

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 38684
(For London Office only).N^o 34527

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
M.V. "BRITISH MARSHAL"	180959	British London	8582	9.46	Sunderland
Moulded Dimensions: Length 463.46 Breadth 61.75 Depth 34.08 to centre of rudder stock.					Date of Survey During Construction
Moulded displacement at moulded draught = 85 per cent. of moulded depth 18231 tons					Surveyor's Signature Noel F.H. Duncann
Coefficient of fineness for use with Tables 7696 770					Particulars of Classification +100 A1
					Carrying petroleum in bulk.

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 34.08	(a) Where D is greater than Table depth (D-Table depth) R = (34.14-30.90) 3 = +9.72"	Moulded Breadth (B) 61.75
Stringer plate ... 06	3.24	Standard Round of Beam = $\frac{B \times 12}{50}$ = 14.82
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓	Ship's Round of Beam = 15.5
Depth for Freeboard (D) = 34.14	If restricted by superstructures ✓	Difference .68
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right)$ = $\frac{.68 \times 5828}{4} = -10"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	96.79	8.0	8.0	✓	96.79	Standard Height of Superstructure 7.50'
" overhang ...	1.33	.66			.66	" " R.Q.D. ✓
R.Q.D. enclosed ...						Deduction for complete superstructure 42"
" overhang ...		42.67				Percentage covered $\frac{S}{L} = 42.14$
Bridge enclosed ...	42.67	8.0	8.0	✓	42.67	" " $\frac{S_1}{L} = 41.72$
" overhang aft ...	3.50	2.63			2.63	" " $\frac{E}{L} =$
" overhang forward83	.42	8.0	✓	.42	Percentage from Table, Line A. TANKER 32.72
F'cle enclosed ...	50.18	8.0			50.16	(corrected for absence of forecastle (if required))
" overhang ...		50.16				Percentage from Table, Line B.
Trunk aft ...						(corrected for absence of forecastle (if required))
" forward ...						Interpolation for bridge less than 2L (if required)
Tonnage opening aft ...						Deduction = 42 x .3272 = -13.74"
" " forward						
Total ...	195.30	193.33			193.33	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	Mean actual sheer aft =	Mean standard sheer aft =
A.P. ...	56.35	1		56.35	56	56.00	1		56.00	}	Deficient
1/2 L from A.P. ...	25.08	4		100.32	25	25.00	4		100.00		
3/4 L " ...	6.20	2		12.40	6.25	6.25	2		12.50	Mean actual sheer forward =	Mean standard sheer forward =
Amidships ...	-	4		-	-	-	4		-	}	Length of enclosed superstructure forward of amidships =
3/4 L from F.P. ...	12.40	2		24.80	12.125	12.125	2		24.25		
1/2 L " ...	50.15	4		200.60	50.25	50.25	4		201.00	}	not applicable
F.P. ...	112.69	1		112.69	111.25	111.25	1		111.25		
Total ...				507.16					505.00	Sheer forward:-	

	std.	actual		std.	actual	
	0	0	1	0	0	
	12.40	12.125	3	37.20	36.375	298.375
	50.15	50.25	3	150.45	150.75	300.34
	112.69	111.25	1	112.63	111.25	
				300	300.34	298.375
						= .993

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{2.16}{18} \left(.75 - \frac{2107}{.5393} \right) = + .06"$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 34.14
Summer freeboard = 6.64
Moulded draught (d) = 27.50

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 6.87.63/4

Addition for Winter North Atlantic Freeboard (if required) = 6.87 + 4.63 = 11.50

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 17298$

Tons per inch immersion at summer load water line

T = 58.15

Deduction = $\frac{\Delta}{40T}$ inches

= 7.44"

= 7 1/2"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

770+68 1.45
1.36 1.36

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

78.57

83.77

9.9.46

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British Marshal.

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.

Displacement extreme at Summer Load draft = 17,298 tons

Time for inch = 58.15 tons

Roop equivalent:-

Round of Roop foot = 98.375 - 93.625 = 4.75'

Equiv length = 93.62 + $\frac{2}{3} \times 4.75$ = 96.79'

Equiv Chang 98.12 - 96.79 = 1.33'

Bridge equivalent:-

Equiv length 40.0 + $\frac{2}{3} \times 4$ = 42.67'

" for Chang 43.5 - 42.67 = .83

Towcastle equivalent:-

length forward of passage = 24.21

at sides of passage:-

$\frac{17.17 + 22.98}{2}$ = 20.07

less

3.00

= $\frac{17.07 \times 18}{20.07}$ = 15.31

20.07

Sidehouses:- $\frac{22.98 + 25.87}{2}$

2

= 24.42

less

10.00

$\frac{14.42 \times 13.5}{24.42}$ = 7.97

24.42

Passage (18.00 - 15.31) x .993 = 2.67

2.69

Equivalent enclosed length = 50.16'

Equivalent covered length = 50.18

Trade of ship Tanker

Names of sister ships M.V. "BRITISH MAJOR" "BRITISH MARQUIS"

Builder's name and yard number Wm Duffell & Sons Ltd. Yard No 437.

Owners The British Tanker Co Ltd

Fee £ 19 0 0

Will be charged on L.C.



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Foundation