

Provisional Assignment
 As C.S.S. vessel with tonnage opening.

Index. No. 35384
 (For London Office only).

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Odense 79-80.</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <i>465.0</i> Breadth <i>62.0</i> Depth <i>32.5</i>					Date of Survey <i>5/4/34</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>16160</i> tons					Surveyor's Signature
Coefficient of fineness for use with Tables <i>.410</i>					Particulars of Classification <i>+100 A1. with freeboard contemplated.</i>

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth <i>32.50</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>(32.54 - 31.00) 3 = +4.62</i>	Moulded Breadth (B) <i>62.0</i>
Stringer plate <i>.04</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>14.88</i>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ <i>✓</i>	If restricted by superstructures	Ship's Round of Beam = <i>3.00</i>
Depth for Freeboard (D) = <i>32.54</i>		Difference <i>11.88 defⁿ</i>
		Restricted to
		Correction = $\frac{\text{Diff}^n}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{11.88}{4} \times .0063 = +.02$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	<i>24.43</i>	<i>24.43</i>	<i>8.0</i>	<i>✓</i>	<i>24.43</i>	Standard Height of Superstructure <i>4.50</i>
„ overhang	<i>2.46</i>	<i>1.38</i>			<i>1.38</i>	„ „ R.Q.D. <i>✓</i>
R.Q.D. enclosed						Deduction for complete superstructure <i>42.0</i>
„ overhang						Percentage covered $\frac{S}{L} =$ <i>100.00</i>
Bridge enclosed	<i>429.00</i>	<i>429.00</i>	<i>8.0</i>	<i>✓</i>	<i>429.00</i>	„ $\frac{S_1}{L} =$ <i>99.34</i>
„ overhang aft	<i>1.41</i>	<i>1.06</i>			<i>1.06</i>	„ $\frac{E}{L} =$ <i>99.34</i>
„ overhang forward						Percentage from Table, Line A. (corrected for absence of forecastle (if required))
F'cle enclosed						Percentage from Table, Line B. <i>99.22</i> (corrected for absence of forecastle (if required))
„ overhang						Interpolation for bridge less than 2L (if required)
Trunk aft						Deduction = <i>42.0</i> x <i>.9922</i> = <i>-41.64</i>
„ forward						
Tonnage opening aft	<i>4.10</i>	<i>2.91</i>	<i>8.0</i>	<i>✓</i>	<i>2.91</i>	
„ „ forward						
Total	<i>465.00</i>	<i>462.08</i>			<i>462.08</i>	

Sheers measured at Shelter SHEER CORRECTION.

Actual T.D. Lt. *8.00*
 Stand. T.D. „ *7.50*
 Mean actual sheer aft = *Deficient*
 Mean standard sheer aft = *.50 = 6"*

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	<i>56.50</i>	1		<i>48.00</i>	<i>54.00</i>	1	<i>54.00</i>
$\frac{1}{4}$ L from A.P.	<i>25.14</i>	4		<i>24.44</i>	<i>24.44</i>	4	<i>97.76</i>
$\frac{2}{4}$ L „	<i>6.22</i>	2		<i>7.12</i>	<i>7.12</i>	2	<i>14.24</i>
Amidships		4		<i>0</i>	<i>✓</i>	4	<i>✓</i>
$\frac{3}{4}$ L from E.P.	<i>12.43</i>	2		<i>12.25</i>	<i>12.25</i>	2	<i>24.50</i>
$\frac{1}{4}$ L „	<i>50.28</i>	4		<i>46.06</i>	<i>48.06</i>	4	<i>192.24</i>
E.P.	<i>113.00</i>	1		<i>102.00</i>	<i>108.00</i>	1	<i>108.00</i>
Total			<i>508.50</i>	<i>+6"</i>			<i>490.74</i>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{17.76}{18} \times .25 = +0.25$
 If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	<i>91.45</i>
Depth to Freeboard Deck = <i>32.54</i>	$\Delta =$		<i>93.48</i>
Summer freeboard = <i>4.45</i>	Tons per inch immersion at summer load water line		
Moulded draught (d) = <i>24.49</i>	T =		
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>6.95 = 4"</i>	Deduction = $\frac{\Delta}{40T}$ inches = <i>4"</i>	Depth Correction <i>4.62</i>	
Addition for Winter North Atlantic Freeboard (if required) = <i>✓</i>		Deduction for superstructures <i>41.64</i>	
		Sheer correction <i>0.25</i>	
		Round of Beam correction <i>1.02</i>	
		Correction for Thickness of Deck amidships <i>✓</i>	
		Other corrections, scantlings, etc. <i>✓</i>	
		<i>4.89 41.64 -36.78</i>	
		Summer Freeboard = <i>57.00</i>	

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

Tropical Fresh Water Line above Centre of Disc <i>14"</i>	Tropical Fresh Water Freeboard <i>3' 4"</i>
Fresh Water Line „ „ <i>4"</i>	Fresh Water „ „ <i>4' 2"</i>
Tropical Line „ „ <i>4"</i>	Tropical „ „ <i>4' 2"</i>
Winter Line below „ „ <i>4"</i>	Winter „ „ <i>5' 4"</i>
Winter North Atlantic Line „ „ <i>✓</i>	Winter North Atlantic „ „ <i>✓</i>

Summer moulded draft *24' 9 1/2"*