

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having POOP & BRIDGE COMBINED  
and Forecastle.

KONGEEN (Type of Superstructures.)

Ship's Name "TINTO" Nationality and Port of Official Number Danish 132215 Gross Tonnage 789 Date of Build 1911-1

Moulded Dimensions: Length 200 Breadth 32.0 Depth 14.5

Moulded displacement at moulded draught = 85 per cent. of moulded depth 1597 tons

Coefficient of fineness for use with Tables .709

Port of Survey London.

Date of Survey 11-5-32

Name of Surveyor H. Y. Bell.

Particulars of Classification +100 A.1.

Depth for Freeboard (D) 14.53

Depth correction

Round of Beam correction

Moulded Breadth (B) 32.00

Standard Round of Beam =  $\frac{B \times 12}{50} = 7.68$

Ship's Round of Beam = 8.0

Difference .32

Restricted to

Correction =  $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right) = .08(1 - \frac{69.54}{200}) = .02$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...	<u>120.5</u>	<u>114.32</u>	<u>7-7½"</u>		<u>114.32</u>
" overhang ...					
Bridge enclosed...					
" overhang aft ...					
" overhang forward	<u>24.26</u>	<u>24.26</u>	<u>7-7½"</u>		<u>24.26</u>
Fore enclosed ...	<u>25.25</u>	<u>.99</u>			<u>.50</u>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward					
Total ...	<u>145.75</u>	<u>139.08</u>			<u>139.08</u>

Standard Height of Superstructure	<u>6.0</u>
" " R.Q.D.	<u>✓</u>
Deduction for complete superstructure	<u>26.0</u>
Percentage covered $\frac{S}{L} =$	<u>72.87</u>
" " $\frac{S_1}{L} =$	<u>69.54</u>
" " $\frac{E}{L} =$	<u>69.54</u>
Percentage from Table, Line A	<u>62.22</u>
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B	
(corrected for absence of forecastle (if required))	
Interpolation for bridge less ...	<u>2L (if required)</u>
Deduction = $26.00 \times 62.22 =$	<u>16.18</u>

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>30.00</u>	1		<u>30.00</u>	<u>39</u>	<u>39.00</u>	1		<u>39.00</u>
¼ L from A.P. ...	<u>13.35</u>	4		<u>53.40</u>	<u>17</u>	<u>17.38</u>	4		<u>69.52</u>
½ L " ...	<u>3.30</u>	2		<u>6.60</u>	<u>4</u>	<u>4.33</u>	2		<u>8.66</u>
Amidships ...		4		<u>0</u>	<u>0</u>	<u>0</u>	4		<u>0</u>
¾ L from F.P. ...	<u>6.60</u>	2		<u>13.20</u>	<u>8</u>	<u>8.66</u>	2		<u>17.32</u>
¾ L " ...	<u>26.70</u>	4		<u>106.80</u>	<u>34</u>	<u>34.75</u>	4		<u>139.00</u>
F.P. ...	<u>60.00</u>	1		<u>60.00</u>	<u>73.75</u>	<u>73.75</u>	1		<u>73.75</u>
Total ...				<u>270.00</u>					<u>347.25</u>

Mean actual sheer aft =	<u>Exact</u>
Mean standard sheer aft	
Mean actual sheer forward =	<u>Exact</u>
Mean standard sheer forward	
Length of enclosed superstructure forward of amidships =	<u>70.25</u>
" " aft of "	<u>50</u>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - S}{2L} \right) = \frac{77.25}{18} \left( \frac{.75 - .3643}{200} \right) = -1.66$

If limited on account of midship superstructure.

