

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

APR 25 1939

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey <u>BREMEN</u>
having <u>POOP, BRIDGE AND FORECASTLE</u>					Date of Survey <u>APRIL 1939</u>
(Type of Superstructures.)					Name of Surveyor <u>A. Holtz</u>
Ship's Name <b>" JAVA "</b>	Nationality and Port of Registry <u>DUTCH</u> <u>AMSTERDAM</u>	Official Number <u>9250.10</u>	Gross Tonnage <u>1939</u>	Date of Build	Particulars of Classification <u>* 100 A1</u>
Moulded Dimensions: Length <u>149.349 M.</u> Breadth <u>19.202 M.</u> Depth <u>11.945 M.</u>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>20130 m<sup>3</sup></u>					
Coefficient of fineness for use with Tables <u>.69</u>					

<b>Depth for Freeboard (D)</b> Moulded depth ... <u>11.945</u> Stringer plate ... <u>11</u> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <u>11.956</u>	<b>Depth correction</b> (a) Where D is greater than Table depth $\sqrt{D - \text{Table depth}} R =$ $8.33(11.956 - 9.976)30 = + 4.95 \text{ m}$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = If restricted by superstructures	<b>Round of Beam correction</b> Moulded Breadth (B) <u>19.202</u> Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>3.84 m</u> Ship's Round of Beam = <u>3.80 m</u> Difference = <u>4 m deficient</u> Restricted to Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ $\frac{4}{4} \times 4.113 =$ <u>nil</u>
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## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed <i>equiv. 7</i>	<u>12.895</u>	<u>12.895</u>	<u>2.365</u>	✓	<u>13.663</u>
" overhang ...	<u>13.663</u>	<u>13.663</u>			
R.Q.D. enclosed					
" overhang					
Bridge enclosed...	<u>58.800</u>	<u>58.800</u>	<u>2.515</u>	✓	<u>58.800</u>
" overhang aft ...					
" overhang forward			<u>2.365</u>		
F'cle enclosed ...	<u>15.654</u>	<u>15.654</u>	<u>65 ft sheathing</u>	✓	<u>15.654</u>
" overhang ...					
Trunk aft					
" forward ...					
Tonnage opening aft ...					
" forward	<u>88.117</u>	<u>88.117</u>			
Total ...	<u>87.349</u>	<u>87.349</u>			<u>88.117</u>

Standard Height of Superstructure 2.290 m.

" " R.Q.D. ✓

Deduction for complete superstructure 1067 m

Percentage covered  $\frac{S}{L} =$  58.87 ✓

" "  $\frac{S_1}{L} =$  58.87 ✓

" "  $\frac{E}{L} =$  58.87 ✓

Percentage from Table, Line A. ✓  
(corrected for absence of forecastle (if required)) ✓

Percentage from Table, Line B. 44.87 ✓  
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 1067 × 44.87 = - 479 m

## SHEER CORRECTION.

For Allowed Sheer Forward see page 4

Station	Standard Ordinate	S M	Product	Actual Ordinate <i>m/m</i>	Effective Ordinate	S M	Product
A.P. ...	<u>1501</u>	1	<u>1501</u>	<u>1440</u>	<u>1440</u>	1	<u>1440</u>
$\frac{1}{4}$ L from A.P. ...	<u>667</u>	4	<u>2668</u>	<u>449</u>	<u>449</u>	4	<u>1796</u>
$\frac{2}{4}$ L " ...	<u>167</u>	2	<u>334</u>	<u>-11</u>	<u>-11</u>	2	<u>-22</u>
Amidships ...		4		<u>0</u>		4	
$\frac{3}{4}$ L from F.P. ...	<u>333</u>	2	<u>666</u>	<u>481</u>	<u>444</u>	2	<u>888</u>
$\frac{1}{4}$ L " ...	<u>1333.5</u>	4	<u>5334</u>	<u>1458</u>	<u>1427</u>	4	<u>5708</u>
F.P. ...	<u>3002</u>	1	<u>3002</u>	<u>3282</u>	<u>3212</u>	1	<u>3212</u>
Total ...			<u>13505</u>				<u>13022</u>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{483}{18} \left( .75 - \frac{2943}{20130} \right) = + 12 \text{ m}$

If limited on account of midship superstructure. ✓

Mean actual sheer aft = Deficient = 68.78% Standard.

