

Actual Draught (Scantling)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>DENNYS . 1400.128</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey _____
Moulded Dimensions: Length <i>461.0</i> Breadth <i>63.0</i> Depth <i>40.25</i>					Date of Survey <i>16.7.51.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature _____
Coefficient of fineness for use with Tables <i>Curve = 70.</i>					Particulars of Classification _____

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth <i>40.25</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>(40.31-30.73)3 = + 28.74</i>	Moulded Breadth (B) <i>63.00</i>
Stringer plate <i>.06</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <i>3.58</i>	Standard Round of Beam = $\frac{B \times 12}{50} = 15.12$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = <i>15.75</i>
Depth for Freeboard (D) = <i>40.31</i>		Difference = <i>.63</i>
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.63}{4} \times .8406 = -.13$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>41.00</i>	<i>41.00</i>	<i>7.75</i>		<i>41.00</i>
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed	<i>32.50</i>	<i>32.50</i>	<i>7.50</i>		<i>32.50</i>
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	<i>73.50</i>	<i>73.50</i>			<i>73.50</i>

Standard Height of Superstructure *7.5'*
R.Q.D. _____
Deduction for complete superstructure *42.00"*
Percentage covered $\frac{S}{L} =$ }
" " $\frac{S_1}{L} = 15.94$
" " $\frac{E}{L} =$ }
Percentage from Table, Line A. *7.97*
(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 = *42.00 x .0797 = - 3.35"*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<i>56.10</i>	1			<i>60.00</i>		1		
$\frac{1}{2}L$ from A.P.		4					4		
$\frac{2}{3}L$ "		2					2		
Amidships		4					4		
$\frac{2}{3}L$ from F.P.		2					2		
$\frac{1}{2}L$ "		4					4		
F.P.	<i>112.20</i>	1			<i>120.00</i>		1		
Total				<i>504.90</i>					<i>540.00</i>

Mean actual sheer aft =
Mean standard sheer aft = } *Even.*
Mean actual sheer forward =
Mean standard sheer forward = }
Length of enclosed superstructure forward of amidships = }
" " aft of " = } *N.L.*

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. N.L.* .6703 If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic 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 = $\frac{\Delta}{40 T}$ inches =	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.68 + .70}{1.36} = 1.38 / 1.36$	<i>90.51</i> <i>91.85</i>
Depth to Freeboard Deck = <i>40.31</i> Summer freeboard = <i>11.81</i> Moulded draught (d) = <i>28.50</i>		Depth Correction <i>28.74</i> Deduction for superstructures <i>3.35</i> Sheer correction Round of Beam correction <i>.13</i> Correction for Thickness of Deck amidships Other corrections, scantlings, etc. to summer moulded draught of <i>28.6</i> <i>22.64</i>	<i>33.38</i> <i>3.48</i> + <i>49.90</i>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = Addition for Winter North Atlantic Freeboard (if required) =		Summer Freeboard = <i>141.75</i>	

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 " "

