

Basic Computation for scantling purposes  
as F.S. Ship. (F.D.)

Index No. 36834  
(For London Office only).

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Greenock Dry D. Co. Ltd</i> <i>Yard No. 454</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <i>470.9</i> Breadth <i>65.5</i> Depth <i>assumed 40.38</i> ✓ <i>Actual of rudder stock</i> ✓ (40.75 actual)					Date of Survey <i>20-4-42</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature
Coefficient of fineness for use with Tables <i>✓-696 (estimated)</i>					Particulars of Classification <i>100 HT with plates</i> <i>(Compl. later)</i>

<p>Depth for Freeboard (D).</p> <p>Moulded depth ... .. ✓ <i>40.38</i></p> <p>Stringer plate ... .. ✓ <i>.07</i></p> <p>Sheathing on exposed deck <math>T \left( \frac{L-S}{L} \right) =</math></p> <p>Depth for Freeboard (D) = ✓ <i>40.45</i></p>	<p>Depth correction.</p> <p>(a) Where D is greater than Table depth (D-Table depth) R = ✓ <i>(40.45 - 31.39) 3 = + 27.18</i> <i>9.06</i></p> <p>(b) Where D is less than Table depth (if allowed) (Table depth - D) R = -</p> <p>If restricted by superstructures -</p>	<p>Round of Beam correction.</p> <p>Moulded Breadth (B)</p> <p>Standard Round of Beam = <math>\frac{B \times 12}{50} =</math></p> <p>Ship's Round of Beam =</p> <p>Difference <i>assumed standard</i> ✓</p> <p>Restricted to</p> <p>Correction = <math>\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) =</math> <i>Nil</i> ✓</p>
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### DEDUCTION FOR SUPERSTRUCTURES.

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

*F.D.*

Standard Height of Superstructure	_____
„ „ R.Q.D.	_____
Deduction for complete superstructure	_____
Percentage covered $\frac{S}{L} =$	_____
„ „ $\frac{S_1}{L} =$	_____
„ „ $\frac{E}{L} =$	_____
Percentage from Table, Line A. (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 =	<i>Nil</i> ✓

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..		1					1		
$\frac{1}{8}L$ from A.P. ... ..		4					4		
$\frac{2}{8}L$ „ ... ..		2					2		
Amidships ... ..		4					4		
$\frac{2}{8}L$ from F.P. ... ..		2					2		
$\frac{1}{8}L$ „ ... ..		4					4		
F.P. ... ..		1					1		
Total ... ..									

*assumed standard*

Mean actual sheer aft = \_\_\_\_\_  
Mean standard sheer aft = \_\_\_\_\_

Mean actual sheer forward = \_\_\_\_\_  
Mean standard sheer forward = \_\_\_\_\_

Length of enclosed superstructure forward of amidships = \_\_\_\_\_  
L

„ „ aft of „ = \_\_\_\_\_

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( 75 - \frac{S}{2L} \right) =$  *Nil* ✓  
If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = <i>40.45</i> Ft.</p> <p>Summer freeboard = <i>10.15</i></p> <p>Moulded draught (d) = <i>30.30</i> ✓</p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = <math>\frac{d}{4}</math> inches = _____</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>Δ = _____</p> <p>Tons per inch immersion at summer load water line</p> <p>T = _____</p> <p>Deduction = <math>\frac{\Delta}{40T}</math> inches = _____</p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient <math>\frac{.696 + .08}{1.36} = \frac{.776}{1.36} =</math> ✓</p> <table border="1"> <tr><td></td><td>+</td><td>-</td></tr> <tr><td>Depth Correction ... ..</td><td>✓ <i>27.18</i></td><td>-</td></tr> <tr><td>Deduction for superstructures ... ..</td><td>-</td><td>-</td></tr> <tr><td>Sheer correction ... ..</td><td>-</td><td>-</td></tr> <tr><td>Round of Beam correction ... ..</td><td>-</td><td>-</td></tr> <tr><td>Correction for Thickness of Deck amidships ... ..</td><td>-</td><td>-</td></tr> <tr><td>Other corrections, scantlings, etc. ... ..</td><td>✓ <i>27.18</i></td><td>-</td></tr> <tr><td>Summer Freeboard =</td><td><i>121.84</i></td><td></td></tr> </table>		+	-	Depth Correction ... ..	✓ <i>27.18</i>	-	Deduction for superstructures ... ..	-	-	Sheer correction ... ..	-	-	Round of Beam correction ... ..	-	-	Correction for Thickness of Deck amidships ... ..	-	-	Other corrections, scantlings, etc. ... ..	✓ <i>27.18</i>	-	Summer Freeboard =	<i>121.84</i>		<p><i>93.57</i> ✓</p> <p><i>94.66</i> ✓</p>
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### SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

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 „ „ ... ..	...

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