Mean actual sheer forward = Excess

Length of enclosed superstructure forward of amidships =

actual " aft " standard

1440	1	1440	1501	1	1501
449	3	1347	667	3	2001
-11	3	-33	167	3	501
0	1			1	
		<u>2754</u>			<u>4003</u>

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

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 11.956

Summer freeboard = 2.580

Moulded draught (d) = 9.376

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{48} \text{ inches} = 1.95 \text{ m} = 20 \text{ cms.}$ 

Addition for Winter North Atlantic Freeboard (if required) = ✓

SEE PAGE 4  
Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 18528$ 

Tons per inch immersion at summer load water line

T = 60Deduction =  $\frac{\Delta}{40 T}$  inches=  $7.72 = 196 \text{ m}$ = 20 cms.

## TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient  $\frac{64+68}{1.36} = \frac{1.37}{1.36}$ Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction...

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. ...

2532 m

2550 "

+	-
495	
	479
12	
507	479
+ 28 m	

Summer Freeboard = 2578 m

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

Tropical Fresh Water Line above Centre of Disc ...	40 cms	Tropical Fresh Water Freeboard ...	258 cms
Fresh Water Line " " ...	20 "	Fresh Water " " ...	238 "
Tropical Line " " ...	20 "	Tropical " " ...	238 "
Winter Line below " " ...	20 "	Winter " " ...	278 "
Winter North Atlantic Line " " ...	✓	Winter North Atlantic " " ...	✓

258 cms

218 "

238 "

238 "

278 "

278 "

2m,10,36.

003525-003532-0005 1/2

MARKING FOR  
10 JUN 1939  
RECEIVED



"Java"

Particulars of fiddle, funnel and ventilator coamings:— FIDDLEY TOP AND MOTOR CASING = 260" ABOVE UPPER BRIDGE DECK AND UPPER BRIDGE DECK = 4955" ABOVE BRIDGE DECK, STRONGLY CONSTRUCTED AND CASING PROTECTED BY STRONGLY BUILT STEEL DECK HOUSES. FUNNEL AND ENGINE SKYLIGHT OF SUBSTANTIAL CONSTRUCTION AND EFFICIENTLY CONNECTED TO FIDDLEY TOP. NO FIDDLEY OPENINGS. ✓

NONE. ✓

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :— All Ventilator Coamings are of Substantial Construction as per Rules and Efficiently Welded to the Deck Plating. Efficiently Closing Arrangements are provided for their openings. The Heights of Coamings are as follows: ON:—

POOP DECK: UPPER DECK AFTER WELL:	BRIDGE DECK:	UPPER DECK FWD. WELL:	FORECASTLE DECK:
7' 6 1/2" ✓	NONE ✓	7' 6 1/2" ✓	NONE ✓
(470" to POOP SPACE)			9' 20" ✓

Particulars of Gangway Cargo and Coaling Ports:— *NONE.* ✓

Particulars of Side Scuttles: LOWEST SIDE SCUTTLES (FITTED BELOW FREEBOARD DECK AFT) = 39.4 FEET ABOVE BASE LINE.  
ALL SIDE SCUTTLES BELOW FREEBOARD DECK HAVE STRONG DEADLIGHTS IN POSITION.  
ALL SIDE SCUTTLES ABOVE FREEBOARD DECK (POOP & BRIDGE) HAVE PORTABLE DEADLIGHT, AS SHOWN BY SKETCH ATTACHED.

FILE: 1170 ✓ POOP: 1220 ✓  
HEIGHT: (above steel deck) CONSTRUCTION: HAND RAIL AND 3 RODS. HAND RAIL AND 3 RODS.

180x10 SPACED  
ABOUT 2 FRAME SPACES  
APART

160 x 10 SPACED  
ABOUT 2 FRAME SPA

NONE

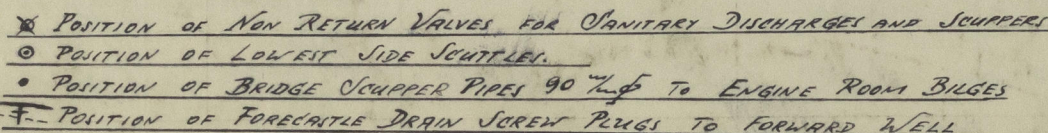
Particulars of Freeing Arrangements.						
	Length of Bulwark METRES	Height of Bulwark METRES	Size of Freeing Ports METRES	Number each side	Area each side SQ. M.	Rule area each side SQ. M.
After Well ... ..	30, 240	1, 150	22, 600 × 0, 230	ONE CONTINUOUS OPENING	5, 1 ✓	1, 838 ✓ <del>1, 42</del>
Forward Well ... ..	30, 920	1, 150	22, 500 × 0, 230	ONE CONTINUOUS OPENING	5, 1 ✓	1, 879 ✓ <del>1, 40</del>
State position of each freeing port ... .. } After Well:— ONE CONTINUOUS OPENING FROM FRAME 22 TO 49 (F. and A. position and height above deck edge) } Forward Well:— -- -- -- -- 131 TO 161 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— NO SHUTTERS, BARS NOR RAILS FITTED.						
Additional area where sheer is less than standard.						

