

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, <sup>TUG</sup>SAILING SHIP, TANKER.)

Ship's Name <b>"DEXTEROUS"</b>	Official Number ✓	Nationality and Port of Registry <b>BRITISH</b> ✓	Gross Tonnage <b>597</b>	Date of Build <b>1942</b>	Port of Survey <b>Hull.</b>
Moulded Dimensions: Length <b>142'6"</b> ✓ Breadth <b>33'0"</b> ✓ Depth <b>16'0"</b> ✓					Date of Survey <b>WHILE BUILDING.</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>1010</b> ✓ tons					Surveyor's Signature <i>J. Macleod</i>
Coefficient of fineness for use with Tables <b>.68 (ACTUAL .553)</b>					Particulars of Classification <b>* 100 A-1</b> <b>"FOR TOWING SERVICES".</b> (CONTEMPLATED)

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth ...	<b>16'0"</b>	(a) Where D is greater than Table depth (D - Table depth) R = <b>(16.03 - 9.50) 1.096 = + 7.16</b> <b>1.53</b>		Moulded Breadth (B)	<b>33'0"</b>
Stringer plate ...	<b>.03</b>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Standard Round of Beam = $\frac{B \times 12}{50}$ =	<b>7.92"</b>
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$				Ship's Round of Beam =	<b>9"</b>
Depth for Freeboard (D) =	<b>16'03"</b>	If restricted by superstructures ✓		Difference <b>EXCESS</b>	<b>1.08</b>
				Restricted to	
				Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right)$ =	$\frac{1.08}{4} \times .6327 = -.17"$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
Fore enclosed ...	<b>52.33</b>	<b>52.33</b>	<b>7'0"</b>	✓	<b>52.33</b>
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total ...	<b>52.33</b>	<b>52.33</b>			<b>52.33</b>

Standard Height of Superstructure **6'00"**

„ „ R.Q.D. ✓

Deduction for complete superstructure **20.25**

Percentage covered  $\frac{S}{L} = 36.73$

„ „  $\frac{S_1}{L} = 36.73$

„ „  $\frac{E}{L} = 36.73$

Percentage from Table, Line A. **20.72**  
(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 = **20.25 x .2072 = - 4.20"**

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<b>24.25</b>	1		<b>24.25</b>	<b>29.50</b>	<b>29.50</b>	1		<b>29.50</b>
1/4 L from A.P. ...	<b>10.79</b>	4		<b>43.16</b>	<b>12.33</b>	<b>12.33</b>	4		<b>49.32</b>
1/2 L „ ...	<b>2.67</b>	2		<b>5.34</b>	<b>2.92</b>	<b>2.92</b>	2		<b>5.84</b>
Amidships ...	<b>-</b>	4		<b>-</b>	<b>ON LAGET.</b>	<b>-</b>	4		<b>-</b>
3/4 L from F.P. ...	<b>5.34</b>	2		<b>10.68</b>	<b>8.08</b>	<b>8.08</b>	2		<b>16.16</b>
3/4 L „ ...	<b>21.58</b>	4		<b>86.32</b>	<b>29.67</b>	<b>29.67</b>	4		<b>118.68</b>
F.P. ...	<b>48.50</b>	1		<b>48.50</b>	<b>73.75</b>	<b>73.75</b>	1		<b>73.75</b>
Total ...				<b>218.25</b>					<b>293.25</b>

Mean actual sheer aft =  
Mean standard sheer aft = } **EXCESS**

Mean actual sheer forward =  
Mean standard sheer forward = }

Length of enclosed superstructure forward of amidships =  
„ „ aft of „ = } **NIL**

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{75(75-1836)}{18 \cdot 5664} = -2.36"$   
If limited on account of midship superstructure. **YES. NO ALLOWANCE**

If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

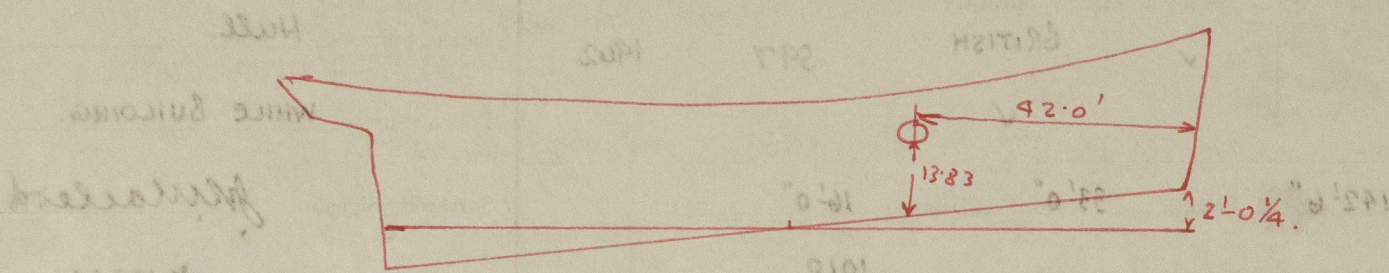
Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	<b>14.53</b>
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	<b>14.53</b>
Depth to Freeboard Deck = <b>16'03</b>	Δ = <b>1078</b>	Depth Correction ...	<b>7.16</b>
Summer freeboard = <b>1'87</b>	Tons per inch immersion at summer load water line	Deduction for superstructures	<b>4.20</b>
Moulded draught (d) = <b>14'16</b>	T = <b>8.69</b>	Sheer correction ...	<b>-</b>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <b>3.54 = 3 1/2"</b>	Deduction = $\frac{\Delta}{40T}$ inches = <b>3.1"</b>	Round of Beam correction ...	<b>.77</b>
Addition for Winter North Atlantic Freeboard (if required) = <b>2"</b>	MLD. DRAFT EXT. DISP. T.P.I.	Correction for Thickness of Deck amidships ...	<b>-</b>
	<b>14' 1 1/2 1100 8.75</b>	Other corrections, scantlings, etc. to position of lowest side scuttle.	<b>5.18</b>
	<b>13' 1 1/2 996 8.45</b>		<b>12.34 4.37 + 7.97</b>
	<b>12' 1 1/2 892 8.20</b>		Summer Freeboard = <b>22.50</b>

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

Tropical Fresh Water Line above Centre of Disc ...	3"	Tropical Fresh Water Freeboard ...	1' 10 1/2"
Fresh Water Line „ „ ...	3"	Fresh Water „ „ ...	1' 7 1/2"
Tropical Line „ „ ...	NIL	Tropical „ „ ...	1' 10 1/2"
Winter Line below „ „ ...	NIL	Winter „ „ ...	1' 18 1/2"
Winter North Atlantic Line „ „ ...	2"	Winter North Atlantic „ „ ...	2' 0 1/2"



A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.



FOR TOWING SERVICES  
(REGISTERED)  
L = 142.5

$$\frac{L}{2} = \frac{142.5}{2} = 71.25$$
$$\frac{42.00}{29.25}$$

$$\frac{29.25}{71.25} \times 2.02 = .83'$$

$$\frac{13.83}{14.66} = .50$$

DRAUGHT RESTRICTED TO 14.16'

*part*

Trade of ship "FOR TOWING SERVICES".

Names of sister ships "DECISION" - "ADHERENT" - "CHARON".

Builder's name and yard number MESSRS COCHRANE & SONS LTD. - YARD NO. 1247.

Owners THE ADMIRALTY.

Fee £ TO BE CHARGED WITH FIRST ENTRY.

1911	1912	1913
200	200	200
200	200	200
200	200	200
200	200	200



© 2021

Lloyd's Register  
Foundation