

23 JUN 1955

Index No. 45705.

(For London Office only.)

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name **"ISIDORA"** Official Number **4436** Nationality and Port of Registry **FRENCH LE HAVRE** Gross Tonnage **1955** Date of Build **1955**

Port of Survey **SAINT-NAZAIRE (NANTES)**

Date of Survey **WHILE BUILDING**

Surveyor's Signature **J. Bell**

Particulars of Classification **+ 100 A1**  
**"CARRYING PETROLEUM IN BULK"**

Moulded Dimensions: Length **193.870** Breadth **25.680** Depth **14.100**  
(C of RUDDER STOCK)

Moulded displacement at moulded draught = 85 per cent. of moulded depth **48085** METRIC tons

Coefficient of fineness for use with Tables **.786**

## DEPTH FOR FREEBOARD (D).

Moulded depth	...	...	...	14.100
Stringer plate	...	...	...	.031
Sheathing on exposed deck	...	...	...	✓
$T \left( \frac{L-S}{L} \right) =$	...	...	...	
Depth for Freeboard (D) =	...	...	...	14.131

## DEPTH CORRECTION.

- (a) Where D is greater than Table depth  
(D-Table depth) R =  
 $8.33(14.131 - 12.925) 30 = + 301 \text{ mm.}$
- (b) Where D is less than Table depth (if allowed)  
(Table depth-D) R =  
 $1.206$
- If restricted by superstructures -

## ROUND OF BEAM CORRECTION.

Moulded Breadth (B)	25.680
Standard Round of Beam = $\frac{B \times 18}{50}$	.514
Ship's Round of Beam	.533
Difference	19
Restricted to	
Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L}\right)$	$\frac{19}{4} \times .6101 = -3 \text{ mm.}$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	39.707	39.707	2440	-	39.707
" overhang	43.440		2440		
R.Q.D. enclosed					
" overhang					
Bridge enclosed	13.820	13.820	2286	2286/2290	13.795
" overhang aft	3.124	2.287	2286	2286/2290	2.283
" overhang forward	3.050				
Fore enclosed	19.626	19.626	2286	2286/2290	19.590
" overhang	.281	.141			.141
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	76.484	75.581			75.516

Standard Height of Superstructure	2.290 m.
" " R.Q.D.	-
Deduction for complete superstructure	1067 mm.
Percentage covered $\frac{S}{L} =$	39.46
" $\frac{S_1}{L} =$	38.99
" $\frac{E}{L} =$	38.95
Percentage from Table, Line A. TANKER.	29.95
(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 =	$1067 \times .2995 = - 320 \text{ mm.}$

## SHEER CORRECTION.

FULL Δ @ 10.583 DRAFT = 42,240 METRIC TONS  
T.P.C.M. " " " = 44.2

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	1869	1	1869		+457	873	1	873	
1/4 L from A.P.	830	4	3320		63	63	4	252	
1/2 L	208	2	416		-	-	2	-	
Amidships	-	4	-		-	-	4	-	
3/4 L from F.P.	415	2	830		-	-	2	-	
3/4 L	1661	4	6644		51	51	4	204	
F.P.	3738	1	3738		1737	1737	1	1737	
Total			16817					3066	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - \frac{S}{2L}}{.75 - .1973} \right) = \frac{13751}{18} \left( \frac{.75 - .1973}{.75 - .1973} \right) = + 422 \text{ mm.}$

If limited on account of midship superstructure. →

Mean actual sheer aft = DEFICIENT.

Mean actual sheer forward = DEFICIENT. < .5

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 = 14.131  
Summer freeboard = 3.551  
Moulded draught (d) = 10.580

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{48}$  inches = 220 mm.

Addition for Winter North Atlantic Freeboard (if required) = 220 + 159 = 379 mm.

## Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta = 42,227 \text{ M. tons.}$   
Tons per inch immersion at summer load water line  
 $T = 44.2$

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

239 mm.