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 =	<u>14.53</u>
Summer freeboard =	<u>.62</u>
Moulded draught (d) =	<u>15.91</u>

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 3.48  $\frac{3}{2}$

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

2

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

$T =$

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

=  $\frac{3.48}{40 \times 15.91} =$

3½"

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

Correction for coefficient

Depth Correction ...	<u>1.85</u>
Deduction for superstructures ...	<u>16.18</u>
Sheer correction ...	<u>1.66</u>
Round of Beam correction ...	<u>.02</u>
Correction for Thickness of Deck amidships ...	
Other corrections, scantlings, etc. ...	
	<u>1.85</u>
	<u>17.86</u>
	<u>16.01</u>

Summer Freeboard = 7.58

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

Tropical Fresh Water Line above Centre of Disc ...	<u>7"</u>	Tropical Fresh Water Freeboard ...	<u>0' 7½"</u>
Fresh Water Line " " ...	<u>3½"</u>	Fresh Water " " ...	<u>0' 0½"</u>
Tropical Line " " ...	<u>3½"</u>	Tropical " " ...	<u>0' 4"</u>
Winter Line below " " ...	<u>3½"</u>	Winter " " ...	<u>0' 1"</u>
Winter North Atlantic Line " " ...	<u>5"</u>	Winter North Atlantic " " ...	<u>1' 1"</u>

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MARKING FORM  
29.1-37.Lloyd's Register  
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Tints.

Particulars of fiddley, funnel and ventilator coamings:—

Particulars of Flush Bunker Scuttles:—

home. ✓

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:—

home.

Three ~~Sanitary~~ sanitary discharge pipes (lead) led below freeboard deck & fitted with storm valves. ✓  
One drain pipe (steel) from Pantry led through Bridge space & not fitted with storm valve. ✓

all scuttles in Poop + Forecastle strongly constructed  
and fitted with lined deadlights.

Rails on Forecastle and Bridge & poop decks 3'-3" high with 3 rods & Stanchions spaced 4'-2" apart.

Permanent - Jam way fitted from Bridge to Loo-castle. ✓

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 ... ..	✓								
Raised Quarter Deck Bulkhead ...	✓								
Bridge, After Bulkhead ... ..	✓								
Bridge, Forward Bulkhead ... ..	30	30	6 x 3 x 4 1/2	30"	Brackets Top & bottom	2 - 3'0" x 4'6"	23	7' 7 1/2"	
Forecastle Bulkhead ... ..	30	30	3 1/2 x 3 1/2 x 4.00	27"	✓	5 - 1'11" x 4'6"	18" 6 28"	7' 7 1/2"	
Trunk, Aft ... ..	✓								
Trunk, Forward ... ..	✓								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓								
Exposed Machinery Casings on Super-structure Decks ... ..	30	30	3 x 3 x 38"	29	Riveted to beam at btt.	# 2'0" x 4'8" # 2'0" x 4'7"	17"	✓	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	30	30	3 x 3 x 38"	29	Riveted to beam at top.	1 - 2'6" x 1'8" att.	22"	✓	
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 ... ..	✓								
Bridge, Forward Bulkhead ... ..									
Forecastle Bulkhead ... ..									
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 ...									

*Riveted channels, full height shifting boards 2 1/2". Back stiffening bar fitted.*

