

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD-STEAMERS.

Index No. 33979  
(For London Office only.)

Port of Survey \_\_\_\_\_  
Date of Survey 16-3-31  
Name of Surveyor \_\_\_\_\_

Ship's Name. <u>M.S. J. H. SENIOR.</u>	Port of Registry and Nationality. <u>DANZIG.</u>	Official Number.	Gross Tonnage.	Date of Build. <u>1931.</u>	Particulars of Classification. <u>+100 A.1 CARRYING PETROLEUM IN BULK. LONG L. FRAMING.</u>
Number in Register Book					

Moulded dimensions 520.0 x 70.0 x 38.75 85% M.D = 32.94'  
Moulded displacement at a moulded draught of 85 per cent. of moulded depth \_\_\_\_\_  
Coefficient of fineness for use with tables .804

### DEPTH FOR FREEBOARD.

Moulded depth	...	...	...	...	...	<u>38.75</u>
Stringer plate	...	...	...	...	...	<u>.06</u>
Sheathing in wells $T \left( \frac{L-S}{L} \right) =$	...	...	...	...	...	<u>✓</u>
Depth D =	...	...	...	...	...	<u>38.81</u>

### CORRECTION FOR LENGTH.

(a) When D is greater than  $\frac{L}{15}$   
 $(D - \frac{L}{15}) \times R = (38.81 - 34.67) \times 3.0 = +12.42$   
(b) When D is less than  $\frac{L}{15}$  (if allowed).  
 $(\frac{L}{15} - D) \times R =$  ...  
If restricted by height of superstructures ...

### SUPERSTRUCTURES.

	Mean Covered Length S.	Equivalent Enclosed Length S <sub>1</sub> .	Height.	Correction for Height.	Effective Length.
Poop enclosed	...	...	...	...	...
„ overhang	...	...	...	...	...
R.Q.D. enclosed	...	...	...	...	...
„ overhang	...	...	...	...	...
I Bridge enclosed	<u>40.08</u>	<u>40.08</u>	<u>7'-6"</u>	<u>✓</u>	<u>40.08</u>
II „ <del>overhang aft</del>	<u>54.84</u>	<u>54.84</u>	<u>7'-6"</u>	<u>✓</u>	<u>54.84</u>
„ overhang forward	...	...	...	...	...
F'cle enclosed	<u>41.50</u>	<u>41.50</u>	<u>7'-6"</u>	<u>✓</u>	<u>41.50</u>
„ overhang	...	...	...	...	...
Trunks forward	...	...	...	...	...
„ aft	...	...	...	...	...
Tonnage opening	...	...	...	...	...

TOTAL = 136.42 136.42 136.42  
Length of ship (L) = 520.0 520.0 520.0  
% Covered ... = 26.23% 26.23% 26.23%  
Corresponding %, corrected for absence of forecastle if required } A = TANKER B = 18.36% Correction for Bridge less than 2L if required } TANKER.  
Allowance ... = 42.0 x .1836 = -7.71

### SHEER.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	<u>89.00</u>	<u>62.00</u>	<u>89.00</u>	<u>1</u>	<u>89.00</u>
2	<u>35.55</u>	<u>27.59</u>	<u>35.55</u>	<u>4</u>	<u>142.20</u>
3	<u>8.89</u>	<u>-</u>	<u>8.89</u>	<u>2</u>	<u>17.78</u>
4	<u>-</u>	<u>-</u>	<u>-</u>	<u>4</u>	<u>-</u>
5	<u>14.77</u>	<u>-</u>	<u>14.77</u>	<u>2</u>	<u>29.54</u>
6	<u>59.09</u>	<u>55.18</u>	<u>59.09</u>	<u>4</u>	<u>236.36</u>
F.P. 7	<u>136.50</u>	<u>124.00</u>	<u>136.50</u>	<u>1</u>	<u>136.50</u>

Mean effective sheer ... = 18) 651.38  
Standard sheer .05L + 5 = 36.19  
Difference (Df) = 31.00  
Allowance =  $Df \times \left( \frac{75 - \frac{S}{L}}{2} \right) = 5.19 \times .6189 = -3.21$   
If limited on account of amidship superstructure ... = ✓  
If limited on account of excess sheer ( $1\frac{1}{2}$  in. per 100 ft.) ... = ✓

If excess sheer forward and deficient sheer aft :—

Actual sheer aft = excess  
Standard sheer aft = excess  
Actual sheer forward = excess  
Standard sheer forward = excess

Length of enclosed superstructure

L  
Forward of amidships = TANKER.  
Aft of amidships = TANKER.

### ROUND OF BEAM.

Standard	...	...	...	...	<u>16.80</u>
Ship	...	...	...	...	<u>17.25</u>
Difference	...	...	...	...	<u>.45</u>
Restricted to	...	...	...	...	...
Allowance = $\frac{\text{Difference}}{4} \times \left( 1 - \frac{S}{L} \right) = \frac{.45}{4} \times (.7377) = -.08$	...	...	...	...	<u>38.81</u>

101.92 ÷ 12 = 8.49  
4) 30.32 = 7.58  
101.92  
7.58  
109.50

### TABULAR FREEBOARD (corrected for flush deck if required) =

Corrected for Coefficient $\frac{.804 + .68}{1.36} =$	<u>798.</u>	<u>100.50</u>
Correction for Length	<u>12.42</u>	
„ Superstructures	<u>-</u>	<u>7.71</u>
„ Sheer	<u>-</u>	<u>3.21</u>
„ Round of beam	<u>-</u>	<u>.08</u>
„ Thickness of deck	<u>✓</u>	<u>✓</u>
„ Scantlings, etc.	<u>✓</u>	<u>✓</u>
„ Statutory deck line	<u>12.42</u>	<u>11.00</u>

Summer Freeboard = 101.92

FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, Wood (Steel) Deck :—

Fresh Water Line	above centre of Disc	...	...	...	<u>8'-6"</u>
Indian Summer Line	„	„	„	„	<u>9'-12"</u>
Winter Line	below	„	„	„	<u>9'-12"</u>
Winter North Atlantic Line	„	„	„	„	<u>9'-12"</u>

1906 FBDS { S = 9'-10 1/2"  
DIFF FROM 1906 { W = -16 1/2"



Est.  $\Delta$  @ 29'-0" draught = 23850 tons.

T.P.1 = 77.2 tons.

$$\begin{aligned} 85\% \text{ Mld. depth} + \text{keel} &= 32'-11\frac{1}{4}" + 2" \\ &= 33'-1\frac{1}{4}" \\ &\quad \underline{29'-0"} \\ &= 4'-1\frac{1}{4}" \text{ diff.} \end{aligned}$$

$$77.2 \times 49.25 = 3802 \text{ tons.}$$

$$23850 + 3802 = 27652 \text{ tons extreme.}$$

$$\frac{27652 \times 995 \times 35}{520 \times 70 \times 38.75 \times 85} = .804.$$



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