

STEAMER
SCANT LINGS ONLY.Index No. _____
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name Esso Liverpool	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 555' Breadth 75'0" Depth 43'25"					Date of Survey 22/5/50
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature
Coefficient of fineness for use with Tables Say 90					Particulars of Classification Contingent

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 43'25"	(a) Where D is greater than Table depth (D-Table depth) R = (43.33-37.00) 3 = +18.99	Moulded Breadth (B) 75'0"
Stringer plate 08	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 18.00
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 15.00
Depth for Freeboard (D) = 43.33		Difference 3.00
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S}{L} \right) = \frac{3}{4} \times .9198 = 7.69$

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	44.50	44.50	7.5	✓	44.50
" overhang aft					
" overhang forward					
F'cle enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	44.50	44.50			44.50

Standard Height of Superstructure **7.5'**

" " R.Q.D. **✓**

Deduction for complete superstructure **42.00**

Percentage covered $\frac{S}{L} =$ **8.02** ✓

" " $\frac{S_1}{L} =$

" " $\frac{E}{L} =$

Percentage from Table, Line A. **4.01**

(corrected for absence of forecastle (if required)) **4.01 - 5 = NIL**

Percentage from Table, Line B. **5.05 - 5 = .05**

(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required) **.05 × .0802 = .004**

Deduction = **NIL** ✓

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	65.5	1		51	51	1	51
$\frac{1}{4}$ L from A.P.		4		6	6	4	24
$\frac{2}{4}$ L "		2		0	0	2	0
Amidships		4		✓	✓	4	✓
$\frac{2}{4}$ L from F.P.		2		0	0	2	0
$\frac{1}{4}$ L "		4		15	15	4	60
F.P.	131.0	1		120	120	1	120
Total			589.5				255

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{334.5}{18} \left(.75 - .0401 \right) = +13.19$

If limited on account of midship superstructure. **✓** **7099** If limited to maximum allowance of 1½ ins. per 100 ft. **✓**

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **43.33**

Summer freeboard = **13.56**

Moulded draught (d) = **29.77**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required)=

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

$T =$

Deduction = $\frac{\Delta}{40 T}$ inches

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.80 + .68}{1.36} = \frac{1.48}{1.36}$

	+	-
Depth Correction	18.99	✓
Deduction for superstructures	✓	✓
Sheer correction	13.19	✓
Round of Beam correction69	✓
Correction for Thickness of Deck amidships	✓	✓
Other corrections, scantlings, etc.	✓	✓
	32.87	✓
Summer Freeboard =	162.81	✓

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

Tropical Fresh Water Line above Centre of Disc

Fresh Water Line " "

Tropical Line " "

Winter Line below " "

Winter North Atlantic Line " "

Tropical Fresh Water Freeboard

Fresh Water " "

Tropical " "

Winter " "

Winter North Atlantic " "

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.

$$\frac{5.55 \times 3}{100} = \frac{16.65}{100} = 0.1665$$

198
1.65

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____