

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.) \_\_\_\_\_

Port of Survey \_\_\_\_\_

Date of Survey 16<sup>th</sup> Nov 1938

Name of Surveyor \_\_\_\_\_

Ship's Name: Rotterdam Drydock Co's No 213.

Nationality and Port of Registry \_\_\_\_\_ Official Number \_\_\_\_\_ Gross Tonnage \_\_\_\_\_ Date of Build \_\_\_\_\_

Moulded Dimensions: Length 430.00' Breadth 62.50' Depth 24.50'

Moulded displacement at moulded draught = 85 per cent. of moulded depth 12785 tons

Coefficient of fineness for use with Tables .800

Particulars of Classification 100 A.1.  
Carrying Petroleum in bulk (contemplated)

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... .. <u>24.50</u>	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B) _____
Stringer plate ... .. <u>.05</u>	(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 <u><math>12.36 \times \frac{7.00}{7.50} = 11.53</math></u>	Ship's Round of Beam = _____
Depth for Freeboard (D) = <u>24.55</u>		Difference _____
		Restricted to _____
		Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <u>Nil</u>

### DEDUCTION FOR SUPERSTRUCTURES.

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

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 × 67.86 = -28.50

### SHEER CORRECTION.

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

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.	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 $\frac{148}{1.36}$
Depth to Freeboard Deck = <u>24.55</u> Ft.	$\Delta =$	Depth Correction ... .. <u>11.53</u>
Summer freeboard = <u>3.81</u>	Tons per inch immersion at summer load water line	Deduction for superstructures ... .. <u>28.50</u>
Moulded draught (d) = <u>20.74</u>	T =	Sheer correction ... .. <u>9.72</u>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =	Deduction = $\frac{\Delta}{40T}$ inches =	Round of Beam correction ... .. _____
Addition for Winter North Atlantic Freeboard (if required) =		Correction for Thickness of Deck amidships ... .. _____
		Other corrections, scantlings, etc. ... .. _____
		<u>9.72</u> <u>40.03</u> <u>-30.31</u>
		Summer Freeboard = <u>45.76</u>

### 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 „ „ ... ..

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 ...	...	...							
		...	...							
		...	...							
FORE AND AFTERS	{ Number ... Spacing ... Unsupported Lengths ... Scantling* and Sketch ...	...	...							
		...	...							
		...	...							
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 Sheer at Roop front = 7"  
 ∴ Virtual " " " " " = 1"  
 $1 \left( \frac{215}{110-68} \right)^2 = 3.77'' = \text{virtual Sheer at A.P.}$

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:—

