$.03"		Ship's Round of Beam = $0.5' \times 6.00 = 3.00"$
Depth for Freeboard (D) =	11.03	If restricted by superstructures ✓	Difference excess 36"
			Restricted to
			Correction = $\frac{\text{Diff}^{\circ}}{4} \times (1 - \frac{S_1}{L}) = \frac{36}{4} \times 4679 = -0.04"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	32.21'	7' + 2' = 9'	7.17'	✓	32.21'
.. overhang ...					
R.Q.D. enclosed ...					
.. overhang ...					
Bridge enclosed ...					
.. overhang aft ...					
.. overhang forward ...	19.69'	7' + 2' = 9'	7.21'	✓	19.69'
F'cle enclosed <i>Equish.</i> ...	27.50'				
.. overhang ...					
Trunk aft ...					
.. forward ...					
Tonnage opening aft ...					
.. forward ...					
Total ...	51.90'	51.90'			51.90'

Standard Height of Superstructure **6.8'**

" " R.Q.D. **✓**

Deduction for complete superstructure **15.75'**

Percentage covered $\frac{S}{L} = 53.21$

" " $\frac{S_1}{L} = 53.21$

" " $\frac{E}{L} = 53.21$

Percentage from Table, Line A. **36.49**

(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 = $15.75 \times 36.49 = -5.75"$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	19.75	1		19.75	2' 2 1/2"	19.75	1		19.75
1/4 L from A.P. ...	8.79	4		35.16	11"	8.79	4		35.16
3/4 L " ...	2.17	2		4.34	2"	2.17	2		4.34
Amidships ...	-	4		-	-	-	4		-
3/4 L from F.P. ...	4.35	2		8.70	3 1/2"	3.50	2		7.00
1/4 L " ...	17.58	4		70.32	1' 3 3/8"	15.375	4		61.50
F.P. ...	39.51	1		39.51	3' 3"	39.00	1		39.00
Total ...				177.78					166.75

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - \frac{S}{2L}}{2L} \right) = \frac{11.03}{18} \left(\frac{.75 - \frac{2660}{4840}}{2L} \right) = +.30"$

If limited on account of midship superstructure. ✓

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

Mean actual sheer aft = **Excess.**

Mean standard sheer aft =

Mean actual sheer forward = **Deficient**

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = } **Deficient**

" " aft of " = } **Sheer.**

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **11.03**

Summer freeboard = **.67**

Moulded draught (d) = **10.36**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **2.59 = 2 1/2"**

Addition for Winter North Atlantic Freeboard (if required) = **4 1/2"**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 510$

Tons per inch immersion at summer load water line

T = **5 tons.**

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

= **2.55**

= **2 1/2"**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.729 + .68}{1.36} = \frac{1.409}{1.36}$

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

9.75

10.10

3.40

5.75

30

.04

3.70

5.79

-2.09

Summer Freeboard = 8.01

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

Tropical Fresh Water Line above Centre of Disc ...	5"
Fresh Water Line " " ...	2 1/2"
Tropical Line " " ...	2 1/2"
Winter Line below " " ...	2 1/2"
Winter North Atlantic Line " " ...	4 1/2"

Tropical Fresh Water Freeboard ...	0' - 8"
Fresh Water " " ...	0' - 3"
Tropical " " ...	0' - 5 1/2"
Winter " " ...	0' - 5 1/2"
Winter North Atlantic " " ...	0' - 10 1/2"
	1' - 0 1/2"

Dalness.

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Forecastle equivalent Bulkhead.

$$\frac{7.50 \times 5.25}{22.67} = 1.73 \#$$

$$\begin{array}{r} 21.58 \\ - 1.73 \\ \hline 19.85 \end{array}$$

Stairway $\frac{2.21 \times 1.67}{22.67} = .16.$

$$\begin{array}{r} 19.85 \\ - .16 \\ \hline 19.69 \text{ equivalent.} \end{array}$$

Trade of ship Sea going Trade.

Names of sister ships ms Dalness. Jant N° 202

Builder's name and yard number De Haan & Berlemans Heusden Jant N° 203.

Owners Ovenstone Coasters P.T.Y. L.T.D. Cape Town.

Fee f 40.00



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Foundation