

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 38512  
(For London Office only).

29347.

15 APR 1946

Ship's Name <b>VAN GELDER.</b>	Official Number <b>V</b>	Nationality and Port of Registry <b>Netherlands Rotterdam</b>	Gross Tonnage <b>325</b>	Date of Build <b>1914</b>	Port of Survey <b>Rotterdam</b>
Moulded Dimensions: Length <b>131' 3" 40M.</b> Breadth <b>26' 3" 8.00M</b> Depth <b>3' 10" 7.90M</b>					Date of Survey <b>9th 11th April 1946</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>could not be obtained</b> tons					Surveyor's Signature <i>M. Viskool</i>
Coefficient of fineness for use with Tables <b>could not be obtained .76 (assumed)</b>					Particulars of Classification <b>90A K</b> <i>gross tonnage</i> <i>Now under survey to be classed at Lloyd's Register.</i>

<b>Depth for Freeboard (D).</b> Moulded depth ... <b>2.996 m</b> Stringer plate ... <b>0.009 m</b> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <b>3.007m</b>	<b>Depth correction.</b> (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $8.33(3.007 - 2.667) 10.102 = +2.9mm$ (b) Where D is less than Table depth (if allowed) $(\text{Table depth} - D) R =$ If restricted by superstructures -	<b>Round of Beam correction.</b> Moulded Breadth (B) <b>26' 3" = 8.00m</b> Standard Round of Beam = $\frac{B \times 12}{50} = 160mm$ Ship's Round of Beam = <b>8 = 203mm</b> Difference <b>43</b> Restricted to Correction = $\frac{\text{Diff}^a}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{43}{4} \times 0.8994 = -10.$
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### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Roop enclosed ...	✓				
" overhang ...	✓				
R.Q.D. enclosed ...	✓				
" overhang ...	✓				
Bridge enclosed ...	✓				
" overhang aft ...	✓				
" overhang forward ...	✓				
Fore enclosed ...		<b>3.25m</b>	<b>2.10m</b>	-	<b>3.250</b>
" overhang ...		<b>4.80m</b>	<b>2.10m</b>	-	<b>775</b>
Trunk aft ...	✓				
" forward ...	✓				
Tonnage opening aft ...	✓				
" forward ...	✓				
Total ...		<b>4.025</b>			<b>4.025</b>

Standard Height of Superstructure **1.83**  
 " " R.Q.D. ✓  
 Deduction for complete superstructure **486**  
 Percentage covered  $\frac{S}{L} = 10.13$   
 " "  $\frac{S_1}{L} = 10.46$   
 " "  $\frac{E}{L} = 10.46$   
 Percentage from Table, Line A. **5.03**  
 (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 × 0.0503 = -24.4mm**

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<b>587</b>	<b>1</b>		<b>587</b>	<b>0.70m</b>	<b>700</b>	<b>1</b>		<b>700</b>
$\frac{1}{2}L$ from A.P. ...	<b>261</b>	<b>4</b>		<b>1044</b>	<b>0.30m</b>	<b>300</b>	<b>4</b>		<b>1200</b>
$\frac{2}{3}L$ " ...	<b>65</b>	<b>2</b>		<b>130</b>	<b>0.05m</b>	<b>50</b>	<b>2</b>		<b>100</b>
Amidships ...	-	<b>4</b>		-	-	-	<b>4</b>		-
$\frac{2}{3}L$ from F.P. ...	<b>130</b>	<b>2</b>		<b>260</b>	<b>0.20m</b>	<b>200</b>	<b>2</b>		<b>400</b>
$\frac{1}{2}L$ " ...	<b>522</b>	<b>4</b>		<b>2088</b>	<b>0.50m</b>	<b>500</b>	<b>4</b>		<b>2000</b>
F.P. ...	<b>1174</b>	<b>1</b>		<b>1174</b>	<b>1.05m</b>	<b>1050</b>	<b>1</b>		<b>1050</b>
Total ...				<b>5283</b>					<b>5450</b>

Mean actual sheer aft =  
 Mean standard sheer aft = } *same*  
 Mean actual sheer forward =  
 Mean standard sheer forward =  
 Length of enclosed superstructure forward of amidships = } *Nil*  
 " " aft of " = } *Nil*

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - \frac{S}{2L}}{.75 - \frac{S}{2L}} \right) = \frac{167}{18} \left( \frac{.75 - .0506}{.75 - .0506} \right) = -6.5mm$   
 If limited on account of midship superstructure. *Nil.* If limited to maximum allowance of 1½ ins. per 100 ft. ✓

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <b>3.005</b> Summer freeboard = <b>.400</b> Moulded draught (d) = <b>2.605</b> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d \times 4}{48} = 54$ Addition for Winter North Atlantic Freeboard (if required) = ✓	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta = \text{could not be obtained}$ Tons per inch immersion at summer load water line $T = \text{could not be obtained}$ Deduction = $\frac{\Delta}{40T}$ inches =	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient $\frac{.76 + .68}{1.36} = \frac{1.44}{1.36} =$ <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td></td><td>+</td><td>-</td></tr> <tr><td>Depth Correction</td><td>28</td><td>-</td></tr> <tr><td>Deduction for superstructures</td><td>-</td><td>24</td></tr> <tr><td>Sheer correction</td><td>-</td><td>-</td></tr> <tr><td>Round of Beam correction</td><td>-</td><td>10</td></tr> <tr><td>Correction for Thickness of Deck amidships</td><td>-</td><td>-</td></tr> <tr><td>Other corrections, scantlings, etc.</td><td>51</td><td>-</td></tr> <tr><td><b>Total</b></td><td><b>7928</b></td><td><b>34</b></td></tr> </table> Summer Freeboard = <b>400</b>		+	-	Depth Correction	28	-	Deduction for superstructures	-	24	Sheer correction	-	-	Round of Beam correction	-	10	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	51	-	<b>Total</b>	<b>7928</b>	<b>34</b>
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### SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck :-

<i>As previously assigned by Netherlands authorities</i> Tropical Fresh Water Line above Centre of Disc ... <b>5cm</b> Fresh Water Line " <i>Nil assigned</i> ... Tropical Line " <i>Nil assigned</i> ... Winter Line below " <b>3cm</b> Winter North Atlantic Line " <i>Nil assigned</i> ...	Tropical Fresh Water Freeboard ... <b>40 cm</b> Fresh Water " <b>35 "</b> Tropical " <b>40 cm</b> Winter " <b>40 cm</b> Winter North Atlantic " <b>40 cm</b>
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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.

Trade of ship. *Service in the Baltic, North Sea including Shetlands, English Channel, Irish Sea and French Coast to Rouen*

Names of sister ships

Builder's name and yard number. *Emald Berninghaus Dussburg*

Owners *J. Vermaas' Scheepvaartbedrijf Rotterdam*

Fee £ *72.-*



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Foundation