

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. **35218**
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Prop, continuous trunk & fore-castle

(Type of Superstructures.)

Ship's Name JENNY <i>(L. measured to 45m above stocks)</i>	Nationality and Port of Registry Dutch Rotterdam	Official Number not yet known	Gross Tonnage 1120 m³	Date of Build 1937
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Port of Survey Hamburg
Date of Survey 17th March 1937
Name of Surveyor R. B. Shephard
Particulars of Classification +100 A1
Carrying Petroleum in Bulk (contemplated)

Moulded Dimensions: Length 55.40 m Breadth 9.000 m Depth 3.545 m
Moulded displacement at moulded draught = 85 per cent. of moulded depth
Coefficient of fineness for use with Tables .745

<p>Depth for Freeboard (D)</p> <p>Moulded depth <u>3.545</u></p> <p>Stringer plate <u>.009</u></p> <p>Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ <u>✓</u></p> <p>Depth for Freeboard (D) = <u>3.554</u></p>	<p>Depth correction</p> <p>(a) Where D is greater than Table depth (D-Table depth) R = <u>✓</u></p> <p>(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <u>8.33(3.693-3.554) 13.99 = -16 m.m.</u> <u>.139</u> If restricted by superstructures <u>Yes. Nil.</u></p>	<p>Round of Beam correction</p> <p>Moulded Breadth (B) = <u>9.00 m.</u></p> <p>Standard Round of Beam = $\frac{B \times 49}{50} =$ <u>.180 m.</u></p> <p>Ship's Round of Beam = <u>.180 m.</u></p> <p>Difference <u>Nil.</u></p> <p>Restricted to</p> <p>Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <u>Nil.</u></p>
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<u>13.450</u>	<u>13.40</u>	<u>2.150</u>	<u>✓</u>	<u>13.40</u>
" overhang	<u>.875</u>	<u>.44</u>			<u>.44</u>
R.Q.D. enclosed	<u>✓</u>				
" overhang	<u>✓</u>				
Bridge enclosed	<u>✓</u>				
" overhang aft	<u>✓</u>				
" overhang forward	<u>✓</u>				
F'cle enclosed	<u>11.020</u>	<u>11.02</u>	<u>1.000</u>	<u>1.00/1.83</u>	<u>6.02</u>
" overhang					
Trunk aft <u>24.60 x 3/4</u>		<u>8.20</u>	<u>1.000</u>	<u>1.00/1.83</u>	<u>4.48</u>
" forward					
Tonnage opening aft					
" forward					
Total	<u>25.295</u>	<u>33.06</u>			<u>24.34</u>

Standard Height of Superstructure 1.83 m.
" " R.Q.D. ✓
Deduction for complete superstructure 615 m.m.
Percentage covered $\frac{S}{L} =$ 45.66
" $\frac{S_1}{L} =$ 59.68
" $\frac{E}{L} =$ 43.93
Percentage from Table, Line A. Tanker. 34.93
(corrected for absence of fore-castle (if required))
Percentage from Table, Line B. ✓
(corrected for absence of fore-castle (if required)) ✓
Interpolation for bridge less than 2L (if required)
Deduction = 615 x .3493 = - 215 m.

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
P.	<u>716</u>	1		<u>716</u>	<u>833</u>	<u>833</u>	1		<u>833</u>
L from A.P.	<u>318</u>	4		<u>1272</u>	<u>270</u>	<u>270</u>	4		<u>1080</u>
" "	<u>80</u>	2		<u>160</u>	<u>-12</u>	<u>-12</u>	2		<u>-24</u>
Midships		4					4		
" from F.P.	<u>159</u>	2		<u>318</u>	<u>330</u>	<u>330</u>	2		<u>660</u>
" "	<u>636</u>	4		<u>2544</u>	<u>982</u>	<u>982</u>	4		<u>3928</u>
F.P.	<u>1431</u>	1		<u>1431</u>	<u>2045</u>	<u>2045</u>	1		<u>2045</u>
Total				<u>6441</u>					<u>8522</u>

