

Preliminary as a Tanker allowing Poop of standard height
i.e. The sheer is reduced and a parabolic curve taken
using the virtual sheer at the Poop front.

Rpt. C.11.

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

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker				
having _____				
(Type of Superstructures.)				
Ship's Name <i>Rotterdam Drydock Co's No 213.</i>	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
Moulded Dimensions: Length <i>430.00'</i> Breadth <i>62.50'</i> Depth <i>24.50'</i>				
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>12785</i> tons				
Coefficient of fineness for use with Tables <i>.800</i>				
Port of Survey _____				
Date of Survey <i>16th Nov 1938</i>				
Name of Surveyor _____				
Particulars of Classification <i>100 A.1. Carrying Petroleum in bulk (contemplated)</i>				

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <i>24.50</i>	(a) Where D is greater than Table depth (D - Table depth) R =	Moulded Breadth (B) _____
Stringer plate <i>.05</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ _____
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures <i>12.36 x $\frac{7.00}{7.50} = 11.53$</i>	Ship's Round of Beam = _____
Depth for Freeboard (D) = <i>24.55</i>		Difference _____
		Restricted to _____
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>Nil</i>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>104.32</i>	<i>104.32</i>	<i>7.50</i>	<i>✓</i>	<i>104.32</i>
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed					
„ overhang aft					
„ overhang forward					
Fore enclosed	<i>60.00</i>	<i>60.00</i>	<i>10.50</i>	<i>✓</i>	<i>60.00</i>
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft		<i>164.76</i>	<i>7.00</i>	<i>7.00/7.50</i>	<i>153.77</i>
„ „ forward					
Total	<i>164.32</i>	<i>329.08</i>			<i>318.09</i>

Standard Height of Superstructure *7.50*
„ „ R.Q.D. *✓*
Deduction for complete superstructure *42.00*
Percentage covered $\frac{S}{L} =$ *38.21*
„ „ $\frac{S_1}{L} =$ *76.53*
„ „ $\frac{E}{L} =$ *73.95*
Percentage from Table, Line A.
(corrected for absence of forecastle (if required))
Percentage from Table, Line B. *TANKER 67.86.70*
(corrected for absence of forecastle (if required))
Interpolation for bridge less than .2L (if required)
Deduction = *42.00 x .6786 = -28.50*

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1		<i>27.00</i>	<i>3.77</i>	1	<i>3.77</i>
$\frac{1}{2}$ L from A.P.		4		<i>12.00</i>	<i>1.68</i>	4	<i>6.72</i>
$\frac{3}{8}$ L „		2		<i>2.95</i>	<i>.41</i>	2	<i>.82</i>
Amidships		4				4	
$\frac{3}{8}$ L from F.P.		2		<i>5.59</i>	<i>5.59</i>	2	<i>11.18</i>
$\frac{1}{2}$ L „		4		<i>22.68</i>	<i>22.68</i>	4	<i>90.72</i>
F.P.		1		<i>51.00</i>	<i>51.00</i>	1	<i>51.00</i>
Total			<i>477.04</i>				<i>1164.21</i>

Mean actual sheer aft = *Deficient*
Mean standard sheer aft = _____
Mean actual sheer forward = *Deficient*
Mean standard sheer forward = _____
Length of enclosed superstructure forward of amidships = } *Deficient*
„ „ aft of „ = } *sheers.*

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{312.83}{18} \left(.75 - \frac{1910}{5590} \right) = +9.72$
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. Addition for Winter and Winter North Atlantic Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Depth to Freeboard Deck = <i>24.55</i>	Displacement in salt water at summer load water line	Correction for coefficient <i>148/136</i>
Summer freeboard = <i>3.81</i>	$\Delta =$	Depth Correction <i>11.53</i>
Moulded draught (d) = <i>20.74</i>	Tons per inch immersion at summer load water line	Deduction for superstructures <i>28.50</i>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =	T =	Sheer correction <i>9.72</i>
Addition for Winter North Atlantic Freeboard (if required) =	Deduction = $\frac{\Delta}{40 T}$ inches =	Round of Beam correction
		Correction for Thickness of Deck amidships
		Other corrections, scantlings, etc.
		<i>9.72 40.03 -30.31</i>
		Summer Freeboard = <i>45.76</i>

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

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

Tropical Fresh Water Freeboard	...
Fresh Water	„
Tropical	„
Winter	„
Winter North Atlantic	„

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
Description of Hatchway											
Dimensions of Hatchway											
COAMINGS	{	Height above Deck	...								
		Thickness	Sides	...							
			Ends	...							
		Stiffeners							
		Brackets, Stays	...								
HATCH BEAMS	{	Number								
		Spacing								
		Scantling and Sketch		...							
		Bearing Surface								
FORE AND AFTERS	{	Number								
		Spacing								
		Unsupported Lengths		...							
		Scantling* and Sketch		...							
		Bearing Surface								
HATCH COVERS	{	Material								
		Thickness...	...								
		How fitted	...								
		Bearing Surface	...								
Spacing of Cleats											
Number of Tarpaulins											

*Are wood fore and afters steel shod at all bearing surfaces ?

Are battens and wedges efficient and in good condition ?

Are tarpaulins in good condition and in accordance with rule requirements ?

Are lashings provided in accordance with rule requirements ?

Particulars of fiddley, funnel and ventilator coamings :—

Sheers Actual Sheers at Roof front = 7"
Virtual " " " " = 1"

$$1 \left(\frac{215}{110.68} \right)^2 = 3.77 \text{ " virtual shear at A.P.}$$

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways :—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

Particulars of Gangway Cargo and Coaling Ports :—

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