

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No. 43676
(For London Office only.)

No 3584

14 AUG 1952

Ship's Name BE0	Official Number ✓	Nationality and Port of Registry Indonesian Djakarta	Gross Tonnage 250	Date of Build 1952	Port of Survey Rotterdam
Moulded Dimensions: Length 35.00 MTR Breadth 6.50 MTR Depth 2.959 MTR					Date of Survey July - August 1952
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 360 m³ tons					Surveyor's Signature <i>Kraayebuit</i>
Coefficient of fineness for use with Tables 68 (actual 629)					Particulars of Classification +100A1 for service in Indonesian Archipelago

DEPTH FOR FREEBOARD (D). Moulded depth 2959 Stringer plate 8 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = \frac{50 \times 20.45}{35} = 29$ Depth for Freeboard (D) = 2996	DEPTH CORRECTION. (a) Where D is greater than Table depth $(D - \text{Table depth}) R = \frac{8.33(2996 - 2334)}{662} = +49 \text{ mm}$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = 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 = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \text{NIL}$
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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	10.400	2.100	-	10.400
" overhang aft			+21		
" overhang forward					
F'cle enclosed	3650	3.65	1800	1.771/1.83	3.532
" overhang			-29		
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	13650	13.650			13.532

Standard Height of Superstructure **1830 mm**
 " " R.Q.D. **-**
 Deduction for complete superstructure **444 mm**
 Percentage covered $\frac{S}{L} = \frac{13.650}{35.00} = 39.00$
 " " $\frac{S_1}{L} = \frac{13.532}{35.00} = 38.67$
 Percentage from Table, Line A. (corrected for absence of forecastle (if required)) **22.37**
 Percentage from Table, Line B. (corrected for absence of forecastle (if required)) **-**
 Interpolation for bridge less than 2L (if required) **-**
 Deduction = $22.37 \times 444 = 99 \text{ mm}$

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

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{626}{18} \left(.75 - \frac{191}{35} \right) = +19 \text{ mm}$
 If limited on account of midship superstructure.

Mean actual sheer aft **59.54**
 Mean standard sheer aft **59.54**
 Mean actual sheer forward **> 1**
 Mean standard sheer forward **> 1**
 Length of enclosed superstructure forward of amidships = **Shy aft**
 " " aft of " = **Shy aft**
 Service trim **300 mm**
 Sheer measured from line parallel to service waterline

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Nil 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 cm 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 = $\frac{\Delta}{40 T} = 4 \text{ cm}$	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td>49</td> <td>-</td> </tr> <tr> <td>Deduction for superstructures</td> <td>-</td> <td>99</td> </tr> <tr> <td>Sheer correction</td> <td>19</td> <td>-</td> </tr> <tr> <td>Round of Beam correction</td> <td>-</td> <td>-</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td>21</td> <td>-</td> </tr> <tr> <td>Other corrections, scantlings, etc. to correspond to a summer moulded draught of 1.993 m (1.997 actual)</td> <td>738</td> <td>-</td> </tr> <tr> <td></td> <td>827</td> <td>99</td> </tr> </table> Summer Freeboard = 1020		+	-	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. to correspond to a summer moulded draught of 1.993 m (1.997 actual)	738	-		827	99
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel Deck :-

Tropical Fresh Water Line above Centre of Disc	8	Tropical Fresh Water Freeboard	9.4
Fresh Water Line	4	Fresh Water	9.8
Tropical Line	4	Tropical	9.8
Winter Line below	Not assigned	Winter	Not assigned
Winter North Atlantic Line	4	Winter North Atlantic	4

Beo.

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 1000kg) 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.

Standard		Actual	
1091	1	1091	1091
485	3	1455	1443
121	3	363	402
			<u>2936</u>
		2909	

Allowed sheer ^{excess 27}
 $2909 + (27 \times \frac{9.54}{25}) = 2919.30$

Effective sheer forward

121	485	1091	$\times \frac{2919.3}{2909}$
<u>121</u>	<u>487</u>	<u>1095</u>	

Trade of ship Indonesian Archipelago

Names of sister ships BANGO, BETTET, BABUT.

Builder's name and yard number N.V. Scheepsbouwwerf en Machinefabriek, De Klop, Sliedrecht n^o CO. 181

Owners Indonesian Government

Fee f. 100,-

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