

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having *Half bright poop, bridge and forecastle.*

(Type of Superstructures.)

Port of Survey *Malmö*

Date of Survey *23rd & 25th Jan. 1932.*

Name of Surveyor *Asunder*

Particulars of Classification *100A1*

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
<i>s/s "OSWIN"</i>	<i>Swedish, Helsingborg.</i>	<i>5402</i>	<i>1320</i>	<i>1913-2 mo</i>
Moulded Dimensions: Length <i>235.0</i> Breadth <i>37.5</i> Depth <i>18.58</i>				
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>3089</i> tons				
Coefficient of fineness for use with Tables <i>.777</i>				

Depth for Freeboard (D)				
Moulded depth	...	...	...	<i>18.58</i>
Keel plate	...	...	...	<i>.04</i>
Leakage on exposed deck	...	...	...	<i>✓</i>
$T \left( \frac{L-S}{L} \right) =$	...	...	...	
Depth for Freeboard (D) =	...	...	...	<i>18.62</i>

Depth correction	
(a) Where D is greater than Table depth (D - Table depth) R =	$(18.62 - 15.67) \times 1.807 = +5.33$
(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	<i>✓</i>
If restricted by superstructures	

Round of Beam correction	
Moulded Breadth (B)	<i>37.5</i>
Standard Round of Beam = $\frac{B \times 12}{50}$	<i>9.0</i>
Ship's Round of Beam	<i>9 1/2</i>
Difference	<i>.50</i>
Restricted to	
Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$= \frac{.50}{4} \times \left( 1 - \frac{.4534}{.5466} \right) = -.07$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
CONSIDERED AS R.Q.D.	FT		FT		
Poop enclosed	<i>16.33</i>	<i>16.33</i>	<i>3.5</i>	<i>3.9</i>	<i>14.65</i>
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	<i>63.25</i>	<i>63.25</i>	<i>7.04</i>	<i>✓</i>	<i>63.25</i>
" overhang aft	<i>2.5</i>	<i>1.87</i>			<i>1.87</i>
" overhang forward					
Forecastle enclosed	<i>25.08</i>	<i>25.08</i>	<i>7.04</i>	<i>✓</i>	<i>25.08</i>
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	<i>107.16</i>	<i>106.53</i>			<i>104.85</i>

Standard Height of Superstructure	<i>6.0</i>
" " R.Q.D.	<i>3.9</i>
Deduction for complete superstructure	<i>29.5</i>
Percentage covered $\frac{S}{L} =$	<i>45.60</i>
" " $\frac{S_1}{L} =$	<i>45.34</i>
" " $\frac{E}{L} =$	<i>44.62</i>
Percentage from Table, Line A.	<i>✓</i>
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B.	<i>65.90</i>
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	<i>✓</i>
Deduction =	$29.5 \times .659 = -19.44$

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
...	<i>33.50</i>	<i>1</i>		<i>33.50</i>	<i>38"</i>	<i>38.0</i>	<i>1</i>		<i>38.0</i>
from A.P. ...	<i>14.91</i>	<i>4</i>		<i>59.64</i>	<i>15 1/2"</i>	<i>15.5</i>	<i>4</i>		<i>62.0</i>
" ...	<i>3.68</i>	<i>2</i>		<i>7.36</i>	<i>3 1/2"</i>	<i>3.5</i>	<i>2</i>		<i>7.0</i>
amidships ...	<i>-</i>	<i>4</i>		<i>-</i>	<i>-</i>	<i>-</i>	<i>4</i>		<i>-</i>
from F.P. ...	<i>7.36</i>	<i>2</i>		<i>14.72</i>	<i>7"</i>	<i>7.0</i>	<i>2</i>		<i>14.0</i>
" ...	<i>29.82</i>	<i>4</i>		<i>119.28</i>	<i>29"</i>	<i>29.0</i>	<i>4</i>		<i>116.0</i>
...	<i>67.00</i>	<i>1</i>		<i>67.00</i>	<i>72"</i>	<i>72.0</i>	<i>1</i>		<i>72.0</i>
Total				<i>301.50</i>					<i>309.0</i>

