

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index No. **32877**
(For London Office only.)No. 21660
-7 DEC 1932

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

COMPLETE SUPERSTRUCTURE WITH TONNAGE OPENING

Port of Survey ROTTERDAM

(Type of Superstructures.)

Date of Survey 1-12-1932

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

NIEUWKERKDUTCH62001928-10Name of Surveyor J. van der Weel

Moulded Dimensions: Length

124.966 M

Breadth

10.06 M

Depth

9.459 MMoulded displacement at moulded draught = 85 per cent. of moulded depth (10.35) = 13.545 tons (35/3)

Coefficient of fineness for use with Tables

.441= 13.425 m³Particulars of Classification 100A1WITH FREEBOARD

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Moulded depth 9.459Stringer plate 0.0105

Sheathing on exposed deck

 $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 9.459(a) Where D is greater than Table depth
(D - Table depth) R =8.33(9.459-8.33) 30 = + 282 m/m(b) Where D is less than Table depth (if allowed)
(Table depth - D) R =

If restricted by superstructures

Moulded Breadth (B)

Standard Round of Beam = $\frac{B \times R}{50} =$ 361Ship's Round of Beam = 0.025Difference Definit 336

Restricted to

Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{336}{4} \times 0.082 = +1 m/m$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S)	Height	Height Correction	Effective Length (E)
Poop enclosed ... <u>18'00</u>	<u>5.486</u>	<u>5.49</u>	<u>3.657</u>	<u>1</u>	<u>5.49</u>
+ " overhang ... <u>2'71</u>	<u>0.824</u>	<u>.41</u>	<u>4'</u>		<u>.41</u>
R.Q.D. enclosed ...					
" overhang ...			<u>2.290</u>		
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...			<u>3.353</u>		
" overhang ...					
Trunk aft ...					
" forward ... <u>5'31</u>	<u>1.631</u>	<u>1.02</u>			<u>1.02</u>
Tonnage opening aft ... <u>8'26</u>	<u>2.456</u>				
" forward ...					
Total ...	<u>124.966</u>	<u>123.94</u>			<u>123.94</u>

Standard Height of Superstructure 2290" " R.Q.D. "Deduction for complete superstructure 1064Percentage covered $\frac{S}{L} =$ 100" " $\frac{S_1}{L} =$ 99.18" " $\frac{E}{L} =$ 99.18

Percentage from Table, Line A.

(corrected for absence of forecastle (if required)) 98.99

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required)

Deduction = 1067 x 98.99 = - 1056 m/m

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>1295</u>	1		<u>1295</u>	<u>1372</u>	<u>1342</u>	1		<u>1372</u>
$\frac{1}{2}$ L from A.P. ...	<u>545</u>	4		<u>2300</u>	<u>763</u>	<u>763</u>	4		<u>3052</u>
$\frac{3}{4}$ L " ...	<u>144</u>	2		<u>288</u>	<u>153</u>	<u>153</u>	2		<u>306</u>
Amidships ...		4					4		
$\frac{3}{4}$ L from F.P. ...	<u>288</u>	2		<u>576</u>	<u>220</u>	<u>220</u>	2		<u>440</u>
$\frac{1}{2}$ L " ...	<u>1150</u>	4		<u>4600</u>	<u>1405</u>	<u>1405</u>	4		<u>5620</u>
F.P. ...	<u>2590</u>	1		<u>2590</u>	<u>2591</u>	<u>2591</u>	1		<u>2591</u>
Total ...				<u>11647</u>					<u>13381</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{1732}{18} \times .25 = -24 m/m$

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.

