

# LLOYD'S REGISTER OF SHIPPING

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, ~~SAILING SHIP~~, ~~TANKER~~)

Received **19 MAY 1959**

Index No. ....

Govt. Copy .....

Owners C11 .....

Ship's Name **Yard No.** **STOCZNIA GDANSKA**  
**B 51/010**  
**KRUTYNIA**

Official Number **Polish**  
**Indonesia**  
**Polish**

Nationality and Port of Registry **Polish**

Gross Tonnage **July 1959**

Date of Build **July 1959**

Port of Survey **G d a n s k**Date of Survey **May, 1959**Surveyor's Signature **M. Pycinski**

Particulars of Classification **100 A.1.**  
**"Strengthened for Navigation in Ice"**  
 Contemplated.

Moulded Dimensions: Length **55.0 m** Breadth **9.60 m** Depth **3.45 m** (As measured)  
 Freeboard Length **55.0 m** to centre of rudder stock.  
 Moulded displacement at moulded draught = 85 per cent. of moulded depth **976 m<sup>3</sup>**  
 (excluding bossing)  
 Coefficient of fineness for use with Tables **.68 (actual .631)**

## DEPTH FOR FREEBOARD (D).

Moulded depth ... **3.450**  
 Stringer plate **0.007 m**  
 Wood Sheathing on exposed deck  
 $T \left( \frac{L-S}{L} \right) =$   
 Depth for Freeboard (D) = **3.457**

## DEPTH CORRECTION.

(a) Where D is greater than Table depth  
 (D-Table depth) R =  
 (b) Where D is less than Table depth (if allowed)  
 (Table depth-D) R =  
 $8.33(3.667 - 3.457) = 13.89 = -24$   
 If restricted by superstructures **No**

## ROUND OF BEAM CORRECTION.

Moulded Breadth (B) **9.60 m.**  
 Standard Round of Beam =  $\frac{B \times 12}{50} = 192$   
 Ship's Round of Beam = **0**  
 Difference = **192**  
 Restricted to  
 Correction =  $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S}{L} \right) = \frac{192^2}{4} \times 0.0149 = +1$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	15.30	15.300	2.35		15.300
" overhang	0.30	.150	2.35		.150
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed	37.40	37.900	2.35		37.900
" overhang	0.30	.225	2.35		.225
Trunk aft	0.30				
" forward		.425 x 1.425			
Tonnage opening aft	1.20	.606			.606
" forward					
Total	55.90	54.181			54.181

Standard Height of Superstructure **1.83 m.**" " R.Q.D. **—**Deduction for complete superstructure **611 m/m**Percentage covered  $\frac{S}{L} = 100$ " "  $\frac{S_1}{L} =$ " "  $\frac{E}{L} =$ Percentage from Table, Line A. **98.16**

(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 =  $611 \times 98.16 = -600$ 

No designed trim in loaded condition.

## SHEER CORRECTION.

Actual line dk R<sub>1</sub> = 2350

Std " " = 1830

Diff = 520 m/m

Station	Standard Ordinate	S M	Product	Actual Ordinate + 520	Effective Ordinate	S M	Product
A.P.	712	1	712	517	1037	1	1037
1/4 L from A.P.	317	4	1268	206	462	4	1848
1/2 L	78	2	156	23	114	2	228
Amidships	0	4	0	0	0	4	0
3/4 L from F.P.	157	2	314	153	215	2	430
1/4 L	634	4	2536	625	867	4	3468
F.P.	1424	1	1424	1429	1949	1	1949
Total			6410	+520			8960

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{2550}{18} \times 25 = -35$

If limited on account of midship superstructure. **No**If limited to maximum allowance of 1 1/2 ins. per 100ft. **No**

## Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **3.457**  
 Summer freeboard = **.050**  
 Moulded draught (d) = **3.407**  
 Keel allowance =  
 Extreme draught =  
 Deduction for Tropical freeboard and addition for =

Winter freeboard =  $\frac{d}{48} \text{ inches} = 71 \text{ mm} = 7 \text{ cm.}$ Addition for Winter North Atlantic Freeboard (if required) =  $71 + 51 = 122 \text{ mm} = 12 \text{ cm.}$ \*) metric tons  
Deduction for Fresh Water.

Displacement in salt water at summer load water line \*)  
 $\Delta = 1224$  tons  
 Tons per inch immersion at summer load water line  
 $T = 4.24$  tons\*/cm  
 Deduction =  $\frac{\Delta}{40 T} \text{ inches} = 72 \text{ m/m}$   
 $= 7 \text{ cm.}$

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

Correction for coefficient **NIL**

Depth Correction ... **24**  
 Deduction for superstructures ... **600**  
 Sheer correction ... **35**  
 Round of Beam correction ... **1**  
 Correction for Thickness of Deck amidships ...  
 Other corrections, scantlings, etc. ...

