

LLOYD'S REGISTER OF SHIPPING

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received
 Index No.
 Govt. Copy
 Owners C11

Ship's Name Verolme United Shipyards - Yard No. 623 <i>633</i>	Official Number	Nationality and Port of Registry Netherlands	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 163.98 Breadth 21.89 Depth 12 m. Freeboard Length 163.98 m. (cr. of rudder stock) Moulded displacement at moulded draught = 85 per cent. of moulded depth 29075 m ³ Coefficient of fineness for use with Tables .794					Date of Survey 15th June, 1959. Surveyor's Signature <i>[Signature]</i> Particulars of Classification 100A1 "Oil Tanker" (Contemplated)

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 12.000	(a) Where D is greater than Table depth (D - Table depth) R = 8.35 (12.022 - 10.932) 30 = 272 mm. (+)	Moulded Breadth (B) 21.89 m. Standard Round of Beam = $\frac{B \times 12}{50} = 438$ mm. ✓ Ship's Round of Beam = 400 mm. Difference 38 mm. ✓ Restricted to Correction = $\frac{\text{Diff}^{\circ}}{4} \times (1 - \frac{S_1}{L}) = \frac{38}{4} \times .639 = 6$ mm. (+) 6 mm. ✓
Stringer plate ... 22	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	
Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	
Depth for Freeboard (D) = 12.022		

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>equiv. see P. 2</i>	38.598	38.598	2.500	--	38.598
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
Fore enclosed	20.100	20.100	2.500	--	20.100
" overhang	1.000	.500	2.500	--	.500
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	59.698	59.198			59.198

Standard Height of Superstructure 2,290 m. ✓
 " " R.Q.D. --
 Deduction for complete superstructure 1067 mm. ✓
 Percentage covered $\frac{S}{L} = 36.41$ ✓
 " " $\frac{S_1}{L} = 36.10$ ✓
 " " $\frac{E}{L} = 36.10$ ✓
 Percentage from Table, Line A Tanker 27.10 ✓
 (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 = .271 x 1067 = 289 mm. ✓

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate See P. 2	S M	Product
A.P. ...	1620	1	1620	1051	1261	1	1261
$\frac{1}{4}$ L from A.P. ...	720	4	2880	244	258	4	1032
$\frac{3}{4}$ L ..	180	2	360	0	0	2	0
Amidships ...	0	4	0	0	0	4	0
$\frac{3}{4}$ L from F.P. ...	360	2	720	0	0	2	0
$\frac{1}{4}$ L ..	1439	4	5756	57	57	4	228
F.P. ...	3240	1	3240	1375	1375	1	1375
Total ...			14576				3896

Mean actual sheer aft = } Deficient sheers ✓
 Mean standard sheer aft = }
 Mean actual sheer forward = }
 Mean standard sheer forward = }
 Length of enclosed superstructure forward of amidships = } Tanker
 " " aft of " = } def. sheer ✓

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{10680}{18} (.75 - .1821) = 337$ mm. ✓
 If limited on account of midship superstructure. If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 12.022 ✓
 Summer freeboard = 2.97 ✓
 Moulded draught (d) = 9.052 ✓
 Keel allowance =
 Extreme draught =
 Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required) =

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 =

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient 1.474/1.36 ✓

Depth Correction ... 272 ✓
 Deduction for superstructures ... 289 ✓
 Sheer correction ... 337 ✓
 Round of Beam correction ... 6 ✓
 Correction for Thickness of Deck amidships ...
 Other corrections, scantlings, etc. ...

+	-
272	289
337	6
615	289
2441	2645
615	289
2441	2645

(+) 326 mm.
 Summer Freeboard = 2971 mm. ✓

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 " ...

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Poop:

Length at side = 36,995 m. ✓
2/3 x 2405 = 1,603 m. ✓
equiv. = 38,598 m. ✓

Actual height of poop = 2500 mm.
Standard " " " = 2290 mm. ✓
excess = 210 mm. ✓

Sheer at A.P.P. = 1051 + 210 = 1261 mm. ✓
Sheer at 1/6 L = 244 + 210 $\left(\frac{9.665}{36.995}\right)^2$ = 258 mm. ✓

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £ : :

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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