

*Conversion Tanker to Steamer.
(For proposals I & II)*

For LONDON OFFICE ONLY

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received
Index No.
Govt. Copy
Owners CII

Ship's Name TITANIAN	Official Number	Nationality and Port of Registry <i>Norwegian Bergen</i>	Gross Tonnage	Date of Build <i>1930</i>	Port of Survey
Moulded Dimensions: Length <i>442.0' 3/8"</i> Breadth <i>58.5'</i> Depth <i>33.0'</i>	Freeboard Length	Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) _____ tons	Coefficient of fineness for use with Tables <i>.79</i>	Surveyor's Signature	Particulars of Classification <i>+10041</i>
Date of Survey <i>28th Sept 1935</i>					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth <i>33.0'</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>(33.0 - 29.47) 3.0 = +10.77"</i>	Moulded Breadth (B) <i>58.50'</i>
Stringer plate <i>(.72) .65</i> <i>.06</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{58.50 \times 12}{50} = 14.04$
Wood Sheathing on exposed deck	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = <i>14.50"</i>
$T \left(\frac{L-S}{L} \right) =$		Difference = <i>+46"</i>
Depth for Freeboard (D) = <i>33.06'</i>		Restricted to
		Correction = $\frac{\text{Diff}^\circ}{4} \times \left(1 - \frac{S}{L} \right) = \frac{46}{4} \times .0972 = 1.12$

DEDUCTION FOR SUPERSTRUCTURES.

107 = .0
29 = .0
41 = 6 3/4
162 = 3
102 = 2 1/2
442 = 0

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>107.00</i>	<i>107.00</i>	<i>7.5</i>	<input checked="" type="checkbox"/>	<i>107.00</i>
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	<i>29.00</i>	<i>29.00</i>	<i>7.5</i>	<input checked="" type="checkbox"/>	<i>29.00</i>
" overhang aft					
" overhang forward					
Fore enclosed	<i>41.54</i>	<i>41.54</i>	<i>7.5</i>	<input checked="" type="checkbox"/>	<i>41.54</i>
" overhang					
Trunk aft <i>16.7 2 1/2</i>		<i>135.90</i>	<i>7.5</i>	<input checked="" type="checkbox"/>	<i>135.90</i>
" forward <i>102 2 1/2</i>			<i>7.5</i>	<input checked="" type="checkbox"/>	
Tonnage opening aft		<i>85.60</i>			<i>85.60</i>
" " forward					
Total	<i>177.54</i>	<i>399.04</i>			<i>399.04</i>

Standard Height of Superstructure *7.5'*

" " R.Q.D.

Deduction for complete superstructure *42.0"*

Percentage covered $\frac{S}{L} = \frac{40.17}{L}$

" " $\frac{S_1}{L} = \frac{90.28}{L}$

" " $\frac{E}{L} = \frac{88.05}{L}$

Percentage from Table, Line A. & B. *88.05*

(corrected for absence of fore-castle (if required))

Percentage from Table, Line B. *88.05*

(corrected for absence of fore-castle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = *42.00 x .8805 = -36.97"*

SHEER CORRECTION.

264 = 6

*Sheer aft: 54.20 ✓ 1 54.20 ✓ 56.40 ✓ 1 56.40 ✓
30.08 ✓ 3 90.24 ✓ 15.60 ✓ 3 46.80 ✓
144.44 ✓ 103.20 ✓*

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	<i>54.20</i>	1		<i>56.40</i>		1	<i>56.40</i>
1/2 L from A.P.	<i>24.12</i>	4		<i>15.60</i>		4	<i>62.40</i>
3/4 L "	<i>5.96</i>	2		<i>0</i>		2	<i>0</i>
Amidships	<i>0</i>	4	<i>0</i>	<i>0</i>		4	<i>0</i>
3/4 L from F.P.	<i>11.92</i>	2		<i>14.40</i>		2	<i>28.80</i>
1/2 L "	<i>48.23</i>	4		<i>54.00</i>		4	<i>216.00</i>
F.P.	<i>108.40</i>	1		<i>108.00</i>		1	<i>108.00</i>
Total			<i>48.780</i>				<i>471.60</i>

Mean actual sheer aft = *71.44%* Deficient (Say 75%)

Mean standard sheer aft =

Mean actual sheer forward = *Excess*

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " =

Sheer Deficient

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{16.20}{18} \left(.75 - \frac{.2008}{2} \right) = +.50"$

If limited on account of midship superstructure. *.5492* If limited to maximum allowance of 1 1/2 ins. per 100ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient <i>.79 + .68 = 1.47</i>
Depth to Freeboard Deck = <i>33.06'</i>	$\Delta =$	Depth Correction <i>10.77"</i>
Summer freeboard = <i>5.48'</i>	Tons per inch immersion at summer load water line	Deduction for superstructures <i>36.97"</i>
Moulded draught (d) = <i>27.58'</i>	T =	Sheer correction <i>.50"</i>
Keel allowance =	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction <i>.01"</i>
Extreme draught =		Correction for Thickness of Deck amidships
Deduction for Tropical freeboard and addition for =		Other corrections, scantlings, etc.
Winter freeboard = $\frac{d}{4}$ inches =		
Addition for Winter North Atlantic Freeboard (if required) =		Summer Freeboard = <i>65.75'</i>

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 " "	Winter " "
Winter North Atlantic Line " "	Winter North Atlantic " "



