

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received
 Index No.
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Ship's Name <i>LOUIS LANTZ.</i> <i>(EX SKOTAS)</i>	Official Number	Nationality and Port of Registry <i>DUTCH</i> <i>ROTTERDAM.</i>	Gross Tonnage	Date of Build <i>1931</i>	Port of Survey
Moulded Dimensions: Length <i>137.10M.</i> Breadth <i>17.98M.</i> Depth <i>10.820M.</i>					Date of Survey <i>27.9.56.</i>
Freeboard Length <i>137.10</i>					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) <i>18650 (ENS) tons</i>					Particulars of Classification <i>ORE CARRIER</i> <i>(CONTEMPLATED)</i>
Coefficient of fineness for use with Tables <i>.815</i>					

DEPTH FOR FREEBOARD (D). Moulded depth ... <i>10.820</i> Stringer plate <i>22.1/2 + 30.2/4</i> <i>32</i> Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <i>10.872</i>	DEPTH CORRECTION. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $8.33(10.872 - 9.149) 30 = 433$ (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) <i>17.98</i> Standard Round of Beam = $\frac{B \times 18}{50} =$ <i>360</i> Ship's Round of Beam = <i>375</i> Difference <i>15</i> Restricted to Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_i}{L} \right) =$ <i>15.7068 = -34</i>
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>29.170</i>	<i>29.170</i>	<i>25.02</i>	<i>✓</i>	<i>29.170</i>
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	<i>11.033</i>	<i>11.033</i>	<i>24.26</i>	<i>✓</i>	<i>11.033</i>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	<i>40.203</i>	<i>40.203</i>			<i>40.203</i>

Standard Height of Superstructure *2.290 M*" " R.Q.D. *1064 m/m*Deduction for complete superstructure *1064 m/m*Percentage covered $\frac{S}{L} =$ " " $\frac{S_i}{L} =$ *29.32*" " $\frac{E}{L} =$ Percentage from Table, Line A. Tank *20.52*

(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 = *1064 x .2052 = 219 m/m*

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ...	<i>1396</i>	<i>1</i>	<i>1396</i>	<i>915</i>	<i>1127</i>	<i>1</i>	<i>1127</i>
$\frac{1}{2}$ L from A.P. <i>621 620</i>	<i>621</i>	<i>4</i>	<i>2480</i>	<i>109</i>	<i>119</i>	<i>4</i>	<i>476</i>
$\frac{2}{3}$ L " <i>739 155</i>	<i>739</i>	<i>2</i>	<i>310</i>	<i>-</i>	<i>-</i>	<i>2</i>	<i>-</i>
Amidships ...	<i>0</i>	<i>4</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>4</i>	<i>0</i>
$\frac{2}{3}$ L from F.P. <i>307 310</i>	<i>307</i>	<i>2</i>	<i>620</i>	<i>-</i>	<i>-</i>	<i>2</i>	<i>-</i>
$\frac{1}{2}$ L " <i>1243 1241</i>	<i>1243</i>	<i>4</i>	<i>4964</i>	<i>434</i>	<i>434</i>	<i>4</i>	<i>1736</i>
F.P. ... <i>2793 2792</i>	<i>2793</i>	<i>1</i>	<i>2792</i>	<i>1829</i>	<i>1829</i>	<i>1</i>	<i>1829</i>
Total ...			<i>12562</i>				<i>5168</i>

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure

L

forward of amidships =

aft of

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Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ *7394**18*

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *10.872*Summer freeboard = *2.550*Moulded draught (d) = *8.322*

Keel allowance =

Extreme draught =

Deduction for Tropical free-

board and addition for =

Winter freeboard = *d inches = 173 = 17cm*

Addition for Winter North Atlantic Freeboard (if

required) = *173 + 112 = 285 = 29cm*

Deduction for Fresh Water.

Displacement in salt water at

summer load water line

 $\Delta =$ *16740*

Tons per inch immersion at

summer load water line

T = *55.2*Deduction = $\frac{\Delta}{40 T}$ inches= *7.58"**19cm*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{815 + 68}{136} = \frac{1495}{136}$

+ -

Depth Correction ... *433* *✓*Deduction for superstructures ... *219* *✓*Sheer correction ... *248* *✓*Round of Beam correction ... *3* *✓*Correction for Thickness of Deck amidships ... *✓*Other corrections, scantlings, etc. ... *✓*

681 222 + 459

Summer Freeboard = *2554*

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

Tropical Fresh Water Line above Centre of Disc ... *36cm*Fresh Water Line " " ... *19cm*Tropical Line " " ... *17cm*Winter Line below " " ... *17cm*Winter North Atlantic Line " " ... *29cm*Tropical Fresh Water Freeboard *255cm*Fresh Water " *219cm*Tropical " *236cm*Winter " *238cm*Winter North Atlantic " *272cm*

Louis Santz.

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.

Shear aft.

Actual T.D. height = 2502
Standard " " = $\frac{2290}{212}$

$$\begin{array}{r} 29.17 \\ 6 \overline{) 137.1} 22.85 \\ \underline{12} 6.32 \\ 51 \end{array}$$

Shear at AP = $915 + 212 = 1127$

Shear at $\frac{1}{6}L = 109 + 212 \left(\frac{6.32}{29.17} \right)^2$
= 119

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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