	Coaming m/m	Plating m/m	Stiffeners m/m	Spacing m/m	End Attachments of Stiffeners	Size of Openings m/m	Height of Sills m/m	Height of Casings m/m
Poop Bulkhead ... ..	250 x 11.5	9.5	6 165 x 75 x 9	760	LWS ANGLES AT TOP AND BOTTOM 4 Riv. 13 g	2 DOORS: 1540 x 700 (1 Door = 1650 x 700)	460 } 400 }	2365
Raised Quarter Deck Bulkhead ...	"	"	"	"	"	2 T.O. = 1250 x 950 (1 SHROUVE = 1390 x 600 3 Doors = 1850 x 600)	550 } 340 }	2515
Bridge, After Bulkhead ... ..	250 x 11.5	7.5	6 100 x 65 x 7	670 ~ 720	NONE	"	"	2515
Bridge, Forward Bulkhead ... ..	250 x 11.5	11.0	6 250 x 90 x 12	720 ~ 760	LWS ANGLES AT TOP & S RIVETS 22 g G.WELDED AT BOTTOM	NONE	"	2515
Forecastle Bulkhead ... ..	250 x 11.5	7.5	6 100 x 65 x 8	680 ~ 760	NONE	2 T.O. = 1735 x 950 (1 Door = 1650 x 800)	265 } 350 }	fwd - 22.80 aft - 24.40
Trunk, Aft ... ..	"	"	"	"	"	"	"	"
Trunk, Forward ... ..	"	"	"	"	"	"	"	"
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	"	"	"	"	"	"	"	"
Exposed Machinery Casings on Super-structure Decks ... ..	"	"	"	"	"	"	"	"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	450 x 10	7.0	5 90 x 75 x 8	840	STIFFENERS CONTINUOUS	NONE	"	2515
Deckhouses on Flush Deck Ships ...	"	"	"	"	"	"	"	"

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Pool Bulkhead	...	...	2 STEEL HINGED N.T. ENTRANCE DOORS, RUBBER PACKED, CAPABLE OF BEING OPERATED FROM BOTH SIDES.
	...	...	1 " " DOOR FOR WASH ROOM, NOT PACKED.
Raised Quarter Deck Bulkhead	...	...	2 T.O. = PORTABLE STEEL PLATES 9" L. THICK WITH HOOK BOLTS.
Bridge, After Bulkhead	...	...	1 STEEL HINGED N.T. ENTRANCE DOOR TO DEEP TANKS, RUBBER PACKED. THESE DOORS ARE CAPABLE OF BEING OPERATED FROM BOTH SIDES.
Bridge, Forward Bulkhead	...	...	3 SOLID HARD WOOD DOORS, HINGED DOORS OF AFRICAN TEAK WOOD.
Forecastle Bulkhead	...	...	INTACT BULKHEAD
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...	...	2 T.O. = PORTABLE STEEL PLATES 8" L. THICK WITH HOOK BOLTS.
Exposed Machinery Casings on Superstructure Decks	...	...	1 STEEL HINGED ENTRANCE DOOR TO PASSAGE, NO PACKING, CAPABLE OF BEING OPERATED FROM BOTH SIDES.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...	...	
Deckhouses on Flush Deck Ships	...	...	



[illegible]

DISPLACEMENT AT MAXIMUM DRAUGHT OF 9798  $\frac{1}{2}$  IN SALT WATER = 19.420 TONS (1 FOOT ABOVE C.W.L.)  
DISPLACEMENT AT MAXIMUM DRAUGHT OF 9493  $\frac{1}{2}$  IN SALT WATER = 18.700 TONS (AT C.W.L.)  
DISPLACEMENT AT MAXIMUM DRAUGHT OF 9188  $\frac{1}{2}$  IN SALT WATER = 17.980 TONS. (1 FOOT BELOW C.W.L.)  
DISTANCE BETWEEN BASE LINE (MOULDED DRAUGHT LINE) AND MAXIMUM DRAUGHT LINE = 44  $\frac{1}{2}$ .

	$\frac{3}{8}L$	$\frac{1}{6}L$	F.P.
Actual	481	1458	3282
Standard	<u>333</u>	<u>1333.5</u>	<u>3002</u>
Diff	148	124.5	280
Diff $\times \frac{1878}{2500}$	111	93.5	210
Standard	<u>333</u>	<u>1333.5</u>	<u>3002</u>
Allowed	444	1427	3212

Received by me.