

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Monte Morcayo</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build <i>1921</i> <i>3</i>	Port of Survey
Moulded Dimensions: Length <i>363</i> Breadth <i>52</i> Depth <i>33.5</i>					Date of Survey <i>21-12-44</i>
Displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature
Coefficient of fineness for use with Tables <i>.73 (assumed)</i>					Particulars of Classification

Depth for Freeboard (D). depth <i>33.50</i> plate ... <i>.52</i> <i>.04</i> g on exposed deck $\frac{L-S}{L} =$ Depth for Freeboard (D) = <i>33.54</i>	Depth correction. (a) Where D is greater than Table depth (D-Table depth) R = $(33.54 - 24.20) \times 2792 = +26.08$ <i>9.34</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) <i>52</i> Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>12.48</i> Ship's Round of Beam = <i>13.00</i> Difference <i>.52</i> Restricted to Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.52}{4} \times .8127 = -.11$
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DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
enclosed ...				
overhang ...				
enclosed ...				
overhang ...				
enclosed ...				
overhang aft ...				
overhang forward ...				
enclosed ...	<i>68</i>	<i>68</i>	<i>8.25</i>	<i>68</i>
overhang ...				
aft ...				
forward ...				
ge opening aft ...				
.. forward				
Total ...	<i>68</i>	<i>68</i>		<i>68</i>

Standard Height of Superstructure	<i>7.13</i>
.. .. R.Q.D.	<i>✓</i>
Deduction for complete superstructure	<i>39.53</i>
Percentage covered $\frac{S}{L} =$	<i>18.73</i>
.. .. $\frac{S_1}{L} =$	
.. .. $\frac{E}{L} =$	
Percentage from Table, Line A.	<i>9.36</i>
(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 =	<i>39.53 \times .0986 = - 3.70</i>

SHEER CORRECTION.

Position	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
..	<i>46.30</i>	<i>1</i>	<i>46.30</i>	<i>6.5</i>	<i>6.5</i>	<i>1</i>	<i>6.5</i>
A.P. ...	<i>20.605</i>	<i>4</i>	<i>82.42</i>	<i>1.5</i>	<i>1.5</i>	<i>4</i>	<i>6.0</i>
..	<i>5.095</i>	<i>2</i>	<i>10.19</i>	-	-	<i>2</i>	-
ps ...	-	<i>4</i>	-	-	-	<i>4</i>	-
F.P. ...	<i>10.19</i>	<i>2</i>	<i>20.38</i>	<i>1.5</i>	<i>1.5</i>	<i>2</i>	<i>3.0</i>
..	<i>41.21</i>	<i>4</i>	<i>164.84</i>	<i>5.0</i>	<i>5.0</i>	<i>4</i>	<i>20.0</i>
..	<i>92.60</i>	<i>1</i>	<i>92.60</i>	<i>13.0</i>	<i>13.0</i>	<i>1</i>	<i>13.0</i>
total ...			<i>416.73</i>				<i>48.5</i>

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 = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{368.23}{18} \left(.75 - \frac{.0936}{.6564} \right) = +13.43$
If limited to maximum allowance of 1½ ins. per 100 ft.

Correction for Tropical Freeboard. Correction for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <i>33.54</i> Summer freeboard = <i>8.75</i> Moulded draught (d) = <i>24.79</i> Correction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>6.20 = 6 1/5</i> Correction 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 = $\frac{\Delta}{40T}$ inches =	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.73 + .68}{1.26} = \frac{1.41}{1.26}$ Depth Correction <i>26.08</i> Deduction for superstructures <i>- 3.70</i> Sheer correction <i>13.43</i> Round of Beam correction <i>- .11</i> Correction for Thickness of Deck amidships Other corrections, scantlings, etc. <i>for summer moulded draught of 24.79</i> <i>46.29</i> <i>3.81</i> <i>+ 42.48</i> Summer Freeboard = <i>105.00</i>	<i>60.30</i> <i>62.52</i>
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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	"