Mean actual sheer aft = Deficient. 84.1% of Standard.
Mean standard sheer aft
Mean actual sheer forward = Excess.
Mean standard sheer forward
Length of enclosed superstructure forward of amidships = Tanker.
" " aft of " = Tanker.
Sheer aft.
Standard Actual
716 1 716 833 1 833
318 3 954 270 3 810
80 3 240 -12 3 -36
1910 1604
 $\frac{1604}{1910} = 84.1\%$
Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{2081}{18} \left(\frac{75-2283}{5217} \right) = -60 \text{ m.}$
If limited on account of midship superstructure ✓
If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = <u>3.554</u></p> <p>Summer freeboard = <u>.260</u></p> <p>Moulded draught (d) = <u>3.294</u></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{48} \text{ inches} =$ <u>69 m.m.</u> <u>9 m.m.</u></p> <p>Addition for Winter North Atlantic Freeboard (if required) = <u>69 + 45 = 114 m.m. = 11 cm.</u></p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta =$ <u>1304</u></p> <p>Tons per inch immersion at summer load water line</p> <p>$T =$ <u>11.43</u></p> <p>Deduction = $\frac{\Delta}{40T} \text{ inches} =$ <u>2.85</u> <u>7 cm.</u></p> <p>$\Delta @ 3m.B.K. = 1158 \text{ tons SW}$ $\Delta @ 2m.B.K. = 1248 \text{ " "}$</p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient $\frac{.745+.68}{1.36} = \frac{1.425}{1.36}$</p> <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td></td> <td></td> </tr> <tr> <td>Deduction for superstructures</td> <td></td> <td><u>215</u></td> </tr> <tr> <td>Sheer correction</td> <td></td> <td><u>60</u></td> </tr> <tr> <td>Round of Beam correction</td> <td></td> <td></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td></td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>275</u></td> <td><u>- 275</u></td> </tr> </table> <p>Summer Freeboard = <u>258</u></p>		+	-	Depth Correction			Deduction for superstructures		<u>215</u>	Sheer correction		<u>60</u>	Round of Beam correction			Correction for Thickness of Deck amidships			Other corrections, scantlings, etc.				<u>275</u>	<u>- 275</u>
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	<u>275</u>	<u>- 275</u>																								

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

Tropical Fresh Water Line above Centre of Disc	<u>14 cm.</u>	Tropical Fresh Water Freeboard	<u>12</u>
Fresh Water Line " "	<u>7</u>	Fresh Water " "	<u>19</u>
Tropical Line " "	<u>7</u>	Tropical " "	<u>19</u>
Winter Line below " "	<u>7</u>	Winter " "	<u>33</u>
Winter North Atlantic Line " "	<u>11</u>	Winter North Atlantic " "	<u>37</u>

16 APR 1937

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway		10 cargo tank 10' dia	10 cargo tank 5' dia	10 C.D. aft	10 C.D. fore	10 chain locker	10 porthole space		
Dimensions of Hatchway		100x650	700 dia	400x600	400x600	400x600	1100x1600		
COAMINGS	Height above Deck	450 ✓	450 ✓	610 ✓	610 ✓	610 ✓	725 ✓		
	Thickness	3/10 ✓	10 ✓	3/6 ✓	3/6 ✓	3/6 ✓	3/7.5 ✓		
	Stiffeners	✓	✓	✓	✓	✓	✓		
	Brackets, Stays	✓	✓	✓	✓	✓	✓		
HATCH BEAMS	Number	✓	✓	✓	✓	✓	✓		
	Spacing and Sketch								
FORE AND AFTERS	Bearing Surface								
	Number								
	Spacing								
	Unsupported Lengths	✓	✓	✓	✓	✓	✓		
HATCH COVERS	Material	Steel O.T.		6' flanged		6' ✓	W.P.		
	Thickness	12.5 ✓	12.5 ✓	12.5 ✓	12.5 ✓	12.5 ✓	12.5 ✓		
	How fitted	✓	✓	✓	✓	✓	✓		
	Bearing Surface	✓	✓	✓	✓	✓	✓		
	Spacing of Cleats	6 wing bolts ✓	6 wing bolts ✓	4 wing bolts ✓			about 500 ✓		
	Number of Tarpaulins	2 ✓	2 ✓	2 ✓			2 ✓		

Particulars of fiddley, funnel and ventilator coverings:—

Engine skylight of steel strongly constructed ✓
Funnel & ventilator coverings efficient ✓
No fiddley openings. ✓

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways :—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

Particulars of Gangway Cargo and Coaling Ports:—

Particulars of Scuppers and Sanitary Discharge Pipes —

Sanitary Discharge Pipes — No overboard scuppers fitted from enclosed spaces. ✓
Sanitary discharges from poop space fitted with storm valves at ship's side, & where
led out below freeboard deck, also fitted with screw down valves. ✓ Discharges from wash basins
led out above freeboard deck, fitted with plugs. ✓

Particulars of Side Scuttles:

