

Scantlings only

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name NYORA	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
					Date of Survey 22.1.48
Moulded Dimensions: Length 229.5 Breadth 36.04 Depth 15.878					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Particulars of Classification
Coefficient of fineness for use with Tables 25 Amund					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 15.74	(a) Where D is greater than Table depth (D-Table depth) R = + .83	Moulded Breadth (B)
Stringer plate 03	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$
Sheathing on exposed deck		Ship's Round of Beam =
$T \left(\frac{L-S}{L} \right) =$		Difference .35
Depth for Freeboard (D) = 15.77	If restricted by superstructures	Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.35}{4} \times .85 = -.07$

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	5%		6		
„ overhang aft					
„ overhang forward					
Fore enclosed	10%		6		
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft					
„ „ forward					
Total					15%

Standard Height of Superstructure **6.0**

„ „ R.Q.D. **3.864**

Deduction for complete superstructure **28.95**

Percentage covered $\frac{S}{L} =$ **.015**

„ „ $\frac{S_1}{L} =$ **.15**

„ „ $\frac{E}{L} =$

Percentage from Table, Line A. **7.50**

(corrected for absence of forecastle (if required)) **7.5**

Percentage from Table, Line B. **9.5**

(corrected for absence of forecastle (if required)) **7.5 + 2 x .05 = 8.5**

Interpolation for bridge less than .2L (if required) **.5**

Deduction = **28.95 x .08 = -2.32**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1		33	33	1	33
$\frac{1}{8}L$ from A.P.		4		12.2	12.2	4	50
$\frac{2}{8}L$ „		2		1.4	1.4	2	2.5
Amidships		4				4	
$\frac{2}{8}L$ from F.P.		2		12.2	12.2	2	25
$\frac{1}{8}L$ „		4		39	39	4	156
F.P.		1		88.2	88.5	1	88.5
Total			246.58				355.0

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{58.42}{18} (0.75 - 0.075) = 2.41$

If limited on account of midship superstructure. **2.41 x .05 = .12**

Mean actual sheer -aft = **meanly!**

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

„ „ aft of „ =

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. <div style="margin-top: 10px;">Depth to Freeboard Deck = 15.77 Summer freeboard = 2.31 Moulded draught (d) = 13.46</div> <div style="margin-top: 10px;">Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =</div> <div style="margin-top: 10px;">Addition for Winter North Atlantic Freeboard (if required) =</div>	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 .75 + .68 <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th></th><th>+</th><th>-</th></tr></thead><tbody><tr><td>Depth Correction</td><td>.83</td><td></td></tr><tr><td>Deduction for superstructures</td><td></td><td>2.32</td></tr><tr><td>Sheer correction</td><td></td><td>.60</td></tr><tr><td>Round of Beam correction</td><td></td><td>.07</td></tr><tr><td>Correction for Thickness of Deck amidships</td><td></td><td></td></tr><tr><td>Other corrections, scantlings, etc.</td><td></td><td></td></tr><tr><td></td><td>.83</td><td>2.99</td></tr></tbody></table> <div style="margin-top: 10px;">Summer Freeboard = 27.70 2.31</div>		+	-	Depth Correction	.83		Deduction for superstructures		2.32	Sheer correction		.60	Round of Beam correction		.07	Correction for Thickness of Deck amidships			Other corrections, scantlings, etc.				.83	2.99
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	...	Tropical Fresh Water Freeboard	...
Fresh Water Line	...	Fresh Water	...
Tropical Line	...	Tropical	...
Winter Line below	...	Winter	...
Winter North Atlantic Line	...	Winter North Atlantic	...