

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name GERB VAN DER WERF Nº 261	Official Number	Nationality and Port of Registry British?	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 40.000m Breadth 7.980m Depth 2.600m					Date of Survey 2/3/55
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 510 m³					Surveyor's Signature
Coefficient of fineness for use with Tables .726					Particulars of Classification for service in the Port Channel carrying and pumping tank

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 2.600	(a) Where D is greater than Table depth (D-Table depth) R = Negative	Moulded Breadth (B) = 7.980m
Stringer plate ... 7	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = 8.33(2667-2.600) 10.102 = -5.5	Standard Round of Beam = $\frac{B \times 100}{50} = 159 \frac{1}{2} \%$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures YES-ALL	Ship's Round of Beam EQUIV. = 120
Depth for Freeboard (D) = 2.607		Difference 39
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{39}{4} \times .4500 = +4 \frac{1}{4} \%$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	12.000				
" overhang ...					
R.Q.D. enclosed ...	12.000	12.000	.915	$\times \frac{915}{2724}$	11.273
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Fore enclosed ...	10.000	10.000	.500	$\times \frac{500}{1.830}$	2.732
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	22.000	22.000			14.005

Standard Height of Superstructure **1.830m**

" " R.Q.D. **.974m**

Deduction for complete superstructure **486%**

Percentage covered $\frac{S}{L} =$ } **55.00**

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

" " $\frac{E}{L} =$ } **35.01**

Percentage from Table, Line A. **19.26**

(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 .1926 = -94%**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	587	1	587	587		1	587
$\frac{1}{8}L$ from A.P. ...	261	4	1044	261		4	1044
$\frac{3}{8}L$ " ...	65	2	130	65		2	130
Amidships ...		4				4	
$\frac{5}{8}L$ from F.P. ...	130	2	260	130		2	260
$\frac{7}{8}L$ " ...	522	4	2088	522		4	2088
F.P. ...	1174	1	1174	1174		1	1174
Total ...			5283				5283

Mean actual sheer aft
Mean standard sheer aft = } **Standard.**

Mean actual sheer forward
Mean standard sheer forward = }

Length of enclosed superstructure forward of amidships = **Nil.**

" " aft of " = }

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \text{Standard. Nil.}$

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 = 2.607 Summer freeboard = 256 Moulded draught (d) = 2.351 Keel allowance = Extreme draught = Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 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 = $\frac{\Delta}{40 T}$ inches =	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.726 + .68}{1.36} = 1.406$ <table border="1"> <tr> <th></th><th>+</th><th>-</th></tr> <tr> <td>Depth Correction</td><td></td><td></td></tr> <tr> <td>Deduction for superstructures</td><td></td><td>94</td></tr> <tr> <td>Sheer correction</td><td></td><td></td></tr> <tr> <td>Round of Beam correction</td><td>4</td><td></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></td><td>4</td><td>94</td></tr> </table> Summer Freeboard = 256		+	-	Depth Correction			Deduction for superstructures		94	Sheer correction			Round of Beam correction	4		Correction for Thickness of Deck amidships			Other corrections, scantlings, etc.				4	94
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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 ...		Tropical Fresh Water Freeboard ...
Fresh Water Line " " ...		Fresh Water " " ...
Tropical Line " " ...		Tropical " " ...
Winter Line below " " ...		Winter " " ...
Winter North Atlantic Line " " ...		Winter North Atlantic " " ...

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.

Mean ^{equiv.} camber = $\frac{3}{2} \times \frac{160}{2}$, 120%.

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____



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Foundation