

PRELIMINARY.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No. 35530
(For London Office only).

Ship's Name STEEL TWIN-SCREW MOTOR OIL TANKER. YARD NO. 207.	Official Number	Nationality and Port of Registry BRITISH.	Gross Tonnage APPROX. 640.	Date of Build (PREPARING PLANS.)	Port of Survey GREENOCK.
Moulded Dimensions: Length 180.0 ft. Breadth 29.5 ft. Depth 11.75 ft.					Date of Survey
Moulded displacement at moulded draught = 85 per cent. of moulded depth 1040 tons (@ 10.0") T.P. = 9.68.					Surveyor's Signature R. M. Scott.
Coefficient of fineness for use with Tables .686					Particulars of Classification 100A1. CARRYING PETROLEUM IN BULK (LONGITUDINAL FRAMING AT BOTTOM IN CENTRE TANKS AND IN TRUNK).
Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth ... 11.75		(a) Where D is greater than Table depth (D - Table depth) R = .03		Moulded Breadth (B) 29.5 ft.	
Stringer plate .38		(b) Where D is less than Table depth (if allowed) (Table depth - D) R = .31		Standard Round of Beam = $B \times \frac{12}{50}$ = 7.08	
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures: $.31 \times \frac{4.0}{6.0} = .21$		Ship's Round of Beam = 7.5	
Depth for Freeboard (D) = 11.78				Difference Excess .42	
				Restricted to Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S}{L}) = \frac{.42}{4} \times (1 - \frac{11.78}{180.0}) = .102$	

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure
Poop enclosed ...						6.00
" overhang ...						R.Q.D. 3.533
R.Q.D. enclosed ...	60.00	60.00	4.0 ft.		60.00	Deduction for complete superstructure 24.00
" overhang ...						Percentage covered $\frac{S}{L} = 45.83\%$
Bridge enclosed ...						" $\frac{S_1}{L} = 77.84\%$
" overhang aft ...						" $\frac{E}{L} = 67.16\%$
" overhang forward ...						Percentage from Table, Line A and B = 59.88
Fore enclosed ...	22.50	22.50	8.0 ft.		22.50	(corrected for absence of forecastle (if required))
" overhang ...						Percentage from Table, Line B.
Trunk aft 57.61	57.61	57.61	4.0 ft.	4.0/6.0	38.41	(corrected for absence of forecastle (if required))
" forward ...						Interpolation for bridge less than 2L (if required)
Tonnage opening aft ...						Deduction = $59.88 \times 24.00 = 14.37$
" forward ...						
Total ...	82.50	140.11			120.91	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	Mean actual sheer aft = Deficient
A.P. ...	28.00	1	✓	28.00	28"	28.00	1	✓	28.00	Mean standard sheer aft
1/4 L from A.P. ...	12.46	4	✓	49.84	11.5"	11.50	4	✓	46.00	Mean actual sheer forward = Deficient
1/2 L " ...	3.08	2	✓	6.16	2"	2.00	2	✓	4.00	Mean standard sheer forward
Amidships ...		4					4			Length of enclosed superstructure forward of amidships = Deficient
3/4 L from F.P. ...	6.16	2	✓	12.32	5"	5.00	2	✓	10.00	" aft of " = Sheers.
1/4 L " ...	24.92	4	✓	99.68	23.5"	23.50	4	✓	94.00	
F.P. ...	56.00	1	✓	56.00	52.5"	52.50	1	✓	52.50	
Total ...				252.00					234.50	
Correction = $\frac{\text{Difference between sums of products}}{18} = \frac{17.5}{18} = .97$										If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