Mean actual sheer aft = *EXCESS*  
Mean standard sheer aft

Mean actual sheer forward = *EXCESS*  
Mean standard sheer forward

Length of enclosed superstructure forward of amidships =  $.124L$   
" " aft of " =  $.145L$

ACTUAL	FORWARD SHEER, STAND.	A.	S
<i>7</i>	<i>7.36</i>	<i>3</i>	<i>21</i>
<i>29</i>	<i>29.82</i>	<i>3</i>	<i>87</i>
<i>72</i>	<i>67.00</i>	<i>1</i>	<i>72</i>
			<i>180</i>
			<i>178.54</i>
			<i>180 = EXCESS</i>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{7.5}{18} \left( .75 - \frac{.228}{.522} \right) = -.22$

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.

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 3418$

Tons per inch immersion at summer load water line

$T = 17.75$

Deduction =  $\frac{\Delta}{40T}$  inches =  $4.81$

Md. depth	Displ.	Tons/ins.
<i>15'</i>	<i>2968</i>	<i>17.50</i>
<i>16'</i>	<i>3149</i>	<i>17.61</i>
<i>17'</i>	<i>3352</i>	<i>17.75</i>

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{.777 + .68}{1.36}$

	+	-
Depth Correction	<i>5.33</i>	<i>-</i>
Deduction for superstructures	<i>-</i>	<i>19.44</i>
Sheer correction	<i>-</i>	<i>.22</i>
Round of Beam correction	<i>-</i>	<i>.07</i>
Correction for Thickness of Deck amidships	<i>-</i>	<i>-</i>
Other corrections, scantlings, etc.	<i>1.02</i>	<i>-</i>
	<i>5.33</i>	<i>19.73</i>
	<i>6.35</i>	<i>-</i>

Summer Freeboard =  $17.10$  *18.12*

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

<i>Timber</i>	Tropical Fresh Water Line above Centre of Disc	<i>429</i>	<i>462</i>
"	Fresh Water Line	<i>321</i>	<i>354</i>
"	Tropical Line	<i>308</i>	<i>341</i>
"	Winter Line	<i>55</i>	<i>88</i>
"	Winter North Atlantic Line	<i>187</i>	<i>154</i>

TIMBER	Tropical Fresh Water Freeboard	<i>9.08</i>	<i>7.99</i>
"	Fresh Water	<i>13.36</i>	<i>12.29</i>
"	Tropical	<i>13.84</i>	<i>12.80</i>
"	Winter	<i>23.82</i>	<i>22.83</i>
"	Winter North Atlantic	<i>33.36</i>	<i>33.36</i>

Summer line above Timber Freeboard only desired

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## PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...
COAMINGS	...	...	...	...	...	...	...	...	...
HATCH BEAMS	...	...	...	...	...	...	...	...	...
FORE AND AFTERS	...	...	...	...	...	...	...	...	...
HATCH COVERS	...	...	...	...	...	...	...	...	...
<p>*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/></p> <p>Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/></p> <p>Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/></p> <p>Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/></p>									

Particulars of fiddley, funnel and ventilator coverings:- Fiddley openings on top of boiler casing fitted with 2" angle frames and permanently attached steel covers. Funnel grating .24 thick.  
Boiler room ventilator coverings:- Diam. 24". Height above casing top 15" (supported).  
Engine room ventilator coverings:- Diam. 18". Thickness .32". Height above casing top .36".

