

Caroline Maersk
38099

Lloyd's Register of Shipping.

Index. No. 38106
(For London Office only).

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name KATRINE MAERSK	Official Number ✓	Nationality and Port of Registry Danish	Gross Tonnage 26,187 tons	Date of Build 1944	Port of Survey Odense
Moulded Dimensions: Length 496'0" Breadth 65'9" Depth 35'11"					Date of Survey August 44
Freeboard Length 496.98'					Surveyor's Signature Hk. Jørgensen
Moulded displacement at moulded draught = 85 per cent. of moulded depth 22,624 tons					Particulars of Classification +100 A1 carrying petroleum in bulk (contemplated)
Coefficient of fineness for use with Tables .795					

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth 35.917	(a) Where D is greater than Table depth (D—Table depth) R = (35.917—33.132)3 = +8.568	Moulded Breadth (B) 65'9"
Stringer plate .071	(b) Where D is less than Table depth (if allowed) (Table depth—D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 15.78$
Sheathing on exposed deck none		Ship's Round of Beam = 15.3
$T \left(\frac{L-S}{L} \right) =$		Difference +.03
Depth for Freeboard (D) = 35.988	If restricted by superstructures	Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = 4.71$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	102.05	102.05	7.65		102.05	Standard Height of Superstructure 7.50
» overhang	2.42	1.21			1.21	» » R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure 42
» overhang						Percentage covered $\frac{S}{L} = 36.53$
Bridge enclosed	34.54	34.54	7.50		34.54	» » $\frac{S_1}{L} = 36.29$
» overhang aft						» » $\frac{E}{L} = 36.29$
» overhang forward	4.38	4.38			4.38	Percentage from Table, Line A.
F	35.17	35.17	7.50		35.17	(corrected for absence of forecastle [if required])
Trunk aft	3.00	3.00			3.00	Percentage from Table, Line B.
» forward						(corrected for absence of forecastle [if required]) 27.29
Tonnage opening aft						Interpolation for bridge less than 2L (if required)
» » forward						Deduction = 42 + .2729 = 44.71
Total	187.56	180.25			180.25	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	59.70	1		59.70	59.5	59.50	1		59.50	Mean actual sheer aft = Excess
1/6 L from A.P.	26.56	4		106.24	26.65	26.65	4		106.60	Mean actual sheer forward = Excess
2/6 L	6.56	2		13.12	6.75	6.75	2		13.50	Mean standard sheer forward
Amidships	0	4		0	0	0	4		0	Length of enclosed superstructure forward of amidships =
2/6 L from F.P.	13.13	2		26.26	13.45	13.45	2		26.90	» » aft of » =
1/6 L	53.13	4		212.52	53.00	53.00	4		212.00	
F.P.	119.40	1		119.40	122.25	122.25	1		122.25	
Total				537.24					540.75	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{2.50}{18} (.75 - .18) = -.11$

If limited on account of midship superstructure.

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 = 35.92 Summer freeboard = 7.58 Moulded draught (d) = 28.34 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 7.09 ~ 180% Addition for Winter North Atlantic Freeboard (if required) = 7.09 + 4.97 + 12.06 ~ 305%	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 20,850$ Tons per inch immersion at summer load water line $T = 67.2$ Deduction = $\frac{\Delta}{40T}$ inches = 7.75 ~ 195%	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.294 + .01}{1.86}$ Depth Correction 8.57 Deduction for superstructures 11.46 Sheer correction .11 Round of Beam correction Correction for Thickness of Deck amidships Other corrections, scantlings, etc. Summer Freeboard = 91.04	86.77 94.04 82.8 6.9-40
--	--	--	----------------------------------

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

Tropical Fresh Water Line above Centre of Disc	37.5	Tropical Fresh Water Freeboard	1935
Fresh Water Line	19.5	Fresh Water	2115
Tropical Line	18.0	Tropical	2130
Winter Line below	18.0	Winter	2470
Winter North Atlantic Line	30.5	Winter North Atlantic	2415

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

Odense Staalskibsverft yard N^o 83.

Builder's name and yard number

Odense Staalskibsverft, Odense, yard N^o 88

Owners

A.P. Møller Esq.

Fee £

To be charged on completion.



© 2020

Lloyd's Register
Foundation