

For Scantling purposes only.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

| | | | | | |
|--|-----------------|----------------------------------|---------------|---------------|-------------------------------------|
| Ship's Name <i>Furness S.B. Co's Respond Whale Oil Factory</i> | Official Number | Nationality and Port of Registry | Gross Tonnage | Date of Build | Port of Survey |
| Moulded Dimensions: Length <u>535</u> Breadth <u>74</u> Depth <u>557</u> <u>235</u> | | | | | Date of Survey <u>10-2-44</u> |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons | | | | | Surveyor's Signature _____ |
| Coefficient of fineness for use with Tables <u>.844 assumed</u> | | | | | Particulars of Classification _____ |

| | | |
|---|--|---|
| Depth for Freeboard (D). Moulded depth <u>47.80</u> Stringer plate <u>.07</u> Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <u>47.87</u> | Depth correction. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(47.87 - 35.67) \times 3 = +36.60$ 72.20 (b) Where D is less than Table depth (if allowed) $(\text{Table depth} - D) R =$ If restricted by superstructures | Round of Beam correction. Moulded Breadth (B) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = Difference Restricted to Correction = $\frac{\text{Diff}^a}{4} \times \left(1 - \frac{S_1}{L} \right) =$ |
|---|--|---|

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) | |
|----------------------------|-------------------------|--|--------|-------------------|----------------------|---|
| Poop enclosed | | | | | | Standard Height of Superstructure |
| .. overhang | | | | | | R.Q.D. |
| R.Q.D. enclosed | | | | | | Deduction for complete superstructure |
| .. overhang | | | | | | Percentage covered $\frac{S}{L} =$ |
| Bridge enclosed | | | | | | $\frac{S_1}{L} =$ |
| .. overhang aft | | | | | | $\frac{E}{L} =$ |
| .. overhang forward | | | | | | Percentage from Table, Line A. (corrected for absence of forecastle (if required)) |
| F'cle enclosed | | | | | | Percentage from Table, Line B. (corrected for absence of forecastle (if required)) |
| .. overhang | | | | | | Interpolation for bridge less than .2L (if required) |
| Trunk aft | | | | | | Deduction = <u>Nil</u> |
| .. forward | | | | | | |
| Tonnage opening aft | | | | | | |
| forward | | | | | | |
| Total | | | | | | |

assumed F.W

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|---------------------------------|-------------------|---|---|---------|-----------------|--------------------|---|---|---------|
| A.P. | | 1 | | | | | 1 | | |
| $\frac{1}{8}L$ from A.P. | | 4 | | | | | 4 | | |
| $\frac{2}{8}L$ | | 2 | | | | | 2 | | |
| Amidships | | 4 | | | | | 4 | | |
| $\frac{2}{8}L$ from F.P. | | 2 | | | | | 2 | | |
| $\frac{1}{8}L$ | | 4 | | | | | 4 | | |
| F.P. | | 1 | | | | | 1 | | |
| Total | | | | | | | | | |

assumed standard

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$
 If limited on account of midship superstructure.

Nil.

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>47.87</u> Ft. Summer freeboard = <u>13.54</u> Moulded draught (d) = <u>34.33</u> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = Addition for Winter North Atlantic Freeboard (if required) = | 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 = $\frac{\Delta}{40T}$ inches = | TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.844 + .68}{1.36} = \frac{1.524}{1.36}$ <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">+</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">36.60</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">36.60</td> <td style="text-align: center;">-</td> </tr> <tr> <td colspan="2" style="text-align: right;">Summer Freeboard = <u>162.42</u></td> </tr> </table> | + | - | 36.60 | - | - | - | - | - | - | - | - | - | 36.60 | - | Summer Freeboard = <u>162.42</u> | |
| + | - | | | | | | | | | | | | | | | | | |
| 36.60 | - | | | | | | | | | | | | | | | | | |
| - | - | | | | | | | | | | | | | | | | | |
| - | - | | | | | | | | | | | | | | | | | |
| - | - | | | | | | | | | | | | | | | | | |
| - | - | | | | | | | | | | | | | | | | | |
| 36.60 | - | | | | | | | | | | | | | | | | | |
| Summer Freeboard = <u>162.42</u> | | | | | | | | | | | | | | | | | | |

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: 13.54

| | |
|---|---------------------------------------|
| 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 |