

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

13050

Ship's Name <u>C. R. D. A. YARD. NO 1384</u>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build <u>1947</u>	Port of Survey <u>TRIESTE</u>
Moulded Dimensions: Length <u>434.0'</u> Breadth <u>54.25'</u> Depth <u>31.0'</u> <u>to centre of main keel</u>					Date of Survey <u>APRIL 1947</u>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>13370 m³ = 13490 tons</u>					Surveyor's Signature <u>S. J. Lumsden</u>
Coefficient of fineness for use with Tables <u>.764</u>					Particulars of Classification <u>100A.</u> <u>CARRYING PETROLEUM IN BULK.</u>

DEPTH FOR FREEBOARD (D). Moulded depth <u>31.0'</u> Stringer plate <u>.06</u> Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <u>31.06</u>	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = $(31.06 - 28.93) \times 3 = 6.39 (+)$ (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures <u>No.</u>	ROUND OF BEAM CORRECTION. Moulded Breadth (B) <u>54.25</u> Standard Round of Beam = $\frac{B \times 12}{50} = 13.02$ Ship's Round of Beam = <u>13.58</u> Difference <u>.56</u> Restricted to Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.56}{4} \times .5708 = .08$
---	--	--

DEDUCTION FOR SUPERSTRUCTURES.					
Station	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <u>Equip</u>	<u>95.10</u>	<u>95.10</u>	<u>7.54'</u>		<u>95.10</u>
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed <u>Equip</u>	<u>42.43</u>	<u>42.43</u>	<u>7.54'</u>		<u>42.43</u>
" overhang aft "	<u>7.87</u>	<u>.82</u>			<u>.82</u>
" overhang forward					
Fore enclosed	<u>51.68</u>	<u>51.68</u>	<u>7.54'</u>		<u>51.68</u>
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	<u>190.30</u>	<u>190.03</u>			<u>190.03</u>

Standard Height of Superstructure 7.5
 " " R.Q.D. 42.00
 Deduction for complete superstructure 43.85
 Percentage covered $\frac{S}{L} =$
 " " $\frac{S_1}{L} =$ } 43.78
 " " $\frac{E}{L} =$
 Percentage from Table, Line A. 34.78
 (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) Tanker
 Deduction = 42.00 \times .3478 = 14.61 (-)

SHEER CORRECTION.							
Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P.	<u>53.4</u>	1	<u>53.40</u>	<u>54"</u>	<u>54.00</u>	1	<u>54.00</u>
$\frac{1}{2}$ L from A.P.	<u>23.76</u>	4	<u>95.04</u>	<u>24"</u>	<u>24.00</u>	4	<u>96.00</u>
$\frac{1}{2}$ L "	<u>3.87</u>	2	<u>11.74</u>	<u>6"</u>	<u>6.00</u>	2	<u>12.00</u>
Amidships		4				4	
$\frac{1}{2}$ L from F.P.	<u>11.74</u>	2	<u>23.48</u>	<u>13"</u>	<u>13.00</u>	2	<u>26.00</u>
$\frac{1}{2}$ L "	<u>47.53</u>	4	<u>190.12</u>	<u>52"</u>	<u>52.00</u>	4	<u>208.00</u>
F.P.	<u>106.80</u>	1	<u>106.80</u>	<u>115"</u>	<u>115.00</u>	1	<u>115.00</u>
Total			<u>480.34</u>				<u>511.00</u>

Mean actual sheer aft = Excess ✓
 Mean standard sheer aft =
 Mean actual sheer forward = Excess ✓
 Mean standard sheer forward =
 Length of enclosed superstructure forward of amidships = Tanker ✓
 " " aft of " = Tanker ✓
 Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{30.44}{18} \left(.75 - \frac{.2146}{2} \right) = .90 (-)$
 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 = <u>31.06</u> Summer freeboard = <u>3.50</u> Moulded draught (d) = <u>25.56</u> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>6.39 6 3/4</u> Addition for Winter North Atlantic Freeboard <u>10 3/4</u> <u>6.39 + 4.34 = 10.73</u>	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 13339.5 \text{ METRIC TONS}$ Tons per inch immersion at summer load water line $T = 19.1 \text{ TONS PER CENTIMETER}$ Deduction = $\frac{\Delta}{40 T}$ inches = <u>6.87 = 6 3/4</u>	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.761 + .68}{1.36} = \frac{1.441}{1.36}$ Depth Correction <u>6.39</u> Deduction for superstructures <u>14.61</u> Sheer correction <u>.90</u> Round of Beam correction <u>.07</u> Correction for Thickness of Deck amidships Other corrections, scantlings, etc. Summer Freeboard = <u>65.98</u>	<u>70.94</u> <u>75.47</u> <u>42</u> <u>28.44</u> <u>9</u> <u>65.98</u>
---	--	--	---

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

Tropical Fresh Water Line above Centre of Disc	...	33.7 m. 13 1/4	Tropical Fresh Water Freeboard	...	4 - 4 3/4	1339
Fresh Water Line	"	17.1 m. 6 3/4	Fresh Water	"	4 - 11 1/4	1505
Tropical Line	"	16.5 m. 6 1/2	Tropical	"	4 - 11 1/2	1511
Winter Line	below	16.5 m. 6 1/2	Winter	"	6 - 0 1/2	1841
Winter North Atlantic Line	"	27.3 m. 10 3/4	Winter North Atlantic	"	6 - 4 3/4	1949



© 2020

Lloyd's Register
Foundation

003808-003815-0135 1/2

Equivalent: 1000 lbs

2008
Park

$$\begin{array}{r} 28.138 \\ \cdot 846 \end{array}$$

2875 $\frac{2}{3} \times 1.270$

Equivo

$$\overline{28.984\text{ m}} = 95.10\text{ feet}$$

Bmedgo

11489
667

apc $\frac{2}{3} \times 1000$

find $\frac{2}{3} \times 1168$

$$\begin{array}{r} 778 \\ \hline 12934 \end{array}$$
$$\overline{12934} = 42.45 \text{ feet}$$

Equip o'hung aft = $1000 - 667 = 333 \text{ mm} = 1.09 \text{ feet}$

Trade of ship

Names of sister ships

Builder's name and yard number

CANTIERE RIUNITI DELL'ADRIATICO. YARD N° 1384

Owners

Fee £



© 2020

Lloyd's Register
Foundation

0135 ²/₂