

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name **SALLY MAERSK** Official Number **✓** Nationality and Port of Registry **DANISH COPENHAGEN** Gross Tonnage **5** Date of Build **1945 7ms.**

Port of Survey _____ Date of Survey **14.9.48**

Moulded Dimensions: Length **126748** Breadth **17068** Depth **11430** ✓

Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons

Coefficient of fineness for use with Tables **.76 (Estimated)** ✓

Surveyor's Signature **AP**

Particulars of Classification **+100A1 with freeboard**

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	11430	(a) Where D is greater than Table depth (D - Table depth) R = $8.33(11447 - 8450)36 = +749$ inches		Moulded Breadth (B)	17068
Stringer plate	17.25	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = ✓		Standard Round of Beam = $\frac{B \times 19}{50}$	341
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures ✓		Ship's Round of Beam	345
Depth for Freeboard (D) =	11447			Difference	4
				Restricted to	
				Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right)$	$= \frac{4}{4} \times 9193 = -1$ inches

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed	10228	10228	2210	2290	9870
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	10228	10228			9870

Standard Height of Superstructure **2290** ✓

" " R.Q.D. ✓

Deduction for complete superstructure **1067** ✓

Percentage covered $\frac{S}{L} = 8.07$ ✓

" " $\frac{S_1}{L} = 7.79$ ✓

Percentage from Table, Line A. **3.90** ✓
(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 = $1067 \times 0.039 = 42$ inches ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	1310	1		1310	1340	1340	1		1340
$\frac{1}{8}L$ from A.P.	582	4		2328	590	590	4		2360
$\frac{2}{8}L$ "	145	2		290	150	150	2		300
Amidships	-	4		-	-	-	4		-
$\frac{3}{8}L$ from F.P.	291	2		582	300	300	2		600
$\frac{4}{8}L$ "	1164	4		4656	1170	1170	4		4680
F.P.	2619	1		2619	2680	2680	1		2680
Total				11785					11960

Mean actual sheer aft = **Excess.**
Mean standard sheer aft = **Excess.**

Mean actual sheer forward = **Excess.**
Mean standard sheer forward = **Excess.**

Length of enclosed superstructure forward of amidships = **NIL.**
" " aft of " = **NIL.**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{175}{18} (.75 - .0404) = -7.796$ inches
If limited on account of midship superstructure. **YES - NIL.** If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **11447** ✓
Summer freeboard = **3410** ✓
Moulded draught (d) = **8037** ✓

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{48}$ inches = **167 = 165** inches ✓

Addition for Winter North Atlantic Freeboard (if required) = ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ **13020**

Tons per inch immersion at summer load water line

T = **46.23**Deduction = $\frac{\Delta}{40 T}$ inches= **7.04** inches= **179** inches= **180** inches

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

$\frac{1940 + 35}{1.36} = \frac{1975}{1.36}$

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. corresponding

to a summer moulded draught of 26.35'

1362 43 + 1319

Summer Freeboard = **3410** ✓

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

Tropical Fresh Water Line above Centre of Disc	345 inches
Fresh Water Line	180 "
Tropical Line	165 "
Winter Line below	165 "
Winter North Atlantic Line	✓

Tropical Fresh Water Freeboard

Fresh Water

Tropical

Winter

Winter North Atlantic

3410 inches

3065 "

3230 "

3245 "

3575 "