Depth to Freeboard Deck = 9.459Summer freeboard = 1.180Moulded draught (d) = 8.249

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 17 m/m

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ 14745

Tons per inch immersion at summer load water line

T = 49.00Deduction = $\frac{\Delta}{40T}$ inches= 7.52 = 19 m/m

AS OBTAINED FROM BUILDERS

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{7.41+66}{1.36} \cdot \frac{1.421}{1.36}$ Depth Correction 282Deduction for superstructures 1056Sheer correction 24Round of Beam correction 1Correction for Thickness of Deck amidships -Other corrections, scantlings, etc. -Summer Freeboard = 1182 m/m

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

Tropical Fresh Water Line above Centre of Disc ...	<u>36 m/m</u>
Fresh Water Line " " ...	<u>19</u>
Tropical Line " " ...	<u>14</u>
Winter Line below " " ...	<u>14</u>
Winter North Atlantic Line " " ...	<u>14</u>

Tropical Fresh Water Freeboard ...	<u>82</u>
Fresh Water " " ...	<u>99</u>
Tropical " " ...	<u>101</u>
Winter " " ...	<u>135</u>
Winter North Atlantic " " ...	<u>135</u>

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	FREEBOARD DECK				SHELTER DECK				
	I	II + V	III + IV	VI	I	II + V	III + IV	VI	
Dimensions of Hatchway	14'9" x 19'0"	32'5" x 19'0"	21'6" x 14'0"	14'2 1/4" x 14'0"	14'9" x 19'0"	32'5" x 19'0"	21'6" x 14'0"	14'2 1/4" x 14'0"	
COAMINGS	Height above Deck	3'9" x 3 1/2" x 4'8"			2'6"				
	Thickness				.44"				
	Sides								
	Stiffeners				3'9" x 3 1/2" x 4'8"				
HATCH BEAMS	Number	4	5	3	4	5	3	4	
	Spacing				EQUAL				
	Scantling and Sketch								
	Bearing Surface								
FORE AND AFTERS	Number								
	Spacing								
	Unsupported Lengths								
	Scantling and Sketch								
HATCH COVERS	Material				PINE				
	Thickness	3 1/4"	3 1/2" - 3 3/4"	3"	3 1/2"				
	How fitted				LONGITUDINALLY				
	Bearing Surface								
Spacing of Cleats					NOT EXCEEDING 24"				
Number of Tarpaulins		2	2	2	2	3	3	3	

*Are wood fore and afters steel shod at all bearing surfaces? ✓
 Are battens and wedges efficient and in good condition? YES.
 Are tarpaulins in good condition and in accordance with rule requirements? YES.
 Are lashings provided in accordance with rule requirements? [LOCKING BEAMS 5"]

Particulars of fiddle, funnel and ventilator coamings:— Coamings protected by shelterdeck and above shelterdeck protected by brattice. See casing, funnel, engineroom and fiddle skylights of an efficient construction and in good condition.

Particulars of Flush Bunker Scuttles:— Only one flush bunker scuttle inside bridge, in the shelterdeck, protected by steel door, of a substantial construction and fitted with bayonet joint.

Particulars of Companionways:— All situated inside shelterdeck, all inside superstructures on shelterdeck or in strong steel deckhouses on same.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—
 11. On shelterdeck 10" and 14" in diameter. Coamings 30" x 40".
 Also 2 of 9" and 1 of 12" dia. Coamings 30" x 36".
 Construction complies with Rules. Wood plugs and canvas covers are available.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—
 16. On shelterdeck, from double bottom tanks.
 Diameters 2 1/2" to 3 1/2", height 27" to 30".
 Wood plugs available.

Particulars of Gangway Cargo and Coaling Ports:—
 Each side 4 coaling ports in bridge deck, giving access below shelterdeck. Waterlights, fitted with permanent hinges and of a substantial and efficient construction.

Particulars of Scuppers and Sanitary Discharge Pipes:— All sanitary discharge pipes lead from spaces situated above the freeboard deck, and are fitted with stormvalves on the ship's side.
 Foremast and shelterdeck have scupper pipes on board, fitted with stormvalves; see sketch.

Particulars of Side Scuttles:— No side scuttles below the freeboard deck.
 Portlights situated in shelterdeck, forward and aft, also in fore, bridge and poop, of a substantial construction and fitted with hinged steel deadlights.

