

LLOYD'S REGISTER OF SHIPPING

SURVEYS FOR FREEBOARD

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

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

Ship's Name "ROSPIGGEN"	Official Number 10045	Nationality and Port of Registry Swedish Grisslehamn.	Gross Tonnage 745	Date of Build 7/1960	Port of Survey Stockholm
Moulded Dimensions: Length 37.1 M Breadth 8.7 M Depth 3.38 M Freeboard Length 37.1 M (APP= 96% of length on L.W.L. from fore side of Stem bay) Moulded displacement at moulded draught = 85 per cent. of moulded depth 518 M³ (excluding bossing) Coefficient of fineness for use with Tables .68 (Actual .559)					Date of Survey 9th Oct. & subsequently.
Surveyor's Signature J. Rind					Particulars of Classification +100A1 Car. ferry for service between harbours in the Stockholm Archipelago and the Aland islands.

DEPTH FOR FREEBOARD (D). Moulded depth ... 3380 Stringer plate ... 10 <i>(Btm. of bar keel under Mfd line = 80)</i> Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ None Depth for Freeboard (D) = 3390	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = 8.33(3390-2474)9.37 = 71 mm (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	ROUND OF BEAM CORRECTION. Moulded Breadth (B) 8700 Standard Round of Beam = $\frac{B \times 12}{50} =$ 174 Ship's Round of Beam 124 = 124 Difference 50 mm Restricted to Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{50}{4} (1 - .4534) = +7.14$
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DEDUCTION FOR SUPERSTRUCTURES.				
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Effective Length (E)
Poop enclosed ...				
" overhang ...				
R.Q.D. enclosed ...				
" overhang ...				
OPEN Bridge ...	9.745	4.873		4.873
" overhang aft ...				
" overhang forward ...				
F'ele enclosed Equip. ...	11.197	11.197	2.200	11.197
" overhang ...	1.503	0.752		0.752
Trunk aft ...				
" forward ...				
Tonnage opening aft ...				
" forward ...				
Total ...	22.445	16.822		16.822

Standard Height of Superstructure	1.830 M
" " R.Q.D.	
Deduction for complete superstructure	462 mm
Percentage covered $\frac{S}{L} =$	60.50
" " $\frac{S_1}{L} =$	45.34
" " $\frac{E}{L} =$	
Percentage from Table, Line A.	28.04
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B.	32.04
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required)	4x4.873=2.63 30.67
Deduction =	462 x .3067 = 142 mm

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

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{5069}{18} (.75 - .3025) = +126 \text{ mm}$
 If limited on account of midship superstructure. ☒ If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100ft. ☒

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 3390 Summer freeboard = 890 Moulded draught (d) = 2.500 Keel allowance = Extreme draught = Deduction for Tropical freeboard and addition for = Winter freeboard = $\frac{d}{4}$ inches = 52 mm Addition for Winter North Atlantic Freeboard (if required) =	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ 429 m³ Tons per inch immersion at summer load water line 25 mm $T =$ 4.5 Deduction = $\frac{\Delta}{40 T}$ inches = 60 mm 62	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient None Depth Correction ... 71 Deduction for superstructures ... 142 Sheer correction ... 126 Round of Beam correction ... 7 Correction for Thickness of Deck amidships ... 469 Other corrections, scantlings, etc. 519 to a summer draught of 2.500 M 2.550 673 Summer Freeboard = 890 mm
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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	NOT ASSIGNED	Tropical Fresh Water Freeboard	NOT ASSIGNED
Fresh Water Line	62 60 mm	Fresh Water	778 830 mm
Tropical Line	NOT ASSIGNED	Tropical	893 942 mm
Winter Line below	53 52 mm	Winter	NOT ASSIGNED
Winter North Atlantic Line	NOT ASSIGNED	Winter North Atlantic	NOT ASSIGNED

Rosriggen

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.

$$\begin{aligned} \text{F'le. Length at Side} &= 10.845 \text{ M} \\ + \frac{4600 \times 600}{7850} &= \frac{352}{11.197 \text{ M}} \end{aligned}$$

$$\text{F'le off} = 12.700 - 11.197 = 1.503 \text{ M}$$

$$\text{Bridge} = 9.695 \text{ M}$$

Trade of ship Car Ferry for service between harbours in Stockholm Archipelago and Åland islands.

Names of sister ships None

Builder's name and yard number AB Åsi-Verken

Owners Rederiet Grisslehamn - Åland.

Fee £ : :

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



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