Particulars of Guard Rails :-

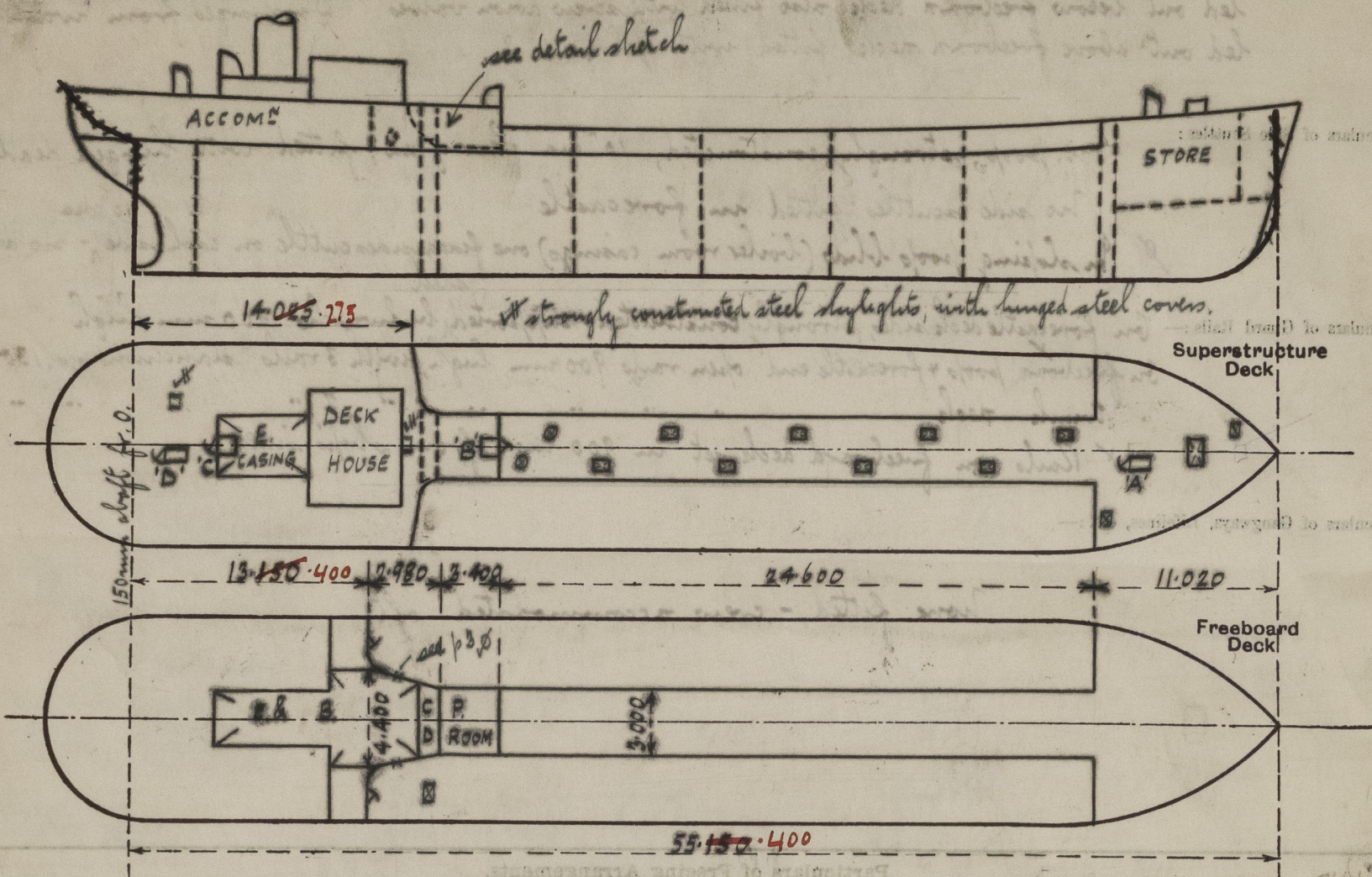
Particulars of Gangways, Lifelines, etc. :—

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	At after end	of fbd deck, in	way of overhang of poop, one	freeing port	600 x 470 mm	
Forward Well	✓		each side, fitted with two rails ✓			
State position of each freeing port { After Well :— ✓ (F. and A. position and height above deck edge) Forward Well :— State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :— Additional area where sheer is less than standard.						

