

*Timber*

# LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

Received .....

Index No. ....

Govt. Copy .....

Owners C11 .....

Ship's Name <i>Granbergen</i>	Official Number	Nationality and Port of Registry <i>Dutch Rotterdam</i>	Gross Tonnage <del>520</del> <i>499</i>	Date of Build <i>1954</i>	Port of Survey .....
Moulded Dimensions: Length <i>9000</i> Breadth <i>4160</i> ✓ Depth <i>4160</i> ✓					Date of Survey <i>28.4.54</i>
Freeboard Length <i>53600</i> ✓					Surveyor's Signature .....
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>1240 m<sup>3</sup> tons</i>					Particulars of Classification <i>+100A1</i>
Coefficient of fineness for use with Tables <i>707</i>					<i>contemplated.</i>

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... .. Stringer plate ... .. Wood Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <i>4170</i> ✓	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D-Table depth) R = <i>+54m</i> ✓ (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = Difference Restricted to Correction = $\frac{\text{Diff}^\circ}{4} \times \left( 1 - \frac{S_1}{L} \right) = -4$ ✓
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**DEDUCTION FOR SUPERSTRUCTURES.**

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..					
" overhang ... ..					
R.Q.D. enclosed ... ..					
" overhang ... ..					
Bridge enclosed ... ..					
" overhang aft ... ..					
" overhang forward ... ..					
F'cle enclosed ... ..					
" overhang ... ..					
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" " forward ... ..					
Total ... ..					

Standard Height of Superstructure .....

" " R.Q.D. ....

Deduction for complete superstructure *616*

Percentage covered  $\frac{S}{L} =$   
 $\frac{S_1}{L} =$   
 $\frac{E}{L} =$  } *44.60* ✓

Percentage from Table, Line *Timber* *65.87* ✓  
(corrected for absence of fore-castle (if required))

Percentage from Table, Line B.  
(corrected for absence of fore-castle (if required))

Interpolation for bridge less than .2L (if required)

Deduction = *616 × .6587 = 406* ✓

**SHEER CORRECTION.**

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..		1				1	
$\frac{1}{8}L$ from A.P. ... ..		4				4	
$\frac{2}{8}L$ " ... ..		2				2	
Amidships ... ..	○	4	○	○	○	4	○
$\frac{2}{8}L$ from F.P. ... ..		2				2	
$\frac{1}{8}L$ " ... ..		4				4	
F.P. ... ..		1				1	
Total ... ..							

Mean actual sheer aft =  
Mean standard sheer aft =

Mean actual sheer forward =  
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =  
L

" " aft of " =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = +114$  ✓  
If limited on account of midship superstructure.

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

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <i>4.170</i> Summer freeboard = <i>.280</i> Moulded draught (d) = <i>3.890</i> Keel allowance = Extreme draught = Deduction for Tropical freeboard and addition for $\frac{d}{48} = 8cm$ ✓ Winter freeboard = $\frac{d}{36} = 11cm$ ✓ Addition for Winter North Atlantic Freeboard (if required) = <i>13cm</i> ✓	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line T = Deduction = $\frac{\Delta}{40 T}$ inches = <i>8cm</i> ✓	<b>TABULAR FREEBOARD corrected for Flush Deck (if required)</b> Correction for coefficient $\frac{1.381}{1.36}$ <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th></th><th>+</th><th>-</th></tr></thead><tbody><tr><td>Depth Correction</td><td><i>54</i> ✓</td><td></td></tr><tr><td>Deduction for superstructures</td><td></td><td><i>406</i> ✓</td></tr><tr><td>Sheer correction</td><td><i>114</i> ✓</td><td></td></tr><tr><td>Round of Beam correction</td><td></td><td><i>4</i> ✓</td></tr><tr><td>Correction for Thickness of Deck amidships</td><td></td><td></td></tr><tr><td>Other corrections, scantlings, etc.</td><td></td><td></td></tr><tr><td><b>Summer Freeboard</b></td><td><i>1684</i> ✓</td><td><i>410</i> ✓</td></tr><tr><td></td><td></td><td><i>-242</i> ✓</td></tr><tr><td></td><td></td><td><i>277mm</i> ✓</td></tr></tbody></table> <i>511</i> ✓ <i>519</i> ✓ <i>28.4.54</i>		+	-	Depth Correction	<i>54</i> ✓		Deduction for superstructures		<i>406</i> ✓	Sheer correction	<i>114</i> ✓		Round of Beam correction		<i>4</i> ✓	Correction for Thickness of Deck amidships			Other corrections, scantlings, etc.			<b>Summer Freeboard</b>	<i>1684</i> ✓	<i>410</i> ✓			<i>-242</i> ✓			<i>277mm</i> ✓
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*Timber* **SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-**

	Timber	Steel	Deck
Tropical Fresh Water Line above Centre of Disc	<i>39cm</i> ✓		
Fresh Water Line	<i>31cm</i> ✓		
Tropical Line	<i>31cm</i> ✓		
Winter Line <i>ABOVE</i>	<i>12cm</i> ✓		
Winter North Atlantic Line <i>BELOW</i>	<i>13cm</i> ✓		
<i>Summer line above</i>	<i>23</i> ✓		

*28cm* ✓  
*12cm* ✓  
*20cm* ✓  
*20cm* ✓  
*39cm* ✓  
*64cm* ✓

5m, 11.51. T.

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