

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name S/S "RUDOLF"	Official Number 8582	Nationality and Port of Registry Swedish Gothenburg.	Gross Tonnage 1969	Date of Build 1943 6	Port of Survey Gothenburg
Moulded Dimensions ^{Freeboard} Length 76.475 M. Breadth 12.50 M. Depth 6.375 M.					Date of Survey
Moulded displacement at moulded draught = 85 per cent. of moulded depth 4079 M³ tons					Surveyor's Signature
Coefficient of fineness for use with Tables .7875					Particulars of Classification

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth	(a) Where D is greater than Table depth (D—Table depth) R =	Moulded Breadth (B)
Stringer plate		Standard Round of Beam = $\frac{B \times 12}{50}$ =
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	(b) Where D is less than Table depth (if allowed) (Table depth—D) R =	Ship's Round of Beam =
Depth for Freeboard (D) = 6.390 M.	+ 208 $\frac{m}{m}$	Difference
	If restricted by superstructures	Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$ = - 1 $\frac{m}{m}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S) M.	Equivalent Enclosed Length (S ₁) M.	Height $\frac{m}{m}$	Height Correction	Effective Length (E) M.
Poop enclosed	16.781	16.781	2180		16.781
» overhang	3.744	1.872			1.872
R.Q.D. enclosed	26.230	26.230	1217	1217/1224	26.080
» overhang					
Bridge enclosed					
» overhang aft					
» overhang forward					
Fore enclosed	5.550	5.550	2837		5.550
» overhang	1.220	.610			.610
Trunk aft					
» forward					
Tonnage opening aft	1.220	1.224 = Diff \times .384			1.224
» forward	.380	.265			.265
Total	55.125	52.552			52.402

Standard Height of Superstructure **1.833 M.**
» » R.Q.D. **1.224 M.**
Deduction for complete superstructure **790 $\frac{m}{m}$**
Percentage covered $\frac{S}{L} = 72.08\%$
» » $\frac{S_1}{L} = 68.72\%$
» » $\frac{E}{L} = 68.52\%$
Percentage from Table, Line A. **Timber** **80.61%**
(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 = **790 \times .8061 = - 637 $\frac{m}{m}$**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
1/6 L from A.P.		4				4	
2/6 L		2				2	
Amidships		4				4	
2/6 L from F.P.		2				2	
1/6 L		4				4	
F.P.		1				1	
Total							

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

Mean actual sheer aft =
Mean standard sheer aft =
Mean actual sheer forward =
Mean standard sheer forward =
Length of enclosed superstructure forward of amidships =
L
» » aft of » =
+ 147 $\frac{m}{m}$
If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 7.607 Summer freeboard = 1.824 Moulded draught (d) = 5.783 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{48}$ inches = 120 $\frac{m}{m}$ Addition for Winter, North Atlantic Freeboard (if required) = $\frac{d}{36} =$ 161 $\frac{m}{m}$	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ 4462 tons Tons per inch immersion at summer load water line T = 2159 Deduction = $\frac{\Delta}{40 T}$ inches = 5.17 $\frac{m}{m}$ = 131 $\frac{m}{m}$	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient Depth Correction 208 Deduction for superstructures - 637 Sheer correction 147 Round of Beam correction - 1 Correction for Thickness of Deck amidships - Other corrections, scantlings, etc. 1217 1572 638 + 934 Summer Freeboard = 1824 $\frac{m}{m}$
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TIMBER SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood Steel, Deck:— Timber Tropical Fresh Water Line above Centre of Disc 410 $\frac{m}{m}$ » Fresh Water Line 290 » Tropical Line 279 » Winter Line below 2 » Winter North Atlantic Line 168 summer above 159	RAISED QUARTER Timber Tropical Fresh Water Freeboard 1824 $\frac{m}{m}$ Fresh Water 1693 Tropical 1704 Winter 1985 Winter North Atlantic 2151
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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

Names of sister ships

Builder's name and yard number

Owners

Fee £

None.

A.B. Lindholmens Varv, Gothenburg, Yard No. 973.

Rederi A.B. Bifrost (G. Karlberg, Mgr.), Gothenburg.



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Foundation