

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index No. 27663  
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Port of Survey

(Type of Superstructures.)

Date of Survey 7-11-32

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Name of Surveyor

Moulded Dimensions: Length 478.16 Breadth 63.62 Depth 25.33

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

Coefficient of fineness for use with Tables .706

Particulars of Classification

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Depth ... 25.33

(a) Where D is greater than Table depth (D-Table depth) R =

Moulded Breadth (B) 63.62

Exposed deck ... 0.0

(b) Where D is less than Table depth (if allowed) (Table depth-D) R =  $(31.88-25.37) \times 3 = -19.53$

Standard Round of Beam =  $\frac{B \times 12}{50} = 15.27$

Ship's Round of Beam = 16.00

Difference = .73

Restricted to

Correction =  $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L}) = \frac{.73^2}{4} \times .0068$

Depth for Freeboard (D) = 25.37

If restricted by superstructures 6.51

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
enclosed ...	<u>464.16</u>	<u>464.16</u>	<u>13.0</u>		
overhang ...					
enclosed ...					
overhang ...					
enclosed ...					
overhang aft ...	<u>10.00</u>	<u>7.50</u>	<u>13.0</u>		
overhang forward					
enclosed ...					
overhang ...					
aft ...					
forward ...					
opening aft ...	<u>4.00</u>	<u>3.25</u>	<u>13.0</u>		
" forward					
Total ...	<u>478.16</u>	<u>474.91</u>			<u>474.91</u>

Standard Height of Superstructure 7.5

" " R.Q.D.

Deduction for complete superstructure 4.2

Percentage covered  $\frac{S}{L} = 100$

" "  $\frac{S_1}{L} =$

" "  $\frac{E}{L} = 99.32$

Percentage from Table, Line A. 99.16

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction =  $.99.16 \times 4.2 = -41.64$

### SHEER CORRECTION.

	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
	<u>57.82</u>	<u>1</u>		<u>59.7</u>	<u>125.7</u>	<u>1</u>	<u>125.70</u>
P. ...		<u>4</u>			<u>55.94</u>	<u>4</u>	<u>223.76</u>
		<u>2</u>			<u>13.83</u>	<u>2</u>	<u>27.66</u>
		<u>4</u>			<u>-</u>	<u>4</u>	<u>-</u>
P. ...		<u>2</u>			<u>21.41</u>	<u>2</u>	<u>42.82</u>
		<u>4</u>			<u>86.62</u>	<u>4</u>	<u>346.48</u>
		<u>1</u>		<u>128.7</u>	<u>194.7</u>	<u>1</u>	<u>194.70</u>
Total ...			<u>520.38</u>	<u>+66</u>			<u>961.12</u>

Mean actual sheer aft =  
Mean standard sheer aft =

Mean actual sheer forward =  
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " =

Correction =  $\frac{\text{Difference between sums of products}}{18} \times (1 - \frac{S}{2L}) = \frac{440.74}{18} \times (1 - \frac{.75}{2L}) = 6.12$

limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft. 7.17

Correction for Tropical Freeboard.  
Correction for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 25.37  
Summer freeboard = 2.52  
Moulded draught (d) = 22.85

Correction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches =

Correction for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Δ =

Tons per inch immersion at summer load water line

T =

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

	+	-
Depth Correction		<u>19.53</u>
Deduction for superstructures		<u>41.64</u>
Sheer correction		<u>6.12</u>
Round of Beam correction		<u>-</u>
Correction for Thickness of Deck amidships		<u>-</u>
Other corrections, scantlings, etc.		<u>-</u>
<b>Summer Freeboard</b>	<u>95.75</u>	<u>-67.29</u>
	<u>101.90</u>	
	<u>97.60</u>	

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

Tropical Fresh Water Line above Centre of Disc	...
Fresh Water Line	...
Tropical Line	...
Winter Line below	...
Winter North Atlantic Line	...

Tropical Fresh Water Freeboard	...
Fresh Water	...
Tropical	...
Winter	...
Winter North Atlantic	...

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