

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>TYLON</b>	Official Number <b>9005</b>	Nationality and Port of Registry <b>SWEDISH HALMSTAD</b>	Gross Tonnage <b>847</b>	Date of Build <b>1914 6 MS.</b>	Port of Survey _____ Date of Survey <b>4.5.49.</b> Surveyor's Signature _____ Particulars of Classification <b>+100 A1.</b>
Moulded Dimensions: Length <b>210.20</b> Breadth <b>31.50</b> Depth <b>15.58</b>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					
Coefficient of fineness for use with Tables <b>.736 (Estimated)</b>					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... .. <b>15.58</b>	(a) Where D is greater than Table depth (D-Table depth) R = <b>+2.59</b> ✓	Moulded Breadth (B) _____ Standard Round of Beam = $\frac{B \times 12}{50} =$ _____ Ship's Round of Beam _____ = _____ Difference _____ Restricted to _____ Correction = $\frac{\text{Diff}^{\circ}}{4} \times (1 - \frac{S_1}{L}) =$ <b>-.03</b> ✓
Stringer plate ... .. <b>.03</b>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = _____	
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ _____	If restricted by superstructures _____	
Depth for Freeboard (D) = <b>15.61</b>		

**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 ... ..					
Fore' enclosed ... ..					
"  overhang ... ..					
Trunk aft ... ..					
"  forward ... ..					
Tonnage opening aft ... ..					
"  forward ... ..					
Total ... ..	<b>115.92</b>	<b>108.72</b>			<b>108.72</b>

Standard Height of Superstructure **6.00**  
" " R.Q.D. ✓  
Deduction for complete superstructure **27.02**  
Percentage covered  $\frac{S}{L} =$  **55.15**  
" "  $\frac{S_1}{L} =$  } **51.72**  
" "  $\frac{E}{L} =$  }  
Percentage from Table, Line **TIMBER** **70.32** ✓  
(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 = **27.02 × 70.32 = 19.00** ✓

**SHEER CORRECTION.**

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..		1					1		
$\frac{1}{4}L$ from A.P. ... ..		4					4		
$\frac{2}{4}L$ " ... ..		2					2		
Amidships ... ..		4					4		
$\frac{3}{4}L$ from F.P. ... ..		2					2		
$\frac{1}{4}L$ " ... ..		4					4		
F.P. ... ..		1					1		
Total ... ..				<b>279.17</b>					<b>278.60</b>

Mean actual sheer aft = **Deficient**  
Mean standard sheer aft = \_\_\_\_\_  
Mean actual sheer forward = **Deficient**  
Mean standard sheer forward = \_\_\_\_\_  
Length of enclosed superstructure forward of amidships = } **Deficient**  
" " aft of " = } **Sheer.**

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) =$  **+0.02** ✓  
If limited on account of midship superstructure. ✓  
If limited to maximum allowance of 1½ ins. per 100 ft. ✓

<p><b>Deduction for Tropical Freeboard.</b> Addition for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = <b>15.61</b> Ft. Summer freeboard = <b>0.81</b> Moulded draught (d) = <b>14.80</b></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = <math>\frac{d}{4}</math> inches = <b>3.70 = 94 mms.</b> Addition for Winter North Atlantic Freeboard (if required) = <math>\frac{d}{3}</math> = <b>4.93 = 125 mms.</b></p>	<p><b>Deduction for Fresh Water.</b></p> <p>Displacement in salt water at summer load water line <math>\Delta =</math> _____ Tons per inch immersion at summer load water line T = _____ Deduction = <math>\frac{\Delta}{40 T}</math> inches = <b>89 mms.</b></p>	<p><b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) <b>24.84</b></p> <p>Correction for coefficient <math>\frac{.736 + .68}{1.36} = \frac{1.416}{1.36}</math> <b>25.86</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>+</td><td>-</td></tr> <tr><td>Depth Correction ... ..</td><td><b>2.59</b></td></tr> <tr><td>Deduction for superstructures ... ..</td><td><b>19.00</b></td></tr> <tr><td>Sheer correction ... ..</td><td><b>.02</b></td></tr> <tr><td>Round of Beam correction ... ..</td><td><b>-.03</b></td></tr> <tr><td>Correction for Thickness of Deck amidships ... ..</td><td></td></tr> <tr><td>Other corrections, scantlings, etc. ... ..</td><td></td></tr> <tr><td><b>2.61</b></td><td><b>19.03</b></td></tr> <tr><td colspan="2">Summer Freeboard = <b>9.44</b> ✓</td></tr> </table>	+	-	Depth Correction ... ..	<b>2.59</b>	Deduction for superstructures ... ..	<b>19.00</b>	Sheer correction ... ..	<b>.02</b>	Round of Beam correction ... ..	<b>-.03</b>	Correction for Thickness of Deck amidships ... ..		Other corrections, scantlings, etc. ... ..		<b>2.61</b>	<b>19.03</b>	Summer Freeboard = <b>9.44</b> ✓	
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**TIMBER** SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	<b>396 mms.</b>	Tropical Fresh Water Freeboard ... ..	<b>67</b>
" Fresh Water Line " "	<b>307</b>	Fresh Water " " "	<b>156</b>
" Tropical Line " "	<b>307</b>	Tropical " " "	<b>156</b>
" Winter Line <i>above</i> " "	<b>92</b>	Winter " " "	<b>371</b>
" Winter North Atlantic Line <i>below</i> " "	<b>102</b>	Winter North Atlantic " " "	<b>565</b>
" Summer line " "	<b>218</b>		

Existing measurements 10.5.1949