*Steel hinged doors operated from both sides.*

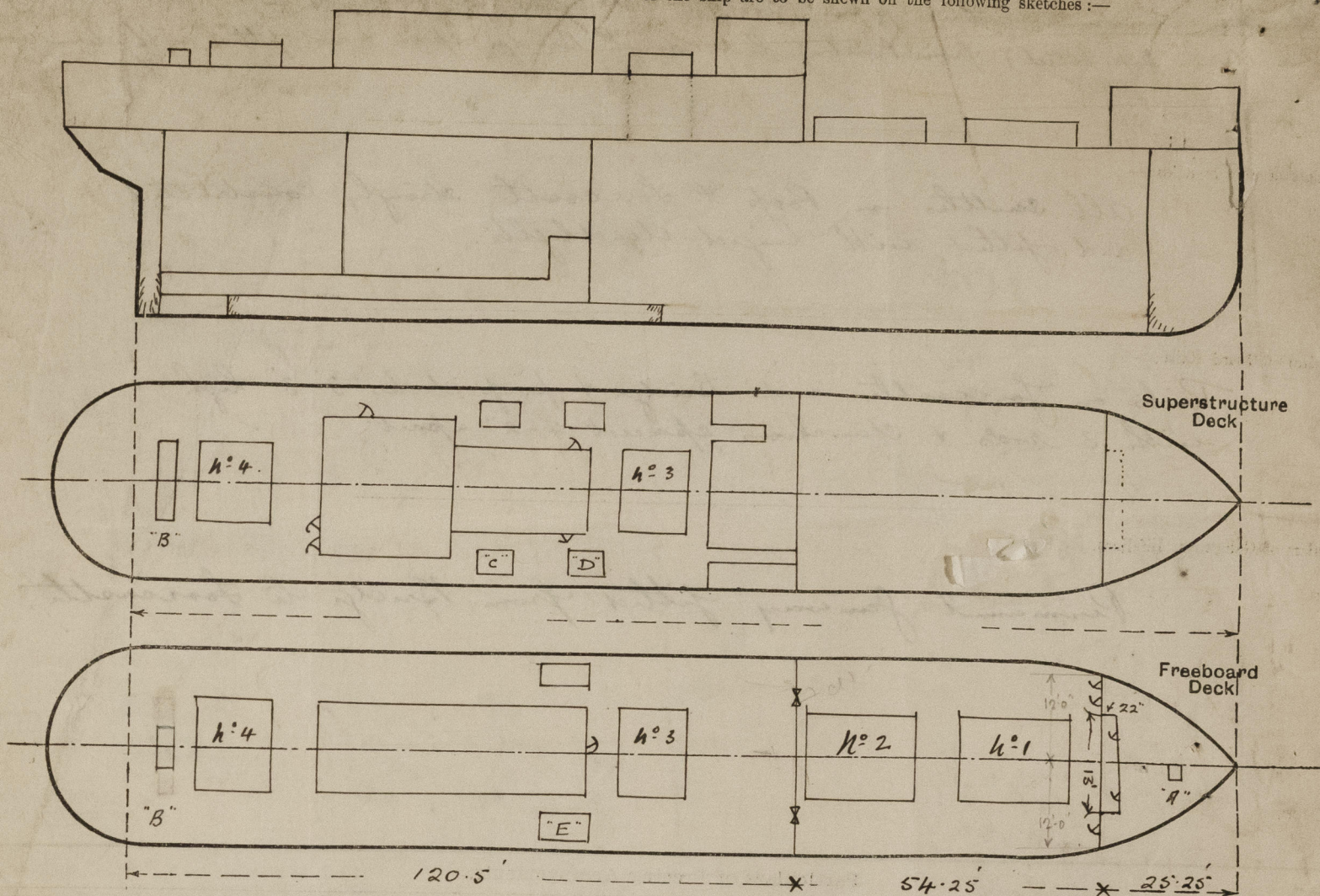
*# 1 - steel hinged doors, operated from both sides. 1 1/4" wood door.*

*Steel hinged door, operated from both sides.*

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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:—



25.25  
1.83  
23.42  
for 120.5  
120.5  
24.4  
25.25  
24.4  
2.99  
1.50

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

Small latches. "A" 15' x 18" wood latch, no coaming to chain locker.  
"B" 12' x 4", coaming 9", on superstructure deck.  
"B" 4' x 4", " 6 1/2", on freeboard deck } to After Hold.  
"C" 5' 7" x 2' 9" " 9" to Bridge space. Hatch 3"  
"D" 3' 11" x 2' 8" " 9" " " " 3"  
"E" 3' 8" x 2' 9" " 9" " Bunkers. " 3"

all latches & tarpaulins in good condition  
Cleats spaced 24" except on "B" latch on  
freeboard deck where spacing is 36"

Builder's name and yard number. Duncan S. B. Co. Ltd. H-218.

Names of sister ships.

Owners. ~~The United Shipping Co. Ltd.~~ E. Hermann's Wilson Line Ltd.

Fee £ 6 : 16 : 0 Received by me

9/13/32



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