

For Hatch Beams
C.S.S.

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Penning 1468</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <i>461</i> Breadth <i>63</i> Depth <i>40.25-9</i> <i>31.25</i>					Date of Survey <i>9.11.51.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) _____ tons					Surveyor's Signature _____
Coefficient of fineness for use with Tables <i>68</i>					Particulars of Classification <i>+100 A1</i> <i>contemplative.</i>

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth <i>31.25</i>	(a) Where D is greater than Table depth (D - Table depth) R = $(31.25 - 30.73) \times 3 = +1.68$	Moulded Breadth (B)
Stringer plate <i>0.4</i>	(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 $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam <i>Latin</i> = <i>Standard</i>
Depth for Freeboard (D) = <i>31.29</i>		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^c}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>Nil</i>

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					
Fore 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 = <i>42</i>

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		4					4		
$\frac{2}{8}L$ from F.P.		2					2		
$\frac{1}{8}L$ "		4					4		
F.P.		1					1		
Total									

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ *1.5*

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <i>31.29</i> Summer freeboard = <i>4.06</i> Moulded draught (d) = <i>27.23</i> Keel allowance = _____ Extreme draught = _____ Deduction for Tropical freeboard and addition for _____ Winter freeboard = $\frac{d}{4}$ inches = _____ Addition 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 <i>Nil</i> <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><i>1.68</i></td><td></td></tr> <tr><td>Deduction for superstructures</td><td></td><td><i>42</i></td></tr> <tr><td>Sheer correction</td><td></td><td><i>1.5</i></td></tr> <tr><td>Round of Beam correction</td><td></td><td></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>Summer Freeboard = <i>48.69</i></td><td></td><td></td></tr> </tbody> </table>		+	-	Depth Correction	<i>1.68</i>		Deduction for superstructures		<i>42</i>	Sheer correction		<i>1.5</i>	Round of Beam correction			Correction for Thickness of Deck amidships			Other corrections, scantlings, etc.			Summer Freeboard = <i>48.69</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 " "