

For determination of draught only *East Ship*

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

NO
283

Ship's Name <i>Harlan Wolff</i> <i>1034-5</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <i>425</i> Breadth <i>57</i> Depth <i>38.58</i> <i>29.83</i>					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>Virtual 13096</i> tons <i>at .85 D = 30.58</i>					Particulars of Classification <i>+100% with freeboard</i>
Coefficient of fineness for use with Tables <i>.728</i>					

Depth for Freeboard (D) Moulded depth ... <i>Virtual 30.58</i> Plate ... <i>.04</i> Correction on exposed deck $\frac{(L-S)}{L} =$ Depth for Freeboard (D) = <i>30.62</i>	Depth correction. (a) Where D is greater than Table depth (D - Table depth) R = $(30.62 - 28.33) \times 3 = +6.87$ <i>2.29</i> (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 <i>Assumed None</i> Restricted to Correction = $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L}) =$ <i>Nil</i>
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
enclosed ...					
overhang ...					
enclosed ...					
overhang ...					
enclosed ...					
overhang aft ...					
overhang forward ...					
enclosed ...					
overhang ...					
aft ...					
forward ...					
opening aft ...					
forward ...					
Total ...					

C.S.

Standard Height of Superstructure *7.5*
" " R.Q.D. *✓*
Deduction for complete superstructure *42*
Percentage covered $\frac{S}{L} =$
" " $\frac{S_i}{L} =$ } *100*
" " $\frac{E}{L} =$
Percentage from Table, Line A. *100*
(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 = *-42*

SHEER CORRECTION.

Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
1	1				1	
4	4				4	
2	2				2	
4	4				4	
2	2				2	
4	4				4	
1	1				1	

assumed standard

LL.R. Tween-deck height = *8.0*
Standard = *7.5*
Difference *.5*
Mean actual sheer aft =
Mean standard sheer aft =
Mean actual sheer forward =
Mean standard sheer forward =
Length of enclosed superstructure forward of amidships =
" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) =$ *-.50*
Deduction on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Correction for Tropical Freeboard.
Correction for Winter and Winter North Freeboard.
Virtual
Depth to Freeboard Deck = *30.62*
Summer freeboard = *3.88*
Moulded draught (d) = *26.74*
Correction for Tropical freeboard and addition for freeboard = $\frac{d}{4}$ inches =
Winter North Atlantic Freeboard (if

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

TABULAR FREEBOARD corrected for Flush Deck (if required)
Correction for coefficient $\sqrt{\frac{.728 + .68}{1.36}} = \sqrt{\frac{1.408}{1.36}} =$
Depth Correction ... *6.87*
Deduction for superstructures ... *42.00*
Sheer correction ... *.50*
Round of Beam correction ...
Correction for Thickness of Deck amidships ...
Other corrections, scantlings, etc. ...
6.87 42.50 -35.63

Summer Freeboard = *46.51*

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	"

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