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction	...	...	...	301	-
Deduction for superstructures	...	...	...	-	320
Sheer correction	...	...	...	422	-
Round of Beam correction	...	...	...	-	3
Correction for Thickness of Deck amidships	...	...	...		
Other corrections, scantlings, etc.	...	...	...		
	723	323			+ 400

Summer Freeboard = 3551

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

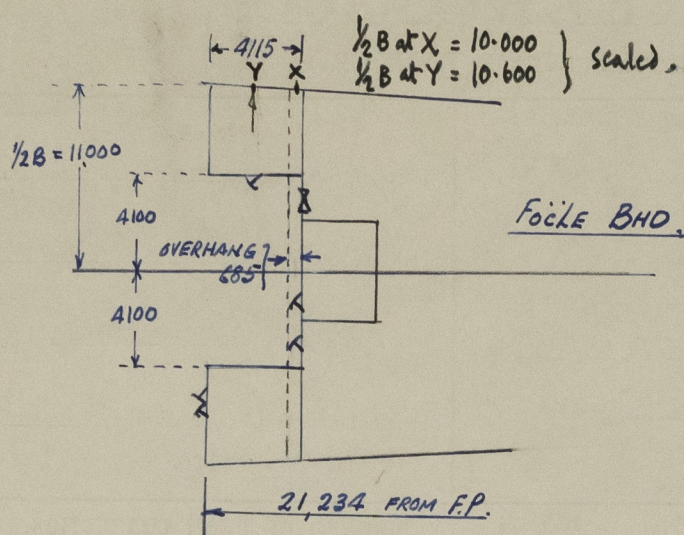
Tropical Fresh Water Line above Centre of Disc	...	230
Fresh Water Line	"	220
Tropical Line	"	220
Winter Line below	"	220
Winter North Atlantic Line	"	380

Tropical Fresh Water Freeboard	...	3320
Fresh Water	"	3330
Tropical	"	3770
Winter	"	3930
Winter North Atlantic	"	3930

B.V. Freeboards.



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.



Sheers (m).

Actual

1737	1	1737
51	3	153
0	3	-
		1890

Standard.

3738	1	3738
1661	3	4983
415	3	1245
		9966

Length of fore-castle.

$$\begin{aligned} \text{Length to bld.} &= 17.119 \\ + \frac{(20.000 - 8.200) \cdot 685}{20.000} &= .404 \\ + \frac{(21.200 - 8.200) \cdot 3.430}{21.200} &= 2.103 \\ \text{Equiv. length} &= 19.626 \end{aligned}$$

$$\begin{aligned} \%H &= .685 - .404 \\ &= .281 \end{aligned}$$

NOTE: POOP DK. PARALLEL TO UPPER DK. FROM FOR. BHD. TO FR. 14  
SHEER OF POOP DK. FROM FR. 14 TO A.P. = 0°45'.

The following plans are forwarded herewith:

1. Upper Deck and Hold. General Arrangement
2. Poop, Foyle and Bridge Decks

Length of poop.

$$\begin{aligned} \text{Length at side} &= 38.240 \\ + (\frac{2}{3} \times 2.20) &= 1.467 \\ \text{Equiv. length} &= 39.707 \end{aligned}$$

Length of bridge.

$$\begin{aligned} \text{Length at side} &= 12.796 \\ + (\frac{2}{3} \times 2.043) &= 1.362 \\ &= 14.158 \\ \text{Equiv. length} &= 14.158 \times \frac{25.070}{25.680} = 13.820 \\ \%H &= 3.124 \times \frac{25.070}{25.680} = 3.050 \end{aligned}$$

$$\begin{aligned} 14.837 & 21.234 \\ 12.796 & 14.376 \\ 2.043 & 6.858 \end{aligned}$$

44364

Trade of ship TANKER

Names of sister ships "ISANDA" - CHANTIER DE PENHOET N° K15

Builder's name and yard number SOCIÉTÉ DES CHANTIER ET ATELIERS DE SAINT-NAZAIRE (PENHOËT) - N° P15

Owners SOCIÉTÉ MARITIME SHELL

Fee £ NO FEE CHARGED.



© 2021

Lloyd's Register  
Foundation