

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name "MYTONGATE"	Official Number 165696	Nationality and Port of Registry British Hull	Gross Tonnage 410.37	Date of Build 1938	Port of Survey NEWCASTLE.
Moulded Dimensions: Length 150'-0" Breadth 26'-0" Depth 10'-0" TO MAIN DECK					Date of Survey During construction
Moulded displacement at moulded draught = 85 per cent. of moulded depth					Surveyor's Signature W.E. Marlborough
Coefficient of fineness for use with Tables .729 -					Particulars of Classification + 100 A.1

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 10'-0"	(a) Where D is greater than Table depth (D - Table depth) R = (10.03 - 10.00) 1.154 = .03"	Moulded Breadth (B) 26'-0"
Stringer plate03	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = .03	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{26 \times 12}{50} = 6.24"$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ NONE	If restricted by superstructures ✓	Ship's Round of Beam = 6.2"
Depth for Freeboard (D) = 10.03		Difference Excess = .26"
		Restricted to
		Correction = $\frac{\text{Diff.}}{4} \times (1 - \frac{S_1}{L}) = \frac{.26}{4} \times (.2917) = -.02"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	26.75	26.75	6'-9" 2 1/2" SH.	✓	26.75
.. overhang ...					
R.Q.D. enclosed ...	10.5-66.5	66.50	6'-9" 3.33	✓	66.50
.. overhang ...					
Bridge enclosed...					
.. overhang aft ...					
.. overhang forward					
Fore enclosed ...	13.00	13.00	6.00	✓	13.00
.. overhang ...					
Trunk aft ...					
.. forward ...					
Tonnage opening aft ...					
.. forward					
Total ...	106.25	106.25			106.25

Standard Height of Superstructure	6.00'
" " R.Q.D.	3.333
Deduction for complete superstructure	21.00
Percentage covered $\frac{S}{L} =$	70.83
" " $\frac{S_1}{L} =$	70.83
" " $\frac{E}{L} =$	70.83
Percentage from Table, Line A.	64.02
(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 =	21.00 x 64.02 = 13.44

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. ...	25.00	1		25.00	2'-1"	25.00	1		25.00	Deficient > 75% Standard.	
1/4 L from A.P. ...	11.125	4		44.50	11"	11.00	4		44.00		
1/2 L " ...	2.75	2		5.50	2 1/2"	2.50	2		5.00	Mean actual sheer forward	Mean standard sheer forward
Amidships ...	-	4		-	NIL	-	4		-	Excess.	
3/4 L from F.P. ...	5.50	2		11.00	5 1/2"	5.50	2		11.00		
1/4 L " ...	22.25	4		89.00	1'-10 1/2"	22.50	4		90.00	Length of enclosed superstructure forward of amidships =	
F.P. ...	50.00	1		50.00	4'-2"	50.00	1		50.00	" " aft of " =	
Total ...				225.00					225.00	No sheer correction	

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

If limited on account of midship superstructure. ✓

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)	15.50"
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.729 + .68}{1.36} = \frac{1.409}{1.36}$	16.06"
RAISED QUARTER	$\Delta = 845$	Depth Correction03	
Depth to Freeboard Deck = 13.36	Tons per inch immersion at summer load water line	Deduction for superstructures ... 13.44	
Summer freeboard = 3.546	$T = 8.22$	Sheer correction02	
Moulded draught (d) = 9.820	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction ... 40.00	
Deduction for Tropical freeboard and addition for	$= 2.57 = 2 1/2"$	Correction for Thickness of Deck amidships ... 40.03	
Winter freeboard = $\frac{d}{4}$ inches = 2.46 = 2 1/2"		Other corrections, scantlings, etc. ...	
Addition for Winter North Atlantic Freeboard (if required) = 4 1/2"		Summer Freeboard = 42.63	

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

Tropical Fresh Water Line above Centre of Disc	3 1/4	3 1/4	Tropical Fresh Water Freeboard	3 1/2	3 1/2
Fresh Water Line	2 1/2	2 1/2	Fresh Water	3 1/4	3 1/4
Tropical Line	3 1/4	3 1/4	Tropical	3 1/2	3 1/2
Winter Line below	2 1/2	2 1/2	Winter	3 1/4	3 1/4
Winter North Atlantic Line	4 1/2	4 1/2	Winter North Atlantic	3 1/4	3 1/4

10 DEC 1937

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.

Trade of ship

Names of sister ships

Hullgate.

Builder's name and yard number

Clelands (Successors) Ltd. No 36

Owners

Fee £



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Lloyd's Register
Foundation

Mytongate.