

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Securus 38501

Ship's Name M/T "GAUTHIOD"	Official Number ✓	Nationality and Port of Registry Swedish Stockholm	Gross Tonnage About 8,600	Date of Build 1947	Port of Survey Malmö
Moulded Dimensions: Length 465.75' Breadth 62' Depth 34.5'					Date of Survey Whilst building.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 18830 tons					Surveyor's Signature A. Barring
Coefficient of fineness for use with Tables .778					Particulars of Classification 100A1 Carrying Petroleum in Bulk.

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 34.5'	(a) Where D is greater than Table depth (D - Table depth) R = (34.56 - 31.05) 3 = + 10.53"	Moulded Breadth (B) 62.0'
Stringer plate ... 0.063	(b) Where D is less than Table depth (if allowed) ✓ (Table depth - D) R = 3.51	Standard Round of Beam = $\frac{B \times 12}{50} =$ 14.88
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures ✓	Ship's Round of Beam = 14.97"
Depth for Freeboard (D) = 34.563'		Difference + .09
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{.09}{4} \times .5873 =$ -.01"

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed <i>equiv.</i>	97.11	97.11	7.75	✓	97.11	
.. overhang ...						
R.Q.D. enclosed						
.. overhang						
Bridge enclosed <i>equiv.</i>	38.33	38.33	7.75	✓	38.33	
.. overhang aft						
.. overhang forward						
F'cle enclosed						
.. overhang	56.79	56.79	7.5	✓	56.79	
Trunk aft						
.. forward						
Tonnage opening aft						
.. forward						
Total	192.23	192.23			192.23	

Standard Height of Superstructure	7.5'
.. R.Q.D.	
Deduction for complete superstructure	42"
Percentage covered $\frac{S}{L} =$	41.27
.. $\frac{S_1}{L} =$	
.. $\frac{E}{L} =$	
Percentage from Table, Line A. TANKER	32.27
(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 = 42 × .3227 = - 13.55"	

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product	
A.P. ...	56.57	1	56.57	41.74	41.74	1	41.74	
$\frac{1}{4}$ L from A.P. ...	25.18	4	100.72	3.02	3.02	4	6.04	
$\frac{3}{8}$ L ..	6.22	2	12.44	0	-	2	-	
Amidships ...	-	4		0	-	4	-	
$\frac{3}{8}$ L from F.P. ...	12.44	2	24.88	0.08	.08	2	.16	
$\frac{1}{4}$ L ..	50.35	4	201.40	25.88	25.88	4	103.52	
F.P. ...	113.15	1	113.15	100.25	100.25	1	100.25	
Total			509.16				257.75	

Mean actual shear aft =
Mean standard shear aft = } *deficient*

Mean actual shear forward =
Mean standard shear forward =

Length of enclosed superstructure forward of amidships = } *deficient*
L aft of .. = } *sheer*

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{251.41}{18} (.75 - .2064) = + 7.59"$
If limited on account of midship superstructure. ✓

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. ✓

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.778 + .68}{1.36} = \frac{1.458}{1.36}$	79.14
Depth to Freeboard Deck = 34.56	$\Delta = 17270$		84.86
Summer freeboard = 7.45	Tons per inch immersion at summer load water line	Depth Correction ... 10.53	
Moulded draught (d) = 27.11	T = 61.05	Deduction for superstructures ... 13.55	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.78" = 172 mm	Deduction = $\frac{\Delta}{40 T}$ inches = 7.07" = 180 mm	Sheer correction ... 7.59	
Addition for Winter North Atlantic Freeboard (if required) = 6.78 + 4.66 = 11.44 = 291 mm	<i>See over!</i>	Round of Beam correction01	
		Correction for Thickness of Deck amidships ...	
		Other corrections, scantlings, etc. ...	
		18.12 13.56 + 4.56	
		Summer Freeboard = 89.40	

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

Tropical Fresh Water Line above Centre of Disc	352 mm	Tropical Fresh Water Freeboard ...	2271 mm
Fresh Water Line	180 "	Fresh Water	1919 "
Tropical Line	172 "	Tropical	2091 "
Winter Line below	172 "	Winter	2092 "
Winter North Atlantic Line	291 "	Winter North Atlantic	2443 "
			2562 "

M/T. Gauthiod.

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.

Displacement in salt water and tons per inch immersion:-

Moulded draught:	Displacement:	Tons per inch:
75' = 25.875'	16365 tons.	60.87
80' = 27.60'	17.630 "	61.12
85' = 29.325'	18.900 "	61.37

Pooh equiv -

$$\begin{array}{r} \text{at tide} = 90.55 \\ \frac{2}{3} \times 9.84 = 6.56 \\ \hline 97.11' \end{array}$$

Bridge equiv

$$\begin{array}{r} \text{at tide} \quad 34.61 \\ \frac{2}{3} \times 5.58 \quad 3.72 \\ \hline 38.33' \end{array}$$

Trade of ship

Names of sister ships

M/T "Scurro", Hockemus Yard No. 286.

Builder's name and yard number

Hockemus Makt. Varkestads A.-B., Mahmö, Yard No. 288.

Owners

Stoekholm Rederi A. B. Svea, Stockholm.

Fee £



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