

Lloyd's Register of Shipping.

Index No. 36895
(For London Office only).

SURVEYS FOR FREEBOARD.

COSMO TRADER

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>EX</i> CARLTON	Official Number 165841	Nationality and Port of Registry <i>British</i> Hong Kong <i>Newcastle</i>	Gross Tonnage 7210	Date of Build 1942.	Port of Survey <i>Burrisland.</i> (LEITH.)
Moulded Dimensions: Length 412.0 Breadth 57.66 Depth 37.83 - <i>2nd DECK.</i> <i>412.50 to centre of upper stack.</i> 2nd DECK 24.44 - 12415 TONS.					Date of Survey <i>While building.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth 11.05 32.16 = 16848 tons					Surveyor's Signature <i>Robert Wood</i>
Coefficient of fineness for use with Tables 744 <i>24.44</i> 771 <i>32.16</i>					Particulars of Classification + 100 A.I. <i>with freeboard corresponding to a</i> <i>mld draught of 27'1"</i>

Depth for Freeboard (D).		Depth correction.	Round of Beam correction.
Moulded depth ...	11.05 ... 37.83.	(a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(37.89 - 27.50) \times 3 = +31.17"$	Moulded Breadth (B) 57.66
Stringer plate ...	7.2 ... 057.	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 13.84
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	06	If restricted by superstructures	Ship's Round of Beam = 13.84
Depth for Freeboard (D) =	37.89		Difference <i>deficient</i> 96" \rightarrow 12 3/8 11.05.
			Restricted to
			Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) =$ 96 \div 4 = +24"

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
.. overhang ...					
R.Q.D. enclosed ...					
.. overhang ...					
Bridge enclosed...					
.. overhang aft ...					
.. overhang forward					
F'ele enclosed ...					
.. overhang ...					
Trunk aft ...					
.. forward ...					
Tonnage opening aft ...					
.. forward					
Total ...					

Flush deck

Standard Height of Superstructure	
.. R.Q.D.	<input checked="" type="checkbox"/>
Deduction for complete superstructure	
Percentage covered $\frac{S}{L} =$	
.. $\frac{S_1}{L} =$	Nil.
.. $\frac{E}{L} =$	
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	<input checked="" type="checkbox"/>
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	
Deduction =	Nil

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. ...	51.25	1		51.25	78	78	1		78.00		
$\frac{1}{8}L$ from A.P. ...	12.805	4		91.22	34 5/8	34.625	4		138.50		
$\frac{3}{8}L$..	5.645	2		11.29	8 1/4	8.25	2		16.50		
Amidships ...	-	4		-	-	-	4		-		
$\frac{5}{8}L$ from F.P. ...	11.275	2		22.55	11 1/4	11.25	2		22.50		
$\frac{7}{8}L$..	45.61	4		182.44	46 3/8	46.375	4		185.50		
F.P. ...	102.50	1		102.50	105	105.00	1		105.00		
Total ...				461.25					546.00		

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75 - S}{2L} \right) =$ **84.75** \div **18** \times **75** = **-3.53"**

If limited on account of midship superstructure. **No, flush deck.**

Mean actual sheer aft = **78.00**
Mean standard sheer aft = **78.00**
Mean actual sheer forward = **138.50**
Mean standard sheer forward = **138.50**
Length of enclosed superstructure forward of amidships = **1.**
.. aft of .. = **Flush deck.**

T.P.I. @ 28.75 M² = 47.95
T.P.I. @ 32.00 M² = 48.72
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)	81.59
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	87.05
Depth to Freeboard Deck = 37.89	$\Delta =$ 14016 @ 27.26		
Summer freeboard = 10.81	Tons per inch immersion at summer load water line	Depth Correction ...	31.17
Moulded draught (d) = 27.08	T = 47.58	Deduction for superstructures ...	3.53
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.77 = 6 3/4"	Deduction = $\frac{\Delta}{40 T}$ inches = 7.364	Sheer correction ...	24
Addition for Winter North Atlantic Freeboard (if required) =	= 7 1/4"	Round of Beam correction ...	16.7.42
		Correction for Thickness of Deck amidships ...	14.82
		Other corrections, scantlings, etc. to correct to a summer loaded draught of 27'-1"	46.23
		Summer Freeboard =	129.75

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

Tropical Fresh Water Line above Centre of Disc ...	14"	Tropical Fresh Water Freeboard ...	10' - 9 3/4"
Fresh Water Line ..	7 1/4"	Fresh Water ..	9' - 7 3/4"
Tropical Line ..	6 3/4"	Tropical ..	10' - 2 1/2"
Winter Line below ..	6 3/4"	Winter ..	10' - 3"
Winter North Atlantic Line ..	7"	Winter North Atlantic ..	11' - 4 1/2"

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 *General Cargo.*

Names of sister ships *"INGLETON" Burntisland Yard N° 255.*

Builder's name and yard number *The Burntisland S.B. Co. Ltd - Yard N° 263.*

Owners *R. Chapman & Son, Maritime Buildings, Newcastle/Tyne.*

Fee £ *Charged with 1st entry.*



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