Particulars of Guard Rails:— On guardrails round superstructures on freeboard deck.
 3 or 4 rails, height from 3'3" to 3'5"; riveted stanchions spaced 4' or 5'0".
 Bulwark on shelterdeck. Height is 4'0". Forms 2 wells.
 Stanchions 7' x 4'0" x 5'4".

Particulars of Gangways, Lifelines, etc.:—
 Lifelines are available and it is a practice to fix same in bad weather from centre of the forward and aft.

Particulars of Freeing Arrangements. ON SHELTERDECK						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	121'0"	4'0"	1400 x 450	4	27.12 M ² 2,52 M ²	12.16 ²
Forward Well	122'0"	4'0"	1400 x 450	4	27.12 M ² 2,52 M ²	12.21 ²
State position of each freeing port (F. and A. position and height above deck edge) After Well:— State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— NO SHUTTERS. 1 INCH 12 BAR. Additional area where sheer is less than standard. EDGES. 19"						

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	20"	26"	4' x 3' x 32"	30"	✓	✓	✓	
Raised Quarter Deck Bulkhead	✓							
Bridge, After Bulkhead	26"	26"	4' 5 1/2" x 3' x 36"	30"	1100 x 1230	1100 x 1230	600	
Bridge, Forward Bulkhead	✓							
Forecastle Bulkhead	✓							
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓							
Exposed Machinery Casings on Superstructure Decks	✓							
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	30"	26"	4' 3' x 2 1/2" x 36"	30"	✓	5'1" x 2'0"	16"	
Deckhouses on Flush Deck Ships	✓							

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	✓
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	2 1/2" Stormboards in riveted Z profiles, full height, also intermediate bulkheads.
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	✓
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓
Exposed Machinery Casings on Superstructure Decks	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	Ordinary hinged steel door, operated from both sides.
Deckhouses on Flush Deck Ships	✓

description
dimension

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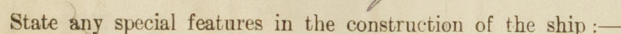
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Displacement at $25'-7\frac{1}{2}'$ = 13,169 tons.
 With at $27'-7\frac{1}{2}'$ = 14,345 tons.

Hatch B " " 2'-0" x 2'-0". Coaming 10". Rigid Steel w. 8" cover. ✓
 2 Gunhatches C in wells. 2'-8" x 2'-3". Coaming 27" x 36". } Complete ballening down array
 2 Coalhatches D in forewell. 4'-4" x 4'-5". Coaming 30" x 40". }
 Peakhatch E enclosed by collision bulkhead. 4'-0" x 3'-0". Coaming 4 3/2".
 10 Ventilatingholes F in freeb. deck. (Flush) Closed by Steel plates on tap bolts, w. 8"
 8 Coalhatches G in freeboard deck. 4'-4" x 4'-4". Coamings 9" x 3" x 42".
 Damagehatch aft. 19'-0" x 5'-4 1/2". Coaming B.A. 13" x 53 1/4" x 62".
 Efficient wood covers.

Bridgefront on shelterdeck. Coaming .44" plate .40" Stiffeners B.A. 240 x 90 x 12 1/2
2 Hinged steel watertight doors, operated from both sides.

Aft end bridge on shelterdeck. Coaming .40" plate .32" Stiff. 4130 x 65 x 10 1/2 x 760
2 Ordinary hinged steel doors, operated from both sides.

Roof front. on shepherd. 40' 36" x 170 x 75 x 12' 1/2 x 760' ✓
2 Hinged steel watertight doors, operated from both

Builder's name and yard number

Names of sister ships

Owners

Fee £ 173. 40 : Will be. Received by me

Expenses of 1.00.

Machiniefabriek & Scheepswerf v. P. Smut Jr. Rotterdam
N^o 418

Roller Mem. 6th December 1932

H. van der Meel

Please send the assignment as soon as possible. The vessel will probably sail from Amsterdam Tuesday 13th December.