

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 101
(For London Office only).

Ship's Name <i>Proposed Anglo Saxon Tanker</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <i>434.00</i> Breadth <i>62.5</i> Depth <i>24.25</i>					Date of Survey <i>17.10.38</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature
Coefficient of fineness for use with Tables <i>.784</i>					Particulars of Classification

Depth for Freeboard (D). Moulded depth <i>24.25</i> Stringer plate <i>.05</i> Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <i>24.30</i>	Depth correction. (a) Where D is greater than Table depth (D-Table depth) R = (b) Where D is less than Table depth (if allowed) (Table depth-D) R = <i>(28.93 - 24.30) 3 = -13.89</i> <i>4.63</i> If restricted by superstructures <i>13.89 x 1/7.5 = -12.96</i>	Round of Beam correction. Moulded Breadth (B) <i>62.5</i> Standard Round of Beam = $\frac{B \times 12}{50} = 15$ Ship's Round of Beam = <i>15</i> Difference Restricted to Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right) = \text{Nil}$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>107.00</i>	<i>107.00</i>	<i>7.5</i>		<i>107.00</i>
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed... ..					
„ overhang aft					
„ overhang forward					
F'cle enclosed	<i>60.0</i>	<i>60.00</i>	<i>7.5</i>		<i>60.00</i>
„ overhang					
Trunk aft		<i>168.12</i>	<i>7.0</i>	<i>7.0/7.5</i>	<i>156.91</i>
„ forward					
Tonnage opening aft					
„ „ forward					
Total	<i>167.00</i>	<i>335.12</i>			<i>323.91</i>

Standard Height of Superstructure <i>7.50</i>
„ „ R.Q.D. _____
Deduction for complete superstructure <i>42.00</i>
Percentage covered $\frac{S}{L} = 38.48$
„ „ $\frac{S_i}{L} = 77.21$
„ „ $\frac{E}{L} = 74.64$
Percentage from Table, Line A. <i>Tanker</i> <i>68.71</i>
(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 = <i>42 x .6871 = -28.86</i>

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
$\frac{1}{4}$ L from A.P.		4				4	
$\frac{2}{4}$ L „		2				2	
Amidships		4				4	
$\frac{2}{4}$ L from F.P.		2				2	
$\frac{1}{4}$ L „		4				4	
F.P.		1				1	
Total							

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = +7.65$
If limited on account of midship superstructure.

Mean actual sheer aft =
Mean standard sheer aft =

Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
L
„ „ aft of „ =

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 = <i>24.30</i> Summer freeboard = <i>3.52</i> Moulded draught (d) = <i>20.78</i> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>5.19 = 5¼</i> 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 = $\frac{\Delta}{40 T}$ inches =	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.784 + .68}{1.36} = \frac{1.464}{1.36}$ <table><tr><th></th><th>+</th><th>-</th></tr><tr><td>Depth Correction</td><td></td><td><i>12.96</i></td></tr><tr><td>Deduction for superstructures</td><td>-</td><td><i>28.86</i></td></tr><tr><td>Sheer correction</td><td><i>7.65</i></td><td></td></tr><tr><td>Round of Beam correction... ..</td><td>-</td><td>-</td></tr><tr><td>Correction for Thickness of Deck amidships</td><td>-</td><td>-</td></tr><tr><td>Other corrections, scantlings, etc.</td><td>-</td><td>-</td></tr><tr><td></td><td><i>7.65</i></td><td><i>41.82</i></td></tr><tr><td>Summer Freeboard =</td><td></td><td><i>42.20</i></td></tr></table>		+	-	Depth Correction		<i>12.96</i>	Deduction for superstructures	-	<i>28.86</i>	Sheer correction	<i>7.65</i>		Round of Beam correction... ..	-	-	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	-	-		<i>7.65</i>	<i>41.82</i>	Summer Freeboard =		<i>42.20</i>
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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 „ „	<i>5¼</i>
Winter Line below „ „	
Winter North Atlantic Line „ „	

Tropical Fresh Water Freeboard
Fresh Water „ „
Tropical „ „ *3 1/4*
Winter „ „
Winter North Atlantic „ „
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