

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

N^o 27981

Ship's Name M.T. "CLAUSINA"	Official Number ✓	Nationality and Port of Registry Dutch. Ijgavenham	Gross Tonnage 8028.38	Date of Build 1938	Port of Survey Rotterdam
Moulded Dimensions: Length 140.511 M^s Breadth 17.983 M^s Depth 10.363 M^s (TO CENTRE OF RUDDERPOST)					Date of Survey 3.10.1938
Moulded displacement at moulded draught = 85 per cent. of moulded depth 17620 M³ tons					Surveyor's Signature Dr. van
Coefficient of fineness for use with Tables .792					Particulars of Classification 7100 A1 Carrying Petroleum in Bulk (Contemplated)

Depth for Freeboard (D). Moulded depth ... 10363 Stringer plate ... 23 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 10386	Depth correction. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $8.33(10.386 - 9.368)30 = +254 \text{ mm}$ (b) Where D is less than Table depth (if allowed) $(\text{Table depth} - D) R =$ If restricted by superstructures ✓	Round of Beam correction. Moulded Breadth (B) 17983 Standard Round of Beam = $\frac{B \times 12}{50} =$ 360 Ship's Round of Beam = 360 Difference ✓ Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L}\right) =$ Nil
--	---	--

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>Equiv.</i> ...	28809	28809	2286		28809
" overhang...	<i>none</i>		+64 mm sheathing		
R.Q.D. enclosed	<i>✓</i>				
" overhang					
Bridge enclosed. <i>Equiv.</i> ...	13920	13920	2286	$\frac{2286}{2290}$	13895
" overhang aft	<i>none</i>				
" overhang forward	<i>none</i>				
Forecastle enclosed ...	14722	14722	2286		14722
" overhang <i>Equiv.</i> ...	610	2436	+64 mm sheathing	$\frac{2286}{2290}$	2432
Trunk aft	2436				
" forward					
Tonnage opening aft					
" forward					
Total	59887	59887			59858

Standard Height of Superstructure **2290 mm**
 " " R.Q.D. **✓**
 Deduction for complete superstructure **1067 mm**
 Percentage covered $\frac{S}{L} =$ **42.62**
 " " $\frac{S_1}{L} =$ **42.62**
 " " $\frac{E}{L} =$ **42.60**
 Percentage from Table, Line A. TANKER **33.60**
 (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 = $1067 \times 33.60 = -358 \text{ mm}$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	1425	1		1425	1423	1423	1		1423
$\frac{1}{2}$ L from A.P. ...	633	4		2532	632	632	4		2528
$\frac{3}{8}$ L " ...	158	2		316	156	156	2		312
Amidships ...		4					4		
$\frac{3}{8}$ L from F.P. ...	316	2		632	311	311	2		622
$\frac{1}{2}$ L " ...	1266	4		5064	1266	1266	4		5064
F.P. ...	2849	1		2849	2846	2846	1		2846
Total				12818					12795

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{23}{18} \left(\frac{75-2131}{5364} \right) = +1 \text{ mm}$
 If limited on account of midship superstructure. **✓**

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 = } *Tanker*
 " " aft of " = }

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **10.386 M**
 Summer freeboard = **2.040**
 Moulded draught (d) = **8.346**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{48} \text{ inches} = 174 = 17 \text{ cms}$

Addition for Winter North Atlantic Freeboard (if required) = $174 + 115 = 289 \text{ mm} = 29 \text{ cms}$

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 16644 \text{ M}^3$

Tons per inch immersion at summer load water line

$T = 22.23$

Deduction = $\frac{\Delta}{40T} \text{ inches}$

= 188 mm

= 19 cms

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient $\frac{.792 + .68}{1.36} = \frac{1.472}{1.36}$

	+	-
Depth Correction	254	
Deduction for superstructures		358
Sheer correction	1	
Round of Beam correction		
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	255	358

Summer Freeboard = **2039 mm**

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

Tropical Fresh Water Line above Centre of Disc	...	36 cms	4 1/4"	Tropical Fresh Water Freeboard	...	168	5' 6"
Fresh Water Line	"	19	7 1/2"	"	"	185	6' 0 3/4"
Tropical Line	"	17	6 3/4"	"	"	187	6' 1 1/2"
Winter Line below	"	17	6 3/4"	"	"	221	7' 3"
Winter North Atlantic Line	"	29	11 1/2"	"	"	233	7' 7 1/4"

Clausina.

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.

Poof Equiv. Bhd.

$$\frac{2}{3} \times 1440 = 960$$

$$\frac{27849}{28809} = \text{Equiv. Bhd.}$$

$$\frac{27849}{28809} = \text{Equiv. Bhd.}$$

Bridge Equiv. Bhd.

$$\frac{2}{3} \times 1219 = 813$$

$$\frac{13107}{13920} = \text{Equiv. Bhd.}$$

$$\frac{13107}{13920} = \text{Equiv. Bhd.}$$

Forecastle Sidehouses.

$$\frac{7364 \times 5511}{16664} = 2436 = \text{Equiv. length}$$

Trade of ship Ocean trade.

Names of sister ships M.V. "CORYDA" Rotterdam Repot N. 27166

Builder's name and yard number N.V. Rotterdamsche Droogdok Maats. Yardnumber 203.

Owners Petroleum Maatschappij "La Corona"

Fee f 228.-



© 2021

Lloyd's Register
Foundation