

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name BETTET Official Number ✓ Nationality and Port of Registry Indonesian
Djakarta Gross Tonnage 250 Date of Build 1952

Port of Survey Rotterdam
Date of Survey July-August 1952
Surveyor's Signature Khrayanbink
Particulars of Classification +100 A1
for service in Indonesian Archipelago

Moulded Dimensions: Length 35.00 MTR Breadth 6.50 MTR Depth 2.959 MTR
Moulded displacement at moulded draught = 85 per cent. of moulded depth 360 m³
(excluding bossing)
Coefficient of fineness for use with Tables .68 (actual .629)

DEPTH FOR FREEBOARD (D).

Moulded depth	...	...	...	2959
Stringer plate	...	...	...	8
Sheathing on exposed deck	...	...	...	(59)
$T \left(\frac{L-S}{L} \right) = 50 \times \frac{20.45}{35}$	...	...	...	29
Depth for Freeboard (D) =	...	...	...	2996

DEPTH CORRECTION.

(a) Where D is greater than Table depth
(D - Table depth) R = 8.33 (2.996 - 2.334) 8.33 = +14.9 m/m

(b) Where D is less than Table depth (if allowed)
(Table depth - D) R = 6.62

If restricted by superstructures

ROUND OF BEAM CORRECTION.

Moulded Breadth (B)	6500
Standard Round of Beam = $\frac{B \times 12}{50}$	130
Ship's Round of Beam	130
Difference	
Restricted to	
Correction = $\frac{\text{Diff}^\circ}{4} \times \left(1 - \frac{S_1}{L} \right)$	Nil.

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	10000	10,000	2100	+21	10,000
" overhang aft					
" overhang forward					
F'cle enclosed	3650	3650	1800	-29	3521
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	13650	13650			13532

Standard Height of Superstructure 1830 m/m
" " R.Q.D. 444 m/m
Deduction for complete superstructure 444 m/m
Percentage covered $\frac{S}{L} = 39.00$
" " $\frac{S_1}{L} = 38.67$
" " $\frac{E}{L} = 22.37$
Percentage from Table, Line A.
(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 = .2237 x 444 = -99 m/m

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	546	1	546	400	400	400	1	400	400
$\frac{1}{2}L$ from A.P.	243	4	972	145	145	145	4	580	580
$\frac{3}{4}L$ "	61	2	122	11	11	11	2	22	22
Amidships	—	4	—	0	—	—	4	—	—
$\frac{3}{4}L$ from F.P.	121	2	242	134	121	121	2	242	242
$\frac{1}{2}L$ "	485	4	1940	481	487	487	4	1948	1948
F.P.	1091	1	1091	1091	1095	1095	1	1095	1095
Total			4913					4287	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{626}{18} \left(.75 - \frac{195}{195} \right) = +19 \text{ m/m}$
If limited on account of midship superstructure.

Mean actual sheer aft = 59.54
Mean standard sheer aft = 59.54

Mean actual sheer forward = 71
Mean standard sheer forward = 71

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

service trim 300 mm
sheer measured from line parallel to service waterline
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 = 3017
Summer freeboard = 1020
Moulded draught (d) = 1997
Keel allowance =

Extreme draught =
Deduction for Tropical freeboard and addition for

Winter freeboard = 4 ans

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta = 276 \text{ tons}$
Tons per inch immersion at summer load water line
 $T = 1.77$
Deduction = $\frac{\Delta}{40 T}$ inches

4 ans

TABULAR FREEBOARD—corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction	49	—
Deduction for superstructures	—	99
Sheer correction	19	—
Round of Beam correction	—	—
Correction for Thickness of Deck amidships	21	—
Other corrections, scantlings, etc.	738	—
	827	99

Summer Freeboard = 1020

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

Tropical Fresh Water Line above Centre of Disc	8 ans
Fresh Water Line	4 "
Tropical Line	4 "
Winter Line below	4 "
Winter North Atlantic Line	4 "

Tropical Fresh Water Freeboard	94 "
Fresh Water	98 "
Tropical	98 "
Winter	Not assigned
Winter North Atlantic	4 "

Bettet.

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.

Displacement in saltwater : 279,5 tons (of 1000 kg) at draught 2000 mm.

" " " 371,3 " " " 2500 "

" " " 468,0 " " " 3000 "

Service trim 300 mm

Moulded draught forward : 1830 mm

" " aft : 2130 mm

Sheer measured from line parallel to service waterline.

Sheer forward

Standard

Actual

1091 1 1091

1091 109

485 3 1485

481 1443

121 3 363

134 402

2909

2936

Excess 27.

Adjusted sheer

$$2909 + 27 \times \frac{9.54}{25} = 2919.30$$

Effective Sheer forward

121 485 1091

2919.3
2909

= 121 487 1091

Trade of ship Indonesian Archipelago

Names of sister ships BANGO, BEO, BABUT.

Builder's name and yard number N.V. Scheepskouwwerf en Machinefabriek "De Klop", Sliedrecht. n° C.O. 182

Owners Indonesian Government

Fee fl. 100,-



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