Summer Freeboard = **-155 m/m**SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Water~~, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc **70 mm 7 Cms.**  
 Fresh Water Line " **70 mm 7 Cms.**  
 Tropical Line " **NIL (LIMITED)**  
 Winter Line below " **70 mm 7 Cms.**  
 Winter North Atlantic Line " **120 mm 12 Cms.**

Tropical Fresh Water Freeboard **5 Cms. (LIMITED) 50 mm**  
 Fresh Water **2 Cms. 20 mm**  
 Tropical **2 Cms. 20 mm**  
 Winter **5 Cms. (LIMITED) 50 mm**  
 Winter North Atlantic **12 Cms. 120 mm**

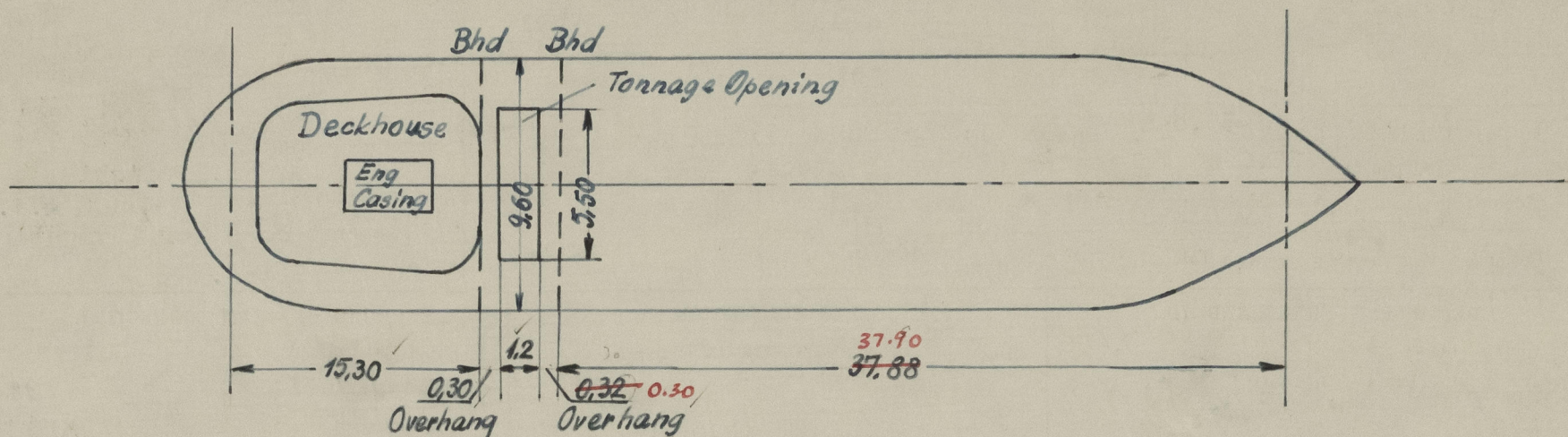
5 Cms. (LIMITED) 50 mm  
 2 Cms. 20 mm  
 2 Cms. 20 mm  
 5 Cms. (LIMITED) 50 mm  
 12 Cms. 120 mm  
 17 Cms. 170 mm



91  
600  
54600

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.

The tonnage hatch is fitted with effective temporary closing appliances.  
Poop front bulkhead intact.  
Forecastle end bulkhead fitted with class II closing appliances.



All dimensions given in metres.

Sub Length:  
mm.  
LRS-0 = 0.300  
00-91 = 91 @ 600 = 54600  
91-FFP = 100  
55000 ✓

$$\frac{B-b}{B} = \frac{9.6-5.5}{9.6} = 0.4271$$

Poop Length:  
mm.  
LRS-0 = 0.300  
0-25 = 15000  
15300

Length Combined Bridge/Fore  
m.  
28-91 = 37.800  
91-FF = 100  
37.900

Length Lamage Well  
25-28 = 1.8 m. (1.0, 0.30+1.2+0.30)  
1.80 m.

47482

Trade of ship International "CARGO"

Names of sister ships None.

Builder's name and yard number Stocznia Gdanska, B51/010, Gdańsk, Poland.

Owners

Fee £ : :

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

Midship Section  
Profile  
Decks.

28



© 2021

Lloyd's Register  
Foundation