

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name SPENJER STAR OF EL NIL. EMPIRE CONFIDENCE.	Official Number	Nationality and Port of Registry BRITISH AMSTERDAM.	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 406.83' Breadth 54.45' Depth 34.28' To Cr of Rubber Stock.					Date of Survey 2.5.50.
Moulded displacement at moulded draught = 85 per cent. of moulded depth					Surveyor's Signature
Coefficient of fineness for use with Tables Say .735.					Particulars of Classification

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 34.28'	(a) Where D is greater than Table depth (D - Table depth) R = (34.39 - 26.61) 3. = +23.34"	Moulded Breadth (B) 54.45'
Stringer plate04	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 7.78	Standard Round of Beam = $\frac{B \times 12}{50} = \mathbf{13.07'}$
Sheathing on exposed deck 3"		Ship's Round of Beam = 11.81'
$T \left(\frac{L-S}{L} \right) = .25 \times \frac{114.5}{406.83} = .07$	If restricted by superstructures <input checked="" type="checkbox"/>	Difference = 1.26'
Depth for Freeboard (D) = 34.39'		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{1.26}{4} \times .9355 = +.29"$

DEDUCTION FOR SUPERSTRUCTURES.				
Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poep enclosed ...				
" overhang ...				
R.Q.D. enclosed ...				
" overhang ...				
Bridge enclosed ...				
" overhang aft ...				
" overhang forward ...				
F'cle enclosed open ... 26.25'	26.25'	7.06'	7.06/7.50	24.71'
" overhang ...				
Trunk aft ...				
" forward ...				
Tonnage opening aft ...				
" " forward ...				
Total ... 26.25'	26.25'			24.71'

Standard Height of Superstructure 7.50'	R.Q.D. <input checked="" type="checkbox"/>
Deduction for complete superstructure 42.00"	
Percentage covered $\frac{S}{L} = \mathbf{6.45'}$	
" $\frac{S_1}{L} = \mathbf{6.07'}$	
Percentage from Table, Line A. 3.04'	
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B. <input checked="" type="checkbox"/>	
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required) <input checked="" type="checkbox"/>	
Deduction = 42.00' .0304 = -1.28"	

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	50.68	<input checked="" type="checkbox"/> 1	50.68	57.25	57.25	<input checked="" type="checkbox"/> 1	57.25
$\frac{1}{2}$ L from A.P. ...	22.555	<input checked="" type="checkbox"/> 4	90.22	18.125	18.125	<input checked="" type="checkbox"/> 4	72.50
$\frac{3}{8}$ L " ...	5.575	<input checked="" type="checkbox"/> 2	11.15	6.00	6.00	<input checked="" type="checkbox"/> 2	12.00
Amidships ...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/>
$\frac{3}{8}$ L from F.P. ...	11.15	<input checked="" type="checkbox"/> 2	22.30	12.00	12.00	<input checked="" type="checkbox"/> 2	24.00
$\frac{1}{2}$ L " ...	46.11	<input checked="" type="checkbox"/> 4	180.44	49.125	49.125	<input checked="" type="checkbox"/> 4	196.50
F.P. ...	101.37	<input checked="" type="checkbox"/> 1	101.37	112.00	112.00	<input checked="" type="checkbox"/> 1	112.00
Total ...			456.16				474.25

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{18.09}{18} (.75 - .0323) = - .72"$

If limited on account of midship superstructure. **Yes Nil.**

Mean actual sheer aft = **DEFICIENT 95.6.70.**

Mean standard sheer aft =

Mean actual sheer forward = **Excess.**

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **N.L.**

" " aft of " =

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 34.57' Summer freeboard = 10.63' Moulded draught (d) = 23.94' Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6" Addition for Winter North Atlantic Freeboard (if required) = <input checked="" type="checkbox"/>	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 = 6 1/4"	TABULAR FREEBOARD 73.62 + 2.40 corrected for Flush Deck (if required) 73.50 Correction for coefficient $\frac{1.36}{1.36} = \mathbf{1.415}$ <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td>23.34</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Deduction for superstructures</td> <td>1.28</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Sheer correction</td> <td>2.29</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Round of Beam correction</td> <td>2.16</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td>2.389</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Other corrections, scantlings, etc. 49.68</td> <td>1.28</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Summer Freeboard = 127.50</td> <td></td> <td></td> </tr> </table>		+	-	Depth Correction	23.34	<input checked="" type="checkbox"/>	Deduction for superstructures	1.28	<input checked="" type="checkbox"/>	Sheer correction	2.29	<input checked="" type="checkbox"/>	Round of Beam correction	2.16	<input checked="" type="checkbox"/>	Correction for Thickness of Deck amidships	2.389	<input checked="" type="checkbox"/>	Other corrections, scantlings, etc. 49.68	1.28	<input checked="" type="checkbox"/>	Summer Freeboard = 127.50		
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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 ... 12 1/4"	Fresh Water Line " " ... 6 1/4"	Tropical Fresh Water Freeboard ... 10' 7 1/2"	Fresh Water " " ... 9' 7 1/4"
Tropical Line " " ... 6"	Tropical " " ... 6"	Tropical " " ... 10' 1 1/2"	Fresh Water " " ... 9' 1 1/4"
Winter Line below " " ... 6"	Winter " " ... 6"	Winter " " ... 11' 1 1/2"	Fresh Water " " ... 10' 1 1/4"
Winter North Atlantic Line " " ... 6"	Winter North Atlantic " " ... 6"	Winter North Atlantic " " ... 11' 1 1/2"	Fresh Water " " ... 10' 1 1/4"