

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. _____
(For London Office only.)

Computation of Freeboard for *Motor Steamer, Sailing Ship, Tanker*
a poop, bridge and forecastle.

Port of Survey _____

Date of Survey *16/6/21*

Name of Surveyor _____

(Type of Superstructures.)
Ship's Name *4H MACY* Nationality and Port of Registry *Hungary* Official Number _____ Gross Tonnage _____ Date of Build _____
Dimensions: Length *128.0* Breadth *17.37* Depth *9.60*
Displacement at moulded draught = 85 per cent. of moulded depth *15120 metric* tons
Correction for use with Tables *813*

Particulars of Classification *+100 A1*
Carrying petroleum in bulk
longitudinal framing

Freeboard (D)	Depth correction	Round of Beam correction
... .. <i>9.60</i>	(a) Where D is greater than Table depth $8.33(D - \text{Table depth}) R =$ $8.33(9.62 - 8.53) \times 30 = +272$	Moulded Breadth (B) <i>17.37</i>
... .. <i>.02</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = .347$
Freeboard (D) = <i>9.62</i>	If restricted by superstructures	Ship's Round of Beam = <i>.356</i>
		Difference = <i>.009</i>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{.009}{4} \times .588 = -.001$

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
<i>29.79</i>	<i>29.79</i>	<i>2.44</i>	-	<i>29.79</i>
<i>10.37</i>	<i>10.37</i>	<i>2.44</i>		<i>10.37</i>
<i>1.05</i>	<i>.79</i>			<i>.79</i>
<i>1.05</i>	<i>.52</i>			<i>.52</i>
<i>11.28</i>	<i>11.28</i>	<i>2.44</i>		<i>11.28</i>
<i>53.54</i>	<i>52.75</i>			<i>52.75</i>

Standard Height of Superstructure *2.29*
" " R.Q.D. *✓*
Deduction for complete superstructure *1.067*
Percentage covered $\frac{S}{L} = .41832$
" " $\frac{S_1}{L} = .4121\%$
" " $\frac{E}{L} = .4121\%$
Percentage from Table, Line A. *✓*
(corrected for absence of forecastle (if required))
Percentage from Table, *Line B. Tanker 32.2/2*
(corrected for absence of forecastle (if required))
Interpolation for bridge less than 2L (if required) *Tanker: does not apply*
Deduction = $1.067 \times .3221 = -.344$

SHEER CORRECTION.

Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
<i>321</i>	<i>1</i>		<i>1.321</i>	<i>1.588</i>	<i>1.588</i>	<i>1</i>		<i>1.588</i>
<i>587</i>	<i>4</i>		<i>2.348</i>	<i>.610</i>	<i>.610</i>	<i>4</i>		<i>2.440</i>
<i>145</i>	<i>2</i>		<i>.290</i>	<i>.127</i>	<i>.127</i>	<i>2</i>		<i>.254</i>
<i>-</i>	<i>4</i>		<i>-</i>	<i>-</i>	<i>-</i>	<i>4</i>		<i>-</i>
<i>291</i>	<i>2</i>		<i>.582</i>	<i>.343</i>	<i>.343</i>	<i>2</i>		<i>.686</i>
<i>1175</i>	<i>4</i>		<i>4.700</i>	<i>1.447</i>	<i>1.447</i>	<i>4</i>		<i>5.788</i>
<i>2642</i>	<i>1</i>		<i>2.642</i>	<i>3.302</i>	<i>3.302</i>	<i>1</i>		<i>3.302</i>
			<i>11.883</i>					<i>14.058</i>

Mean actual sheer aft = *even*
Mean standard sheer aft

Mean actual sheer forward = *even*
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = *Tanker: Does not apply.*
" " aft of " = *Does not apply.*

Difference between sums of products $(.75 - \frac{S}{2L}) = \frac{2.175}{18} (.75 - .209) = -.065$

account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Tropical Freeboard.
Winter and Winter North
Freeboard.

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

.813 + .68
1.88

Depth Correction
Deduction for superstructures
Sheer correction
Round of Beam correction
Correction for Thickness of Deck amidships
Other corrections, scantlings, etc.

	+	-
Depth Correction	<i>.272</i>	<i>-</i>
Deduction for superstructures	<i>-</i>	<i>.344</i>
Sheer correction	<i>-</i>	<i>.065</i>
Round of Beam correction	<i>-</i>	<i>.001</i>
Correction for Thickness of Deck amidships	<i>-</i>	<i>-</i>
Other corrections, scantlings, etc.	<i>-</i>	<i>-</i>
	<i>.272</i>	<i>.410</i>

Summer Freeboard = *1.741*

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

Tropical Fresh Water Line above Centre of Disc *.32*
Fresh Water Line " " *.16*
Tropical Line " " *.16*
Winter Line below " " *.16*
Winter North Atlantic Line " " *.27*

Tropical Fresh Water Freeboard *1.42*
Fresh Water " " *1.58*
Tropical " " *1.58*
Winter " " *1.90*
Winter North Atlantic " " *2.01*

Deckhouses on Flush

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway										
Dimensions of Hatchway										
COAMINGS	{	Height above Deck ...								
		Thickness { Sides ...								
		{ Ends ...								
		Stiffeners								
		Brackets, Stays								
HATCH BEAMS	{	Number								
		Spacing								
		Scantling and Sketch ...								
		Bearing Surface								
FORE AND AFTERS	{	Number								
		Spacing								
		Unsupported Lengths ...								
		Scantling* and Sketch ...								
		Bearing Surface								
HATCH COVERS	{	Material								
		Thickness								
		How fitted								
		Bearing Surface								
Spacing of Cleats										
Number of Tarpaulins										

*Are wood fore and afters steel shod at all bearing surfaces ?
Are battens and wedges efficient and in good condition ?
Are tarpaulins in good condition and in accordance with rule requirements ?
Are lashings provided in accordance with rule requirements ?

Particulars of fiddley, funnel and ventilator coamings :—

Give particulars of fiddly corner
thickness etc of coaming

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways :—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—

give height, & air thickness of coaming

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

Are these fit with cover.

Particulars of Gangway Cargo and Coaling Ports:—

Particulars of Scuppers and Sanitary Discharge Pipes —

Give number of position of discharges, particularly
of storm controlling valves.

Particulars of Side Scuttles :

Give full particulars and
state if sufficiently ~~high~~ high above loadline not to affect the
position of the loadline disc

Particulars of Guard Rails :—


Particulars of Gangways, Lifelines, etc. :—

Give sketch of gangway showing scantling, height spacing of supports,
particulars of bracing etc.

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well						
Forward Well						
State position of each freeing port { After Well :— (F. and A. position and height above deck edge) { Forward Well :— State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :— Additional area where sheer is less than standard.						

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead								
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free- board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super- structure Decks								
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships ...								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead	
Bridge, Forward Bulkhead	
Forecastle Bulkhead	
Exposed Machinery Casings on Free- board or Raised Quarter Decks ...	
Exposed Machinery Casings on Super- structure Decks	
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances*	
Deckhouses on Flush Deck Ships ...	



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