

Amended computation for reduced
tanker tabular freeboard

For LONDON OFFICE ONLY

LLOYD'S REGISTER OF SHIPPING
SURVEYS FOR FREEBOARD
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)Received
Index No.
Govt. Copy
Owners C11

Ship's Name "Esso Liverpool" <i>Wm Esso EL Salvador</i>	Official Number	Nationality and Port of Registry British	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length Breadth 90 Depth 47					Date of Survey 23-8-62
Freeboard Length 660.0' to aft of rudder stock					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons (excluding bossing)					Particulars of Classification +100A1
Coefficient of fineness for use with Tables .803					Oil Tanker.

DEPTH FOR FREEBOARD (D). Moulded depth 47 Stringer plate -11 Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 47.11	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = 9.33 (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	ROUND OF BEAM CORRECTION. Moulded Breadth (B) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = Difference Restricted to Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right) = .06$
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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					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total					

Standard Height of Superstructure

" " R.Q.D.

Deduction for complete superstructure

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

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

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

Percentage from Table, Line A.
(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 = **14.28**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
$\frac{1}{8}L$ from A.P.		4				4	
$\frac{2}{8}L$ "		2				2	
Amidships	0	4	0	0	0	4	0
$\frac{2}{8}L$ from F.P.		2				2	
$\frac{1}{8}L$ "		4				4	
F.P.		1				1	
Total							

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 " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = +15.05$
If limited on account of midship superstructure.If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Ft.
 Depth to Freeboard Deck = **47.11**
 Summer freeboard = **11.50**
 Moulded draught (d) = **35.61**
 Keel allowance =
 Extreme draught =
 Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{4}$ inches = **8.90 = 9"**Addition for Winter North Atlantic Freeboard (if required) = **15 1/2**

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
 = **10**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{1.483}{1.36}$

Depth Correction **9.33**
 Deduction for superstructures **14.28**
 Sheer correction **15.05**
 Round of Beam correction **.06**
 Correction for Thickness of Deck amidships
 Other corrections, scantlings, etc.

117.30"
127.91

+	-
9.33	14.28
15.05	.06
-	-
-	-
24.38	14.34

Summer Freeboard = **137.95"**

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

Tropical Fresh Water Line above Centre of Disc ... **19 1/4** **483.7**
 Fresh Water Line " " ... **10** **254.7**
 Tropical Line " " ... **9 1/4** **229.7**
 Winter Line below " " ... **9 1/4** **229.7**
 Winter North Atlantic Line " " ... **15 1/2** **394.7**

Tropical Fresh Water Freeboard ... **11 1/2** **350.5**
 Fresh Water " " ... **10 1/2** **325.1**
 Tropical " " ... **10 1/2** **325.1**
 Winter " " ... **12 1/2** **373.4**
 Winter North Atlantic " " ... **12 1/2** **389.9**