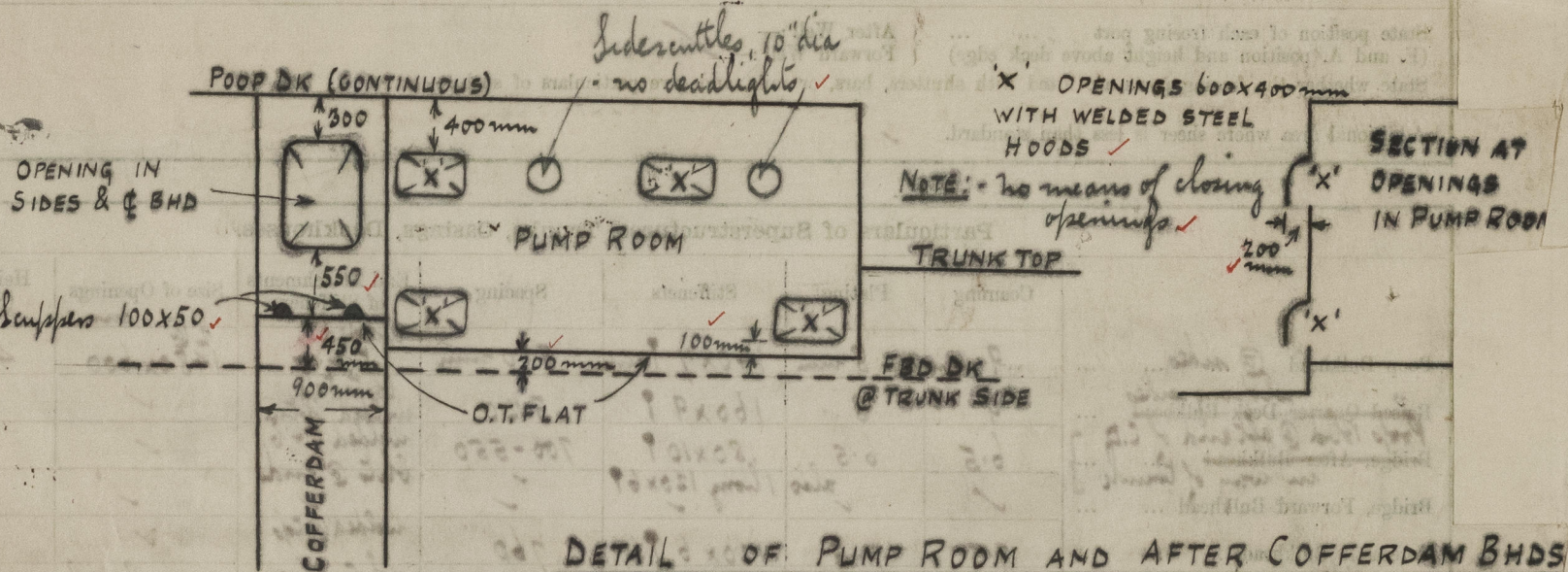
Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead @ sides ...	9 mm	8 mm	140x7 1/2 in	500 mm	welded E & F	2 @ 148x600	460	2150
Forward Quarter Deck Bulkhead	9	8	160x9 1/2	520	blt & top	✓	✓	2150
Poop Bulk @ aft end of C.D.	6.5	6.5	180x10 1/2	700-550	welded E & F	✓	✓	2150
Bridge, After Bulkhead	✓	also	long 120x6 1/2	✓	blt @ ends	✓	✓	-
Bridge, Forward Bulkhead ...	✓							
Forecastle Bulkhead ...	7.5	7.5	120x6 1/2	760	welded @ top	✓	✓	1000
Trunk, Aft @ Pym's Room..	9	7.5	100x6 1/2	680	blt & top	see sketch	1/4	2150
" " " " " " " "	9 1/2	7 1/2	80x5 1/2	500	blt @ top	common	6 1/2	2150
Trunk, Forward ...				460				1000
Exposed Machinery Casings on Free-board	see	poop bulkhead	sloping side		continuous @ top	common	@ aft	
Exposed Machinery Casings on Super-structure Decks ...	6.5	6.5	100x6 1/2	520	welded blt	see sketch	see p. 2	760
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	✓	✓	7 1/2 in	inlet	remains	N.D.		
Deckhouses on Flush Deck Ships ...	✓	✓		✓	✓	✓		

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	Two hinged steel watertight doors, operated from outside only ✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	✓
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	No openings ✓
Exposed Machinery Casings on Freeboard or Raised Quarter Deck ...	No openings ✓
Exposed Machinery Casings on Superstructure Decks	One hinged steel watertight door, operated from both sides ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships ...	✓

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



State any special features in the construction of the ship:—



DETAIL OF PUMP ROOM AND AFTER COFFERDAM BHDS

Builder's name and yard number Messrs D.W. Krenner Sohn's No 772

Names of sister ships ✓

Owners Algemeen Vrachthantoor, N.V. Rotterdam
to be charged with F.E

Fee £ Received by me