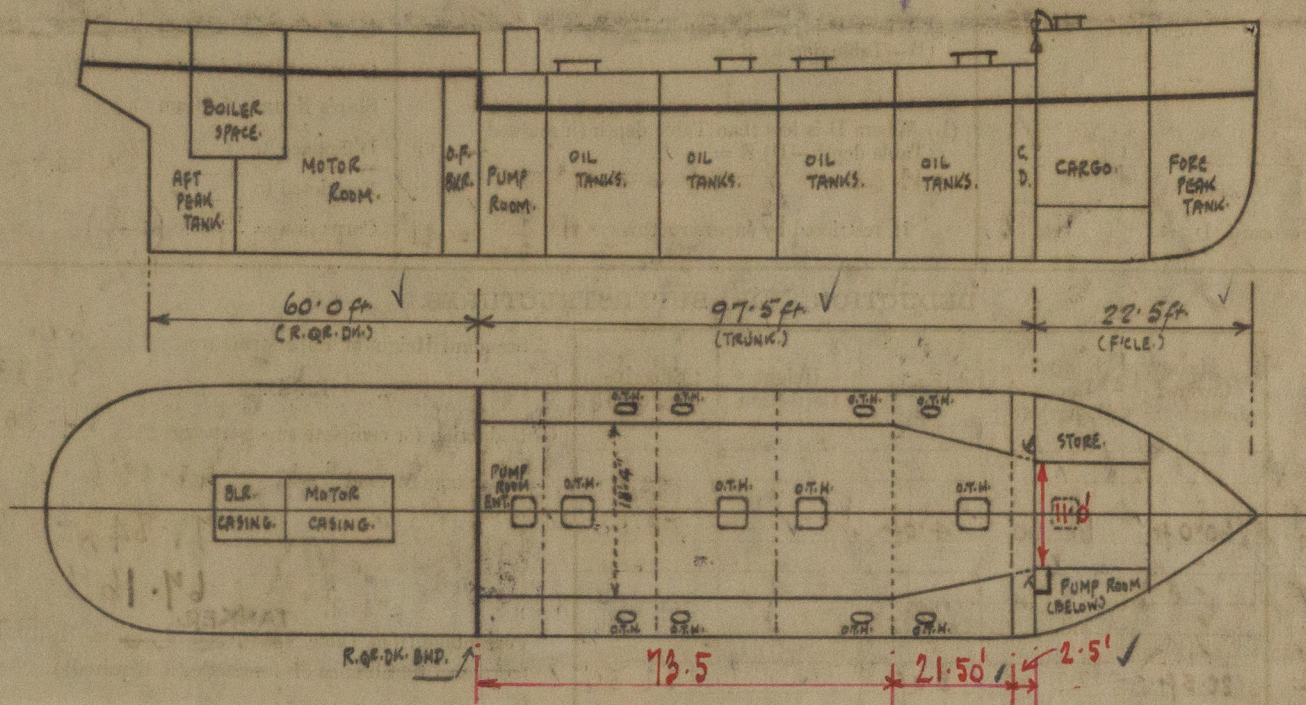
Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	19.80
Addition for Winter and Winter North Atlantic Freeboard.	Displacements in salt water at summer load water line	Correction for coefficient $\frac{626 \times .68}{1.36} = 1.366$	19.89
Depth to Freeboard Deck = 11.78	$\Delta = 11.78 \times 115.4 = 1203$		
Summer freeboard = .48	Tons per inch immersion at summer load water line		
Moulded draught (d) = 11.30	$T = \frac{9.78 \times 9.65}{11.78 \times 9.72} = 9.73$		
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 2.82	Deduction = $\frac{\Delta}{40 T}$ inches		
Addition for Winter North Atlantic Freeboard (if required) = 4 3/4	$\frac{1203}{40 \times 9.73} = 3.09 = 3"$		
		Depth Correction21
		Deduction for superstructures ...	14.37
		Sheer correction51
		Round of Beam correction02
		Correction for Thickness of Deck amidships	
		Other corrections, scantlings, etc.51
		Summer Freeboard = 5.80	

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

Tropical Fresh Water Line above Centre of Disc ...	5 3/4	Tropical Fresh Water Freeboard ...	NIL
Fresh Water Line " " " " " " " "	3"	Fresh Water " " " " " " " "	0' 2 3/4"
Tropical Line " " " " " " " "	2 3/4	Tropical " " " " " " " "	0' 3"
Winter Line below " " " " " " " "	2 3/4	Winter " " " " " " " "	0' 3 1/2"
Winter North Atlantic Line " " " " " " " "	4 3/4	Winter North Atlantic " " " " " " " "	0' 10 1/2"

Yard No 207

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.



CLOSING APPLIANCES.

R. QR. DK. BND. - NO OPENINGS.

FILE BND. - HINGED WOOD & STEEL DOORS, OPERATED FROM BOTH SIDES.

$$\begin{array}{rcl}
 \text{Trunk} & 73.5' \times 18.33 & = 45.68 \\
 & \underline{29.50} & \\
 & 24.0 \times 19.33 & = 11.93 \\
 & \underline{29.5 \times 2} & \\
 & 2.5 \text{ full width} & 57.61 \\
 & & \underline{57.14}
 \end{array}$$

Trade of ship INTERNATIONAL

Names of sister ships ✓

Builder's name and yard number GEORGE BROWN & CO. (MARINE) LTD.

Owners THE SHELL CO. OF EAST AFRICA, LTD.

Fee £ (PRELIMINARY) :



© 2020

Lloyd's Register
Foundation