Particulars of Flush Bunker Scuttles:— *None.*

Particulars of Companionways :— One on forecastle deck of steel plates (flanged) Plating .20  
Steel door. Height of sill above fore deck 12". Capable of being  
operated from both sides.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:— On fore deck:— 5" diam. 1/2" thickness (cast iron).  
9" high. Forward well:— 2-14" diam. .34" thickness. One 36" in height. One 11" in height secured to  
bridge front. Bridge deck:— 1-6" diam. to store regn p.s. at front of bridge .30 thickness. 42" high.  
After well:— 2-14" diam. .34 thickness and one 9" diam. .32 thickness, all 36" in height.  
Closing apparatus:— Wood plugs and canvas.  
Spacing of rivets in deck flange:— Not recording 4 diam. (Cummings on fore bolted to deck).

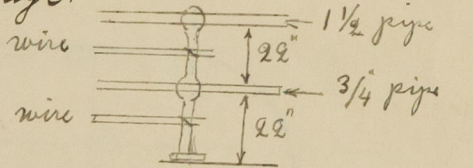
Particulars of Air Pipes in exposed positions on freeboard, <sup>raised quarter,</sup> or superstructure decks: — One on fore, goesenlocks 18" above deck. ✓  
 Two in well forward 39" between deck and opening. ✓  
 On bridge deck flush screw brass plugs fitted. ✓  
 Two on poop deck, goesenlocks 6" high. ✓  
 Air pipes provided with means of closing

Particulars of Gangway Cargo and Coaling Ports:— *Name.*

Particulars of Scuppers and Sanitary Discharge Pipes — One sanitary discharge pipe in way of fore-castle on port side with its discharge about 2' below freeboard deck fitted with single storm valve (This pipe passes through the ship's side abaft the collision bulkhead). One sanitary pipe in way of bridge P. S. with storm valves discharging above U. dk.

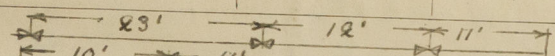
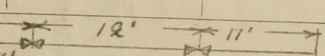

Particulars of Side Scuttles: No side scuttles below foreboard deck.  
Side lights in cross quarters in space under fore. deck fitted with permanently attached deadlights.

Particulars of Guard Rails: *Open rail round file, and poop deck also at after end of bridge.*  
*Front end and sides of bridge deck plate bulwark 42" high.* wine



Particulars of Gangways, Lifelines, etc.:— *None fitted yet.*  
*Life lines fitted.*

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 ... ..	67.08	4'	36" x 16"	3	120'	13.40' ✓
Forward Well ... ..	62.25	4'	36" x 16"	3	120'	12.80' ✓

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:— *Bridge end*  *Bridge end*  *See sketch*  *Bridge framed openings in bulwark 9 1/2"*

Additional area where sheer is less than standard.

