

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index. No. **15370**
 (For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Port of Survey Kobe

(Type of Superstructures.)

Date of Survey 10th to 25th July 1933

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

"SHINFU"Singapore1147801451.831901-10Name of Surveyor M. M. ParkerMoulded Dimensions: Length 230.0' Breadth 34.0' Depth 15.83Moulded displacement at moulded draught = 85 per cent. of moulded depth 2279 tonsCoefficient of fineness for use with Tables .758Particulars of Classification +100A1
Shade Deck.

Depth for Freeboard (D)				Depth correction		Round of Beam correction	
Moulded depth	...	...	<u>15.83</u>	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	<u>34'</u>
Stringer plate	...	...	<u>.08</u>	$(15.86 - 15.33) \times 1.769 = +0.94$		Standard Round of Beam = $\frac{B \times 12}{50}$	<u>8.16</u>
Sheathing on exposed deck	...	...		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Ship's Round of Beam	<u>7.50</u>
$T \left(\frac{L-S}{L} \right) =$						Difference	<u>.66</u>
Depth for Freeboard (D) =			<u>15.86</u>	If restricted by superstructures		Restricted to	
						Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	<u>$\frac{.66}{4} \times .3788 = +.06$</u>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<u>35.25</u>	<u>35.25</u>	<u>7.71</u>	✓	<u>35.25</u>
„ overhang ...	<u>35.00</u>	<u>17.50</u>	„	✓	<u>17.50</u>
R.Q.D. enclosed					
„ overhang					
Bridge enclosed <u>open</u>	<u>42.00</u>	<u>21.00</u>	<u>7.71</u>	✓	<u>21.00</u>
„ overhang aft					
„ overhang forward					
Fore enclosed ...	<u>27.50</u>	<u>27.50</u>	<u>7.71</u>	✓	<u>27.50</u>
„ overhang ...	<u>83.25</u>	<u>41.62</u>	„	✓	<u>41.62</u>
Trunk aft					
„ forward					
Tonnage opening aft					
„ „ forward					
Total	<u>223.00</u>	<u>142.87</u>			<u>142.87</u>

Standard Height of Superstructure 6.00

„ „ R.Q.D. ✓

Deduction for complete superstructure 29.0Percentage covered $\frac{S}{L} =$ 96.95„ „ $\frac{S_1}{L} =$ 62.12„ „ $\frac{E}{L} =$ 62.12Percentage from Table, Line A. 49.60

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 49.60

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) 49.60Deduction = $29 \times .4960 = -14.38$

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	<u>33.00</u>	1	<u>33.00</u>	<u>23.60</u>	<u>23.60</u>	1	<u>23.60</u>
$\frac{1}{8}L$ from A.P. ...	<u>14.68</u>	4	<u>58.72</u>	<u>7.50</u>	<u>7.50</u>	4	<u>30.00</u>
$\frac{2}{8}L$ „ ...	<u>3.63</u>	2	<u>7.26</u>	<u>0.80</u>	<u>0.80</u>	2	<u>1.60</u>
Amidships ...	-	4	-	-	-	4	-
$\frac{3}{8}L$ from F.P. ...	<u>7.26</u>	2	<u>14.52</u>	<u>6.20</u>	<u>6.20</u>	2	<u>12.40</u>
$\frac{4}{8}L$ „ ...	<u>29.37</u>	4	<u>117.48</u>	<u>23.40</u>	<u>23.40</u>	4	<u>93.60</u>
F.P. ...	<u>66.00</u>	1	<u>66.00</u>	<u>60.40</u>	<u>60.40</u>	1	<u>60.40</u>
Total			<u>296.98</u>				<u>221.60</u>

Mean actual sheer aft = DeficientMean actual sheer forward = Deficient

Length of enclosed superstructure forward of amidships = ✓

„ „ aft of „ = ✓

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{75.38}{18} \left(.75 - \frac{48.48}{2} \right) = +1.11$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.
 Ft.
 Depth to Freeboard Deck = 15.89
 Summer freeboard = 1.52
 Moulded draught (d) = 14.37

 Deduction for Tropical freeboard and addition for
 Winter freeboard = $\frac{d}{4}$ inches = 3.59 = 3½
 Addition for Winter North Atlantic Freeboard (if required) =

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 = $\frac{\Delta}{40T}$ inches $\frac{d}{4} = 3\frac{1}{2}$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.68 + 7.58}{1.36} = \frac{1.438}{1.36} =$

	+	-
Depth Correction	<u>0.94</u>	-
Deduction for superstructures	-	<u>14.38</u>
Sheer correction	<u>1.11</u>	-
Round of Beam correction	<u>0.06</u>	-
Correction for Thickness of Deck amidships	<u>0.38</u>	-
Other corrections, scantlings, etc.	-	-
	<u>2.49</u>	<u>14.38</u>

Summer Freeboard = 18.24SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Steel, Deck:-
 Tropical Fresh Water Line above Centre of Disc ... 7
 Fresh Water Line „ „ ... 3½
 Tropical Line „ „ ... 3½
 Winter Line below „ „ ... 3½
 Winter North Atlantic Line „ „ ... 5½

 Tropical Fresh Water Freeboard ... 1'-6¼
 Fresh Water „ „ ... 0'-11¼
 Tropical „ „ ... 1'-2¾
 Winter „ „ ... 1'-2¾
 Winter North Atlantic „ „ ... 1'-9¾

 RECEIVED
 21 MAR 1935