

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received
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 Govt. Copy
 Owners C11.....

Ship's Name INSUMAR	Official Number	Nationality and Port of Registry INDONESIAN DJAKARTA.	Gross Tonnage 283	Date of Build 1953.	Port of Survey <u>TRIESTE</u>
Moulded Dimensions: Length <u>40.0 m.</u> Breadth <u>4.50 m.</u> Depth <u>3.002 m.</u>					Date of Survey <u>DURING CONSTRUCTION.</u>
Freeboard Length					Surveyor's Signature <u>ALEX. M. HOPKINS.</u>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>495</u> tons (excluding bossing)					Particulars of Classification <u>100 A.1.</u>
Coefficient of fineness for use with Tables <u>.68 (ACTUAL .641)</u>					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth <u>3.002</u>	(a) Where D is greater than Table depth (D-Table depth) R = <u>8.33 (3.029 - 2.667) 10.101 = 31.1</u>	Moulded Breadth (B) <u>4.5</u>
Stringer plate <u>8</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <u>.342</u>	Standard Round of Beam = $\frac{B \times 12}{50} = 150 \text{ mm.}$
Wood Sheathing on exposed deck 50		Ship's Round of Beam = <u>150 mm.</u>
$T \left(\frac{L-S}{L} \right) = 50 \times .5811$		Difference <u>NIL.</u>
Depth for Freeboard (D) = <u>3.039</u>	If restricted by superstructures <input checked="" type="checkbox"/>	Restricted to
		Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) = \text{NIL}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <u>open</u> ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed <u>open</u> ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed <u>equiv.</u> ...	<u>4.933</u>	<u>4.467</u>	<u>2.103</u>	-	<u>4.467</u>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	<u>16.757</u>	<u>11.910</u>			<u>11.910</u>

Standard Height of Superstructure 1830

" " R.Q.D. 486.

Deduction for complete superstructure 486.

Percentage covered $\frac{S}{L} = 41.89$

" " $\frac{S_1}{L} = 29.78$

" " $\frac{E}{L} =$

Percentage from Table, Line A. 14.89
 (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 = 486 x .1489 = -72 mm

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	<u>587</u>	1	<u>587</u>	<u>500</u>	<u>500</u>	1	<u>500</u>
$\frac{1}{2}$ L from A.P. ...	<u>261</u>	4	<u>1044</u>	<u>210</u>	<u>210</u>	4	<u>840</u>
$\frac{3}{4}$ L " ...	<u>65</u>	2	<u>130</u>	<u>50</u>	<u>50</u>	2	<u>100</u>
Amidships ...	<u>0</u>	4	<u>0</u>	<u>0</u>	<u>0</u>	4	<u>0</u>
$\frac{3}{4}$ L from F.P. ...	<u>131</u>	2	<u>262</u>	<u>120</u>	<u>120</u>	2	<u>240</u>
$\frac{1}{2}$ L " ...	<u>522</u>	4	<u>2088</u>	<u>440</u>	<u>440</u>	4	<u>1760</u>
F.P. ...	<u>1174</u>	1	<u>1174</u>	<u>1000</u>	<u>1000</u>	1	<u>1000</u>
Total ...			<u>5285</u>				<u>4440</u>

Mean actual sheer aft =
 Mean standard sheer aft =

Mean actual sheer forward =
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
 " " aft of " =

DEFICIENT

DEFICIENT SHEERS.

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{845}{18} \left(.75 - \frac{2095}{5405} \right) = +25 \text{ mm}$

If limited on account of midship superstructure. If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 3060

Summer freeboard = 650

Moulded draught (d) = 2.510

Keel allowance =

Extreme draught =

Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{48} \text{ inches} = 52 \text{ mm} = 5 \text{ cm.}$

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 = $\frac{\Delta}{40 T} \text{ inches} = 5 \text{ cm}$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient NIL.

Depth Correction 31

Deduction for superstructures 72

Sheer correction 25

Round of Beam correction 21

Correction for Thickness of Deck amidships 210

Other corrections, scantlings, etc. compensated

to Summer moulded draught of 2.510 m.

Summer Freeboard = 550.

+	-
<u>31</u>	-
-	<u>72</u>
<u>25</u>	-
-	-
<u>21</u>	-
<u>210</u>	-
<u>287</u>	<u>72</u>
	<u>215</u>

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

Tropical Fresh Water Line above Centre of Disc 10 cm.

Fresh Water Line " " 5 cm.

Tropical Line " " 5 cm.

Winter Line below " " 5 cm.

Winter North Atlantic Line " " NOT ASSIGNED.

Tropical Fresh Water Freeboard 45 cm.

Fresh Water " 50 cm.

Tropical " 50 cm.

Winter " 60 cm.

Winter North Atlantic " NOT ASSIGNED.

Insumar

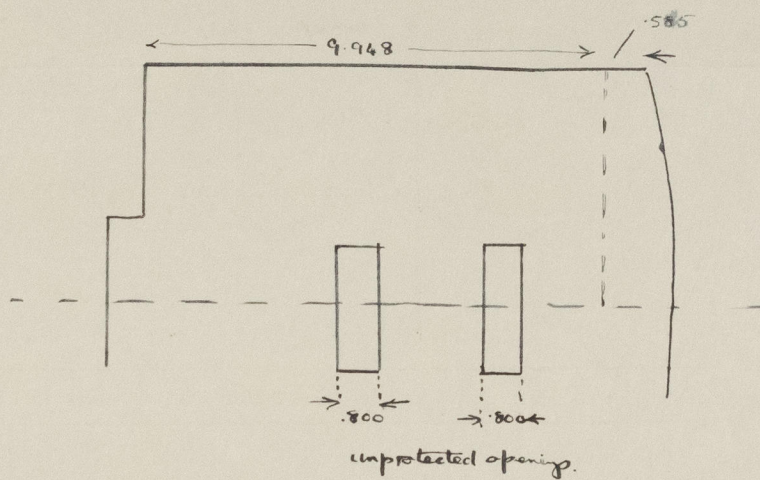
A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Forecastle

$$\begin{aligned} \text{Enclosed at side} &= 5.483. \\ + 2.341 \left[\frac{2.639 + 1.50}{6.138} \right] &= \frac{1.518}{4.061.} \end{aligned}$$

$$O/H = 4.824 - 4.061 = .763$$

$$\begin{aligned} \text{Bridge at side} &= 9.948 + .585 \\ &= 10.533 \\ \text{Less } 2 \times .800 &= \frac{1.600}{8.933.} \\ \text{(unprotected stairways)} & \end{aligned}$$



Trade of ship

Coasting Service

Names of sister ships

INIS - INTATA. INDARI

Builder's name and yard number

Cantieri Navale Giulano

Owners

Republic of Indonesia

Fee £

: : :

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



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