

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name Denny's 1400-128	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 461.0 Breadth 63.0 Depth 40.25					Date of Survey 13.7.51
Moulded displacement at moulded draught = 85 per cent. of moulded depth					Surveyor's Signature
Coefficient of fineness for use with Tables 0.70					Particulars of Classification 1100A / contemplation

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 40.25	(a) Where D is greater than Table depth (D-Table depth) R = (40.31 - 30.73) 3 = +28.74	Moulded Breadth (B) 63.00
Stringer plate73	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = 9.58	Standard Round of Beam = $\frac{B \times 12}{50} = 15.12$
Sheathing on exposed deck	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = 15.75
$T \left(\frac{L-S}{L} \right) =$		Difference = .63
Depth for Freeboard (D) = 40.31		Restricted to <input checked="" type="checkbox"/>
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.63^2}{4} \times .8406 = -.13$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	41.00	41.00	7.75	-	41.00	Standard Height of Superstructure 7.5
„ overhang						
R.Q.D. enclosed						R.Q.D. 42.00
„ overhang						Deduction for complete superstructure 42.00
Bridge enclosed						
„ overhang aft						Percentage covered $\frac{S}{L} = 15.94$
„ overhang forward						
F'cle enclosed	32.50	32.50	7.50	-	32.50	Percentage from Table, Line A. 7.97
„ overhang						(corrected for absence of forecastle (if required))
Trunk aft						Percentage from Table, Line B.
„ forward						(corrected for absence of forecastle (if required))
Tonnage opening aft						Interpolation for bridge less than .2L (if required)
„ „ forward						Deduction = 42.00 x .0797 = -3.35
Total	73.59	73.50			73.50	15.60

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P.	56.10	1		60.0		1	
$\frac{1}{4}L$ from A.P.		4				4	
$\frac{2}{4}L$ „		2				2	
Amidships		4				4	
$\frac{3}{4}L$ from F.P.		2				2	
$\frac{1}{4}L$ „		4				4	
F.P.	112.20	1		120.0		1	
Total			504.90				540.00

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{35.10}{18} \left(.75 - .0797 \right) = -1.31$

If limited on account of midship superstructure. **YES. NIL**

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = 40.31</p> <p>Summer freeboard = 9.77</p> <p>Moulded draught (d) = 30.54</p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =</p> <p>Addition for Winter North Atlantic Freeboard (if required) =</p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta =$</p> <p>Tons per inch immersion at summer load water line</p> <p>T =</p> <p>Deduction = $\frac{\Delta}{40 T}$ inches</p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient $\frac{.68 + .70}{1.36} = 1.38$</p> <table border="1"> <tr> <td></td> <td>+</td> <td>-</td> </tr> <tr> <td>Depth Correction</td> <td>28.74</td> <td>-</td> </tr> <tr> <td>Deduction for superstructures</td> <td>-</td> <td>3.35</td> </tr> <tr> <td>Sheer correction</td> <td>-</td> <td>-</td> </tr> <tr> <td>Round of Beam correction</td> <td>-</td> <td>.13</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>28.74</td> <td>3.48</td> </tr> </table> <p>Summer Freeboard = 17.11</p>		+	-	Depth Correction	28.74	-	Deduction for superstructures	-	3.35	Sheer correction	-	-	Round of Beam correction	-	.13	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	-	-		28.74	3.48
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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	„