

# LLOYD'S REGISTER OF SHIPPING

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, ~~SAILING SHIP~~, TANKER)

For LONDON OFFICE ONLY

Received .....  
 Index No. ....  
 Govt. Copy .....  
 Owners C11 .....

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
"ROSPIGEN"	10045	Swedish Grisslehamn	<del>280</del> 345.06	6,60

Port of Survey ÅmålDate of Survey 6,60Surveyor's Signature Brewer

Particulars of Classification +100A1  
 For service between harbours in the Stockholm Archipelago and the Åland Islands.

Moulded Dimensions: Length 37.1 M. ✓ Breadth 8.7 M. ✓ Depth 3.38 M. ✓  
 Freeboard Length 37.1 M. ✓ (APP = 96% of length on LWL from fore side of bar stem)  
 Moulded displacement at moulded draught = 85 per cent. of moulded depth. 518 M<sup>3</sup> ~~XXXX~~  
 (excluding bossing)  
 Coefficient of fineness for use with Tables -.68 (Actual .559)

DEPTH FOR FREEBOARD (D). mm.	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION. mm.
Moulded depth ... 3380 ✓	(a) Where D is greater than Table depth (D - Table depth) / R = <u>8.33(3.390 - 2.474) / 9.37 = 71 mm</u> 916	Moulded Breadth (B) 8700 Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>174 mm</u> Ship's Round of Beam <u>124 mm</u> Difference <u>50 mm</u>
Stringer plate ... 10 ✓ (Btm. of bar keel under Mld. line = 80) Wood Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ None	(b) Where D is less than Table depth (if allowed) (Table depth - D) / R = If restricted by superstructures	Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{50^2}{4} \times \left( 1 - \frac{5985}{1-4015} \right) = +7 \text{ mm}$
Depth for Freeboard (D) = <u>3390</u> ✓		

## DEDUCTION FOR SUPERSTRUCTURES.

See Sketch	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 ...					
<del>OPEN</del> Bridge enclosed ...	<u>11.100</u> ✓	<u>5.550</u> ✓			<u>5.550</u> ✓
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	<u>7.845</u> ✓	<u>7.845</u> ✓	<u>2.200</u>		<u>7.845</u> ✓
" overhang ...	<u>3.000</u> ✓	<u>1.500</u> ✓			<u>1.500</u> ✓
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<u>21.945</u> ✓	<u>14.895</u> ✓			<u>14.895</u> ✓

Standard Height of Superstructure 1.830 m ✓

R.Q.D. ✓

Deduction for complete superstructure 462 mm ✓Percentage covered  $\frac{S}{L} =$  59.15 ✓
 $\frac{S_1}{L} =$  40.15 ✓  
 $\frac{E}{L} =$ 
Percentage from Table, Line A. 23.63 ✓(corrected for absence of forecastle (if required)) 27.63 ✓

Percentage from Table, Line B

(corrected for absence of forecastle (if required)) 4 x 5.55 = 2.99 26.62Interpolation for bridge less than 2L (if required) 7.42Deduction = 462 x 2.662 = -123 mm

## SHEER CORRECTION.

-NO SHEER ON FREEBOARD DECK -

Station	Standard Ordinate	S M	Product	Actual Ordinate mm.	Effective Ordinate	S M	Product
A.P. ...	<u>563</u>	1	<u>563</u>	0	0	1	0
$\frac{1}{4}$ L from A.P. ...	<u>250</u>	4	<u>1000</u>	0	0	4	0
$\frac{2}{4}$ L ...	<u>63</u>	2	<u>126</u>	0	0	2	0
Amidships ...	0	4	0	0	0	4	0
$\frac{3}{4}$ L from F.P. ...	<u>125</u>	2	<u>250</u>	0	0	2	0
$\frac{1}{4}$ L ...	<u>501</u>	4	<u>2004</u>	0	0	4	0
F.P. ...	<u>1126</u>	1	<u>1126</u>	<u>210</u>	0	1	0
Total ...			<u>5069</u>				0

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{5069 \cdot (.75 - .2958)}{18 \cdot 4542} = +128 \text{ mm}$   
 If limited on account of midship superstructure.

Mean actual sheer aft =

Mean actual sheer forward =

Length of enclosed superstructure forward of amidships =

aft of

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 3.390 ft. m  
 Summer freeboard = 0.890  
 Moulded draught (d) = 2.500  
 Keel allowance =  
 Extreme draught =  
 Deduction for Tropical freeboard and addition for =

Winter freeboard =  $\frac{d}{48}$  inches = 52 mm ✓

Addition for Winter North Atlantic Freeboard (if required) =

- See over -  
Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta = 429 \text{ m}^3$   
 Tons per inch immersion at summer load water line  
 $T = 4.5$   
 Deduction =  $\frac{\Delta}{40 T}$  inches = 60 mm

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient None

Depth Correction ... 71 ✓  
 Deduction for superstructures ... 123 ✓  
 Sheer correction ... 128 ✓  
 Round of Beam correction ... 7 ✓  
 Correction for Thickness of Deck amidships ... 498 ✓  
 Other corrections, scantlings, etc. to correspond to a summer draught of 2.500 m. 704 ✓

Summer Freeboard = 890 mm

890 mm For Service.

## SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc NOT ASSIGNED  
 Fresh Water Line " " 60 mm  
 Tropical Line " " NOT ASSIGNED  
 Winter Line below " " 52 mm  
 Winter North Atlantic Line " " NOT ASSIGNED

## Tropical Fresh Water Freeboard

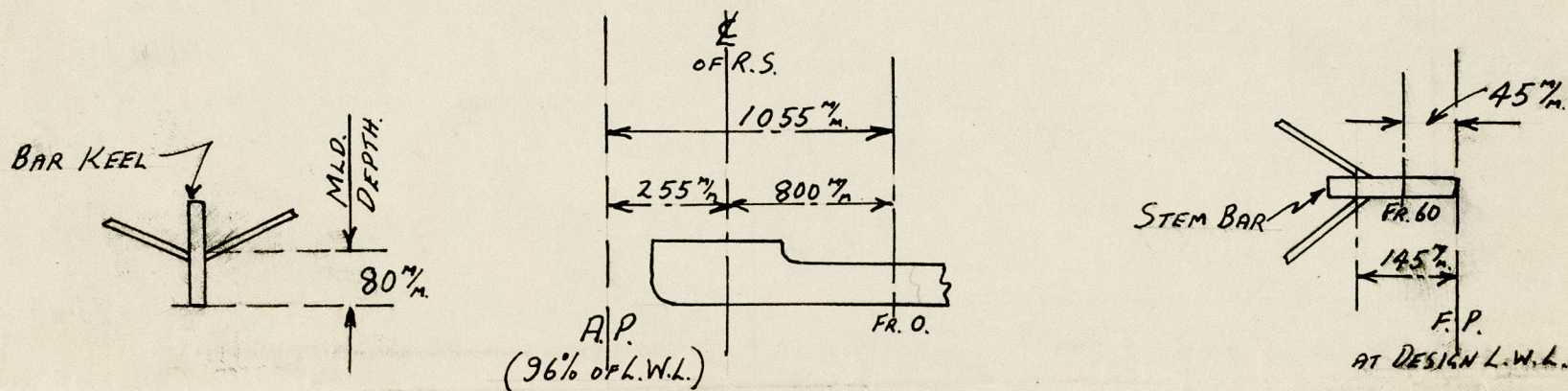
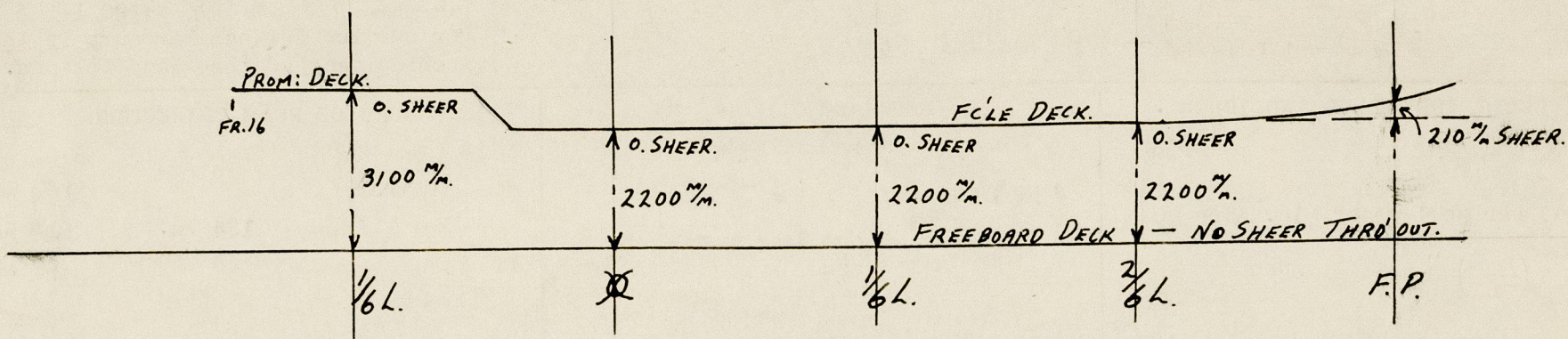
Fresh Water " 830 mmTropical " 942 mmWinter " 890 mmWinter North Atlantic " 890 mm



Rosfjorden

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.

% of Mld. Depth	Displacement in salt water	Immersion $M^3/25$ mm.
3.21 m 95%	612 $m^3$	6.0 $m^3/25$ mm.
2.873 m 85%	521 "	5.1 "
2.535 m 75%	435 "	4.5 "
2.550	3	4.5
15	63	



Trade of ship Car & Passenger Ferry.

Names of sister ships None.

Builder's name and yard number A.-B. Åsi-Verken, Åmål - Yard No. 54

Owners T. Jansson, Vaddö.

Fee £ :

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)

Midship Section  
Profile and Plan.



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