

Preliminary

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 35180
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey _____	
having <u>a complete superstructure with a tonnage opening</u>					Date of Survey <u>27.1.37</u>	
(Type of Superstructures.)					Name of Surveyor _____	
Ship's Name <u>Odense Steamship</u> <u>75/76</u>	Nationality and Port of Registry _____	Official Number _____	Gross Tonnage _____	Date of Build _____	Particulars of Classification <u>100A1 with flw.</u> <u>(Contemplated)</u>	
Moulded Dimensions: Length <u>425.0</u> Breadth <u>57.5</u> Depth <u>28.62</u>						
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>12230</u> tons						
Coefficient of fineness for use with Tables <u>.72</u>						

Depth for Freeboard (D) Moulded depth ... <u>28.62</u> Stringer plate <u>1.2 m/m</u> ... <u>.04</u> Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ <u>✓</u> Depth for Freeboard (D) = <u>28.66</u>	Depth correction (a) Where D is greater than Table depth (D - Table depth) R = <u>✓</u> <u>(28.66 - 28.33) × 3 = +.99</u> (b) Where D is less than Table depth (if allowed) (Table depth - D) R = <u>✓</u> If restricted by superstructures <u>✓</u>	Round of Beam correction Moulded Breadth (B) <u>57.5</u> Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>13.80</u> Ship's Round of Beam = <u>2307 = 9.06</u> Difference <u>4.74</u> Restricted to <u>✓</u> Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{4.74^2}{4} \times .0058 =$ <u>4 = +.01</u>
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<u>✓ 32.96</u>	<u>✓ 32.96</u>	<u>9.0</u>	<u>-</u>	<u>✓ 32.96</u>
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Fore enclosed ...	<u>✓ 387.21</u>	<u>✓ 387.21</u>	<u>9.0</u>	<u>-</u>	<u>✓ 387.21</u>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...	<u>✓ 4.83</u>	<u>✓ 2.41 = 1/2 Diff</u>			<u>2.41</u>
" forward ...					
Total ...	<u>✓ 425.00</u>	<u>✓ 422.58</u>			<u>✓ 422.58</u>

Standard Height of Superstructure 7.5 ✓

 " R.Q.D. ✓

Deduction for complete superstructure 42 ✓

Percentage covered $\frac{S}{L} =$ 100.00 ✓

 " $\frac{S_1}{L} =$ 99.42 ✓

 " $\frac{E}{L} =$ 99.42 ✓

Percentage from Table, Line A. 99.28 ✓
(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 = 42 × .9928 = 41.70 ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ...	<u>✓ 52.50</u>	1	<u>52.50</u>	<u>✓ 52.36</u>	<u>70.36</u>	1	<u>✓ 70.36</u>
1/4 L from A.P. ...	<u>✓ 23.36</u>	4	<u>✓ 93.44</u>	<u>✓ 23.31</u>	<u>✓ 31.32</u>	4	<u>✓ 125.28</u>
1/2 L " ...	<u>✓ 5.775</u>	2	<u>✓ 11.55</u>	<u>✓ 5.83</u>	<u>✓ 7.83</u>	2	<u>✓ 15.66</u>
Amidships ...	<u>-</u>	4	<u>-</u>	<u>-</u>	<u>-</u>	4	<u>-</u>
3/4 L from F.P. ...	<u>✓ 11.55</u>	2	<u>✓ 23.10</u>	<u>✓ 11.65</u>	<u>✓ 14.30</u>	2	<u>✓ 29.00</u>
1/4 L " ...	<u>✓ 46.72</u>	4	<u>✓ 186.88</u>	<u>✓ 46.61</u>	<u>✓ 57.84</u>	4	<u>✓ 232.12</u>
F.P. ...	<u>105.00</u>	1	<u>✓ 105.00</u>	<u>✓ 104.72</u>	<u>✓ 130.40</u>	1	<u>✓ 130.40</u>
Total ...			<u>✓ 472.47</u>				<u>✓ 602.82</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{130.35}{18} \times .25 =$ -1.81 ✓

If limited on account of midship superstructure. ✓

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

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <u>28.66</u> Summer freeboard = <u>✓ 3.27</u> Moulded draught (d) = <u>25.39</u> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>6.35 = 6 1/4</u> Addition for Winter North Atlantic Freeboard (if required) = <u>✓</u>	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line T = Deduction = $\frac{\Delta}{40 T}$ inches <u>1 1/4 = 6 1/4</u> ✓	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.72 + .68}{1.36} = \frac{1.40}{1.36} =$ <u>✓</u> <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th></th><th>+</th><th>-</th></tr></thead><tbody><tr><td>Depth Correction ...</td><td><u>✓ .99</u></td><td><u>-</u></td></tr><tr><td>Deduction for superstructures ...</td><td><u>-</u></td><td><u>41.70</u> ✓</td></tr><tr><td>Sheer correction ...</td><td><u>-</u></td><td><u>1.81</u> ✓</td></tr><tr><td>Round of Beam correction ...</td><td><u>.01</u> ✓</td><td><u>-</u></td></tr><tr><td>Correction for Thickness of Deck amidships ...</td><td><u>-</u></td><td><u>-</u></td></tr><tr><td>Other corrections, scantlings, etc. ...</td><td><u>-</u></td><td><u>-</u></td></tr><tr><td>Summer Freeboard</td><td><u>43.51</u></td><td><u>- 42.51</u> ✓</td></tr></tbody></table> <p style="text-align: right;"><u>87.8</u> <u>28.1.37</u></p>		+	-	Depth Correction ...	<u>✓ .99</u>	<u>-</u>	Deduction for superstructures ...	<u>-</u>	<u>41.70</u> ✓	Sheer correction ...	<u>-</u>	<u>1.81</u> ✓	Round of Beam correction ...	<u>.01</u> ✓	<u>-</u>	Correction for Thickness of Deck amidships ...	<u>-</u>	<u>-</u>	Other corrections, scantlings, etc. ...	<u>-</u>	<u>-</u>	Summer Freeboard	<u>43.51</u>	<u>- 42.51</u> ✓
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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 ...	<u>12 1/2</u> ✓	Tropical Fresh Water Freeboard ...	<u>3 - 3 1/4</u> ✓
Fresh Water Line " " ...	<u>6 1/4</u> ✓	Fresh Water " " ...	<u>2 - 2 3/4</u> ✓
Tropical Line " " ...	<u>6 1/4</u> ✓	Tropical " " ...	<u>2 - 9</u> ✓
Winter Line below " " ...	<u>6 1/4</u> ✓	Winter " " ...	<u>2 - 9 1/2</u> ✓
Winter North Atlantic Line " " ...	<u>✓</u>	Winter North Atlantic " " ...	<u>3 - 9 1/2</u> ✓