

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>"MUNSTER"</b>	Official Number <b>166226</b>	Nationality and Port of Registry <b>BRITISH. LIVERPOOL.</b>	Gross Tonnage <b>4305.35 (15/9/35) #302</b>	Date of Build <b>1938</b>	Port of Survey <b>BELFAST.</b>
Moulded Dimensions: Length <b>345'0"</b> Breadth <b>50'0"</b> Depth <b>19'0"</b>					Date of Survey <b>DURING CONSTRUCTION.</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>(16.15') 5034.</b> tons					Surveyor's Signature <b>J.B. Cocho</b>
Coefficient of fineness for use with Tables <b>.632. (-68 lowest allowed).</b>					Particulars of Classification <b>+100A1 with fhd. "Irish Channel Service" (Class Contemplated)</b>

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth	19.00	(a) Where D is greater than Table depth (D—Table depth) R =		Moulded Breadth (B)	= 50.0'
Stringer plate	.04			Standard Round of Beam = $\frac{B \times 12}{50}$	= 12.0"
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth—D) R =		Ship's Round of Beam	= 4"
$T \left( \frac{L-S}{L} \right) = .25 \times \frac{20}{345}$	.01	<b>(23.00—19.05) 2.654 = - 10.48</b>		Difference	deficient = 8.0"
Depth for Freeboard (D) =	19.05	If restricted by superstructures <b>yes. nil.</b>		Restricted to	
				Correction = $\frac{\text{Diff}^o}{4} \times \left(1 - \frac{S_1}{L}\right)$	= $\frac{8}{4} \times .1512 = +.30$

## DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed <i>Equine</i>	56.77	56.77	8'0" + 2 1/2"	56.77	
" overhang	2.23	1.11	Peak where exposed.	1.11	
R.Q.D. enclosed	-	-	-	-	
" overhang	-	-	-	-	
Bridge enclosed	180.00	180.00	8'0" + 2 1/2" Peak	180.00	
" overhang aft	4.00	3.00	aft 3" PP. Peak	3.00	
" overhang forward	2.00	1.00	where exposed	1.00	
Fore enclosed	40.00	40.00	8'0" + 3" PP.	40.00	
" overhang	-	-	where exposed.	-	
Trunk off	-	-	-	-	
Open Bridge forward	22.00	11.00	8'0" + 3" PP.	11.00	
Tonnage opening aft	-	-	-	-	
" forward	-	-	-	-	
Total	307.00	292.88		292.88	

  

Standard Height of Superstructure	6.95'
" " R.Q.D.	✓
Deduction for complete superstructure	38.33'
Percentage covered $\frac{S}{L} =$	88.98
" " $\frac{S_1}{L} =$	84.88
" " $\frac{E}{L} =$	84.88
Percentage from Table, Line A.	81.35
(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 =	38.33 × .8135 = 31.18"

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	44.50	1		44.50	41.81	41.81	1		41.81	
1/2 L from A.P.	19.81	4		79.24	17.75	17.75	4		71.00	
3/4 L	4.89	2		9.78	3.94	3.94	2		7.88	
Amidships	-	4		-	-	-	4		-	
3/4 L from F.P.	9.49	2		19.58	10.68	10.68	2		21.36	
1/2 L	39.61	4		158.44	38.44	38.44	4		153.76	
F.P.	89.00	1		89.00	83.81	83.81	1		83.81	
Total				400.54					379.62	

  

Mean actual sheer aft	=	Deficient
Mean standard sheer aft	=	
Mean actual sheer forward	=	Deficient
Mean standard sheer forward	=	
Length of enclosed superstructure forward of amidships	=	} Deficient sheers.
" " aft of "	=	

  

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{20.92}{18} (.75 - .4449) = +.35"$   
 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)	55.10
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	55.10
Depth to Freeboard Deck = 19.04	Δ = 4692	Depth Correction	-
Summer freeboard = 3.98	Tons per inch immersion at summer load water line	Deduction for superstructures	- 31.18
Moulded draught (d) = 15.06	T = 32.12	Sheer correction	.35
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3.76 = 3 3/4"	Deduction = $\frac{\Delta}{40T}$ inches = 3.65" = 3 3/4"	Round of Beam correction	.30
Addition for Winter North Atlantic Freeboard (if required) = ✓	Full At. 16'0" 5019 33.02	Correction for Thickness of Deck amidships	- .12
	14'0" 4254 31.15	Other corrections, scantlings, etc. AND TO CORRESPOND TO AN APPROVED WINTER MOULDED DRAUGHT OF 14'9"	23.30
		Summer Freeboard = 47.75	23.95 31.30 - 4.35

## 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"
Fresh Water Line	✓	3 3/4"
Tropical Line	✓	3 3/4"
Winter Line below	✓	3 3/4"
Winter North Atlantic Line	✓	3 3/4"

Tropical Fresh Water Freeboard	3 1/4"
Fresh Water	3 3/4"
Tropical	✓
Winter	4 3/4"
Winter North Atlantic	✓

14 JAN 1938



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 *Irish Channel Service*

Names of sister ships *"Leinster"*

Builder's name and yard number *Harland & Wolff's N° 996*

Owners *Coast Lines Ltd.*

Fee £



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Lloyd's Register  
Foundation

*Munster.*