

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name Doxford's No 640	Official Number	Nationality and Port of Registry	Gross Tonnage 37.58	Date of Build
Port of Survey				
Date of Survey 31.8.39				
Moulded Dimensions: Length 422.21 Breadth 57.46 Depth 29.08				
Moulded displacement at moulded draught = 85 per cent. of moulded depth 12887 tons				
Coefficient of fineness for use with Tables .752				
Surveyor's Signature				
Particulars of Classification				

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth 29.08	(a) Where D is greater than Table depth (D-Table depth) R = (29.12-28.14) 3 = +2.94	Moulded Breadth (B) 57.46
Stringer plate04	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 13.79
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ NIL	If restricted by superstructures	Ship's Round of Beam = 14.50
Depth for Freeboard (D) = 29.12		Difference .71
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) =$ NIL

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	35.46	35.46	8.50		35.46	Standard Height of Superstructure 7.5
.. overhang	1.50	.75			.75 R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure 42.00
.. overhang						Percentage covered $\frac{S}{L} =$ 100
Bridge enclosed	378.88	378.88	8.50		378.88 $\frac{S_1}{L} =$ 99.30
.. overhang aft	1.50	1.12			1.12 $\frac{E}{L} =$ 99.30
.. overhang forward						Percentage from Table, Line A. 99.14
F'cle enclosed						(corrected for absence of forecastle (if required))
.. overhang						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	4.87	3.00			3.00	Deduction = 42 x .9914 = 41.64
.. .. forward						
Total	422.21	419.21			419.21	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	52.22	1			58.20	70.20	1			Mean actual sheer aft =
$\frac{1}{4}L$ from A.P.		4					4			Mean standard sheer aft =
$\frac{2}{4}L$		2					2			Mean actual sheer forward =
Amidships		4					4			Mean standard sheer forward =
$\frac{2}{4}L$ from F.P.		2					2			Length of enclosed superstructure forward of amidships =
$\frac{1}{4}L$		4					4		 aft of .. =
F.P.	194.44	1			114.00	126.00	1			
Total				469.93					588.56	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ **-1.65**

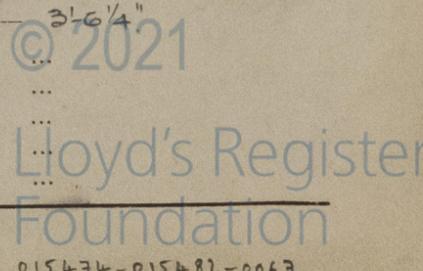
If limited on account of midship superstructure.

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

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p style="text-align: center;">Ft.</p> <p>Depth to Freeboard Deck = 29.12</p> <p>Summer freeboard = 3.52</p> <p>Moulded draught (d) = 25.60</p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.4 = 6 1/2"</p> <p>Addition for Winter North Atlantic Freeboard (if required) =</p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta =$</p> <p>Tons per inch immersion at summer load water line</p> <p>$T =$</p> <p>Deduction = $\frac{\Delta}{40T}$ inches =</p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required) 78.43</p> <p>Correction for coefficient $\frac{.752 + .68}{1.36}$ 32.64</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;"></th> <th style="width: 10%;">+</th> <th style="width: 10%;">-</th> <th style="width: 10%;"></th> </tr> <tr> <td>Depth Correction</td> <td>2.94</td> <td></td> <td></td> </tr> <tr> <td>Deduction for superstructures</td> <td></td> <td>41.64</td> <td></td> </tr> <tr> <td>Sheer correction</td> <td></td> <td>1.65</td> <td></td> </tr> <tr> <td>Round of Beam correction</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>2.94</td> <td>43.29</td> <td>40.35</td> </tr> </table> <p style="text-align: right;">Summer Freeboard = 42.29</p>		+	-		Depth Correction	2.94			Deduction for superstructures		41.64		Sheer correction		1.65		Round of Beam correction				Correction for Thickness of Deck amidships				Other corrections, scantlings, etc.					2.94	43.29	40.35
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: 3' 6 1/4"

Tropical Fresh Water Line above Centre of Disc	Tropical Fresh Water Freeboard
Fresh Water Line	Fresh Water
Tropical Line	Tropical
Winter Line below	Winter
Winter North Atlantic Line	Winter North Atlantic



SUMMER MOULDED DRAFT 25.60!