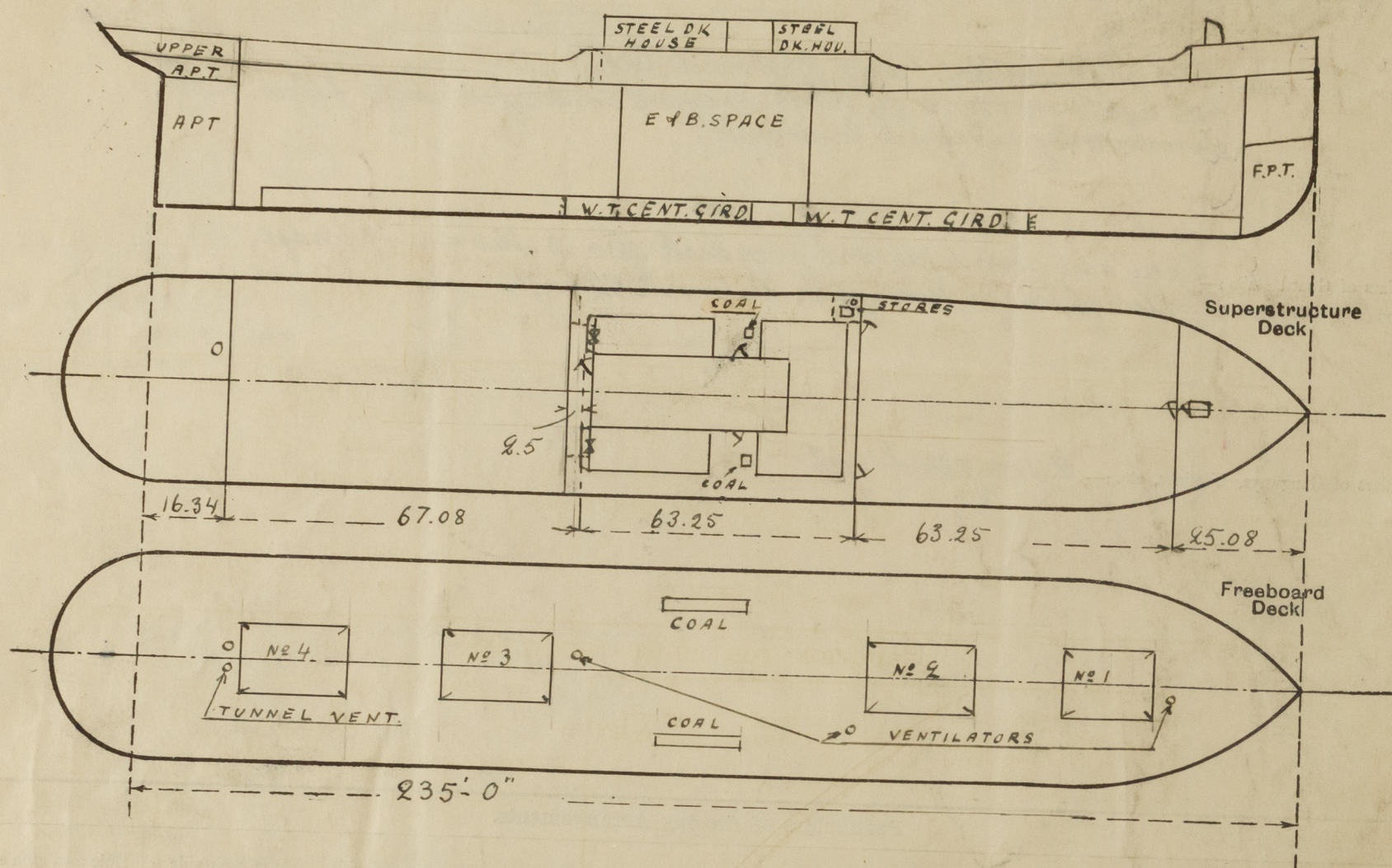
Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Pop Bulkhead ... ..		.40	5 1/2 x 3 x .40	30	Bolts T & B	No opening		35
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ... ..		.28	3 1/2 x 3 x 30	30	No bolts.	3' x 6.75'	None	7.04
Bridge, Forward Bulkhead ... ..	15" x 36"	.32	7 1/2 x 3 x 50	30	Bolts T & B	3' x 5'	16"	7.04
Forecastle Bulkhead ... ..		.28	3 1/2 x 3 x 30	28	No bolts.	2' x 5'	15"	7.04
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 ... ..	9" x 30	.28	3 x 3 x 30	24-30	—	2' x 5'	9"	7.04
Deckhouses on Flush Deck Ships ...								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
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Poop Bulkhead ... ..	No opening.
Raised Quarter Deck Bulkhead ... ..	
Bridge, After Bulkhead ... ..	Portable plates with hook bolts passing through plate (10-1" bolts).
Bridge, Forward Bulkhead ... ..	Hinged steel doors, manipulated from outside.
Forecastle Bulkhead ... ..	Hinged steel door, manipulated from both sides.
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 ... ..	
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:—

*A hand steering post in good condition is fitted in the half height poop.*  
*Arrangements for lashings fitted.*

Builder's name and yard number *Kockmans Mtk. Verkestdals A/S.*

Names of sister ships ☒

Owners *Pederni A/S. Walhall, Helsingborg.*

Fee *kr. 170.00*

Received by me



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