

SE II  
ingway, cargo, pt. C.11.

Class I in Poop front  
Class II in Bridge aft B<sup>40</sup>

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index No. \_\_\_\_\_  
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey _____
having <u>Poop, Bridge &amp; F'cle</u>					Date of Survey _____
(Type of Superstructures.)					Name of Surveyor <u>Hou</u>
Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	Particulars of Classification
<u>KIM</u>					
Moulded Dimensions: Length <u>395</u> Breadth <u>54.75</u> Depth <u>32.0</u>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>13021</u> tons					
Coefficient of fineness for use with Tables <u>.775</u> ✓					

<b>Depth for Freeboard (D)</b>	<b>Depth correction</b>	<b>Round of Beam correction</b>
Moulded depth ... .. <u>32.00</u>	(a) Where D is greater than Table depth (D-Table depth) R = <u>(32.05 - 26.33) 3 = + 17.16</u>	Moulded Breadth (B) <u>54.75</u>
Stringer plate ... .. <u>.05</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 13.14$
Sheathing on exposed deck $T \left( \frac{E-S}{L} \right) =$ ✓	If restricted by superstructures ✓	Ship's Round of Beam = <u>12</u>
Depth for Freeboard (D) = <u>32.05</u> ✓		Difference <u>1.14</u>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{1.14}{4} \times .3045 = +.09$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	<u>96.75</u>	<u>96.75</u>	<u>7.50</u>	✓	<u>96.75</u> ✓	Standard Height of Superstructure <u>7.45</u> ✓
„ overhang ...						„ „ R.Q.D. ✓
R.Q.D. enclosed ...						Deduction for complete superstructure <u>41.67</u> ✓
„ overhang ...						Percentage covered $\frac{S}{L} = 40.57\%$ ✓
Bridge enclosed ...	<u>25.00</u>	<u>25.00</u>	<u>7.50</u>	<u>90%</u>	<u>22.50</u> ✓	„ „ $\frac{S_1}{L} = 69.55\%$ ✓
„ overhang aft ...	<u>3.00</u>	<u>2.25</u>			<u>2.25</u> ✓	„ „ $\frac{E}{L} = 51.80\%$ ✓
„ overhang forward ...						Percentage from Table, Line A. ✓
F'cle enclosed ...	<u>35.50</u>	<u>35.50</u>	<u>7.50</u>	✓	<u>35.50</u> ✓	(corrected for absence of forecastle (if required)) ✓
„ overhang ...						Percentage from Table, Line B. <u>TANKER</u> <u>42.98%</u> ✓
Trunk aft ...	✓	<u>60.96</u>	<u>3.25</u>	<u>90% x 3.25 = 2.925</u>	<u>23.93</u> ✓	(corrected for absence of forecastle (if required)) ✓
„ forward ...	✓	<u>54.25</u>	<u>3.25</u>	<u>3.25</u>	<u>23.67</u> ✓	Interpolation for bridge less than 2L (if required) ✓
Tonnage opening aft ...	✓					Deduction = <u>41.67</u> x <u>42.98</u> = <u>- 17.91</u> ✓
„ „ forward						
Total ...	<u>160.25</u>	<u>274.71</u>			<u>204.60</u>	

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	<u>49.50</u> ✓	1			<u>49.00</u> ✓	<u>48.00</u>	1		<u>48.00</u> ✓	Mean actual sheer aft = <u>Def &gt; .75%</u>
1/4 L from A.P. ...		4			<u>21.33</u>	<u>21.33</u>	4		<u>85.32</u> ✓	Mean actual sheer forward = <u>Excess</u>
1/2 L „ ...		2			<u>5.33</u>	<u>5.33</u>	2		<u>10.66</u> ✓	Mean standard sheer forward
Amidships ...		4			✓	✓	4			Length of enclosed superstructure forward of amidships =
1/4 L from F.P. ...		2			<u>11.85</u>	<u>11.85</u>	2		<u>23.70</u> ✓	„ „ aft of „ = } <u>Tanker</u>
1/2 L „ ...		4			<u>47.40</u>	<u>47.40</u>	4		<u>189.60</u> ✓	
F.P. ...		1			<u>96.00</u>	<u>96.00</u>	1		<u>96.00</u> ✓	
Total ...	<u>445.50</u>								<u>453.28</u> ✓	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{7.78}{18} \times \left( .75 - \frac{20.28}{472} \right) = -.24$  ✓

If limited on account of midship superstructure. If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b>	<b>Deduction for Fresh Water.</b>	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)
Depth to Freeboard Deck = <u>32.05</u>	Displacement in salt water at summer load water line	Correction for coefficient $\frac{1.455}{1.36}$
Summer freeboard = <u>5.39</u>	Δ =	Depth Correction ... .. <u>17.16</u> ✓
Moulded draught (d) = <u>26.66</u>	Tons per inch immersion at summer load water line	Deduction for superstructures ... .. <u>17.91</u> ✓
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>6.66 = 6 3/4</u>	T =	Sheer correction ... .. <u>.24</u> ✓
Addition for Winter North Atlantic Freeboard (if required) =	Deduction = $\frac{\Delta}{40 T}$ inches =	Round of Beam correction ... .. <u>.09</u> ✓
		Correction for Thickness of Deck amidships ... .. ✓
		Other corrections, scantlings, etc. ... .. ✓
		Summer Freeboard = <u>64.74</u>

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

Tropical Fresh Water Line above Centre of Disc ... ..	Tropical Fresh Water Freeboard ... ..
Fresh Water Line „ „ ... ..	Fresh Water „ „ ... ..
Tropical Line „ „ ... ..	Tropical „ „ ... ..
Winter Line below „ „ ... .. <u>6 3/4</u>	Winter „ „ ... ..
Winter North Atlantic Line „ „ ... ..	Winter North Atlantic „ „ ... ..