

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR ~~STEAMER~~, ~~SAILING SHIP~~, TANKER.)

| | | | | | |
|---|----------------------------------|--|--|---|--|
| Ship's Name M/S. "PONTFIELD" | Official Number 165780 | Nationality and Port of Registry British Newcastle | Gross Tonnage 8200 8303 8290 8319.15/16/42 | Date of Build 1939 10 mo. | Port of Survey Gothenburg |
| Moulded Dimensions: Length 465'-2" ✓ Breadth 60'-9" ✓ Depth 34'-0" ✓ | | | | | Date of Survey 19th September 1939. |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth 18430 cub. met. = 18600 tons | | | | | Surveyor's Signature T. Widin |
| Coefficient of fineness for use with Tables .797 ✓ | | | | | Particulars of Classification * 100 A.1. Carrying Petroleum in Bulk. (Class contemplated). |

| | | |
|---|--|---|
| Depth for Freeboard (D). Moulded depth 34'-0" ... 34'-00" Stringer plate 0.85"07" Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = -$ Depth for Freeboard (D) = 34'-07" ✓ | Depth correction. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(34'-07" - 31'-0") 3 = +9'-18"$ ✓ (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) 60.75 Standard Round of Beam = $\frac{B \times 12}{50} = 14.58"$ Ship's Round of Beam = 15.2" Difference apex = .62" ✓ Restricted to Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{.62}{4} \times .6444 = -.10"$ ✓ |
|---|--|---|

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|----------------------------|-------------------------|--|--------|-------------------|----------------------|
| Poop enclosed EQUIV. ... | 94.73 ✓ | 94.73 ✓ | 7'-6" | ✓ | 94.73 ✓ |
| overhang ... | | | | | |
| R.Q.D. enclosed ... | | | | | |
| overhang ... | | | | | |
| Bridge enclosed EQUIV. ... | 32.60 ✓ | 32.60 ✓ | 7'-6" | ✓ | 32.60 ✓ |
| overhang aft ... | | | | | |
| overhang forward ... | | | | | |
| Fore enclosed ... | 38.10 ✓ | 38.10 ✓ | 7'-6" | ✓ | 38.10 ✓ |
| overhang ... | | | | | |
| Tank aft ... | | | | | |
| forward ... | | | | | |
| Machine opening aft ... | | | | | |
| forward ... | | | | | |
| Total ... | 165.43 ✓ | 165.43 ✓ | | | 165.43 ✓ |

Standard Height of Superstructure **7.50'** ✓

" " R.Q.D. ✓

Deduction for complete superstructure **42.00'**

Percentage covered $\frac{S}{L} = 35.56$ ✓

" " $\frac{S_1}{L} = 35.56$ ✓

" " $\frac{E}{L} = 35.56$ ✓

Percentage from Table, Line A. **tanker = 26.56** ✓
(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 × .2656 = 11.16"** ✓

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|---------------------|-------------------|---|--------|---------|-----------------|--------------------|--------|---|---------|
| A.P. ... | 56.52 ✓ | 1 | 56.52 | 40.0° | 40.00 | 1 | 40.00 | | |
| 1/4 L from A.P. ... | 25.15 | 4 | 100.60 | 14.6" | 14.60 | 4 | 58.40 | | |
| 1/2 L ... | 6.22 | 2 | 12.44 | 2.5" | 2.50 | 2 | 5.00 | | |
| Amidships ... | - | 4 | - | 0 | - | 4 | - | | |
| 3/4 L from F.P. ... | 12.43 | 2 | 24.86 | 7.6" | 7.60 | 2 | 15.20 | | |
| 3/4 L ... | 50.30 | 4 | 201.20 | 34.9" | 34.90 | 4 | 139.60 | | |
| F.P. ... | 113.03 | 1 | 113.03 | 80.0" | 80.00 | 1 | 80.00 | | |
| Total ... | | | 508.65 | | | | 338.20 | | |

Mean actual sheer aft = **Deficient** ✓

Mean standard sheer aft =

Mean actual sheer forward = **Deficient** ✓

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = } **Deficient**
L aft of " = } **there.**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{170.45}{18} (.75 - .1778) = +5.42"$ ✓
If limited on account of midship superstructure ✓

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. Depth to Freeboard Deck = 34'-07" ✓ Summer freeboard = 7'-42" ✓ Moulded draught (d) = 26'-65" ✓ Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6'-66" = 6 3/4" ✓ Addition for Winter North Atlantic Freeboard (if required) = 6'-66" + 4'-65" = 11'-31" = 11 1/4" ✓ | Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 17120$ ✓ Tons per inch immersion at summer load water line $T = 58.54$ ✓ Deduction = $\frac{\Delta}{40T}$ inches = 7'-31" ✓ $= 7 1/4"$ ✓ <i>See Report 11.</i> | TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.68 + .797}{1.36} = \frac{1.447}{1.36}$ <table border="1"> <thead> <tr> <th></th> <th>+</th> <th>-</th> </tr> </thead> <tbody> <tr> <td>Depth Correction ...</td> <td>9.18</td> <td>-</td> </tr> <tr> <td>Deduction for superstructures ...</td> <td>-</td> <td>11.16</td> </tr> <tr> <td>Sheer correction ...</td> <td>5.42</td> <td>-</td> </tr> <tr> <td>Round of Beam correction ...</td> <td>-</td> <td>.10</td> </tr> <tr> <td>Correction for Thickness of Deck amidships ...</td> <td>-</td> <td>-</td> </tr> <tr> <td>Other corrections, scantlings, etc. ...</td> <td>-</td> <td>-</td> </tr> <tr> <td></td> <td>14.60</td> <td>11.26</td> </tr> </tbody> </table> Summer Freeboard = 89'-12" ✓ | | + | - | Depth Correction ... | 9.18 | - | Deduction for superstructures ... | - | 11.16 | Sheer correction ... | 5.42 | - | Round of Beam correction ... | - | .10 | Correction for Thickness of Deck amidships ... | - | - | Other corrections, scantlings, etc. ... | - | - | | 14.60 | 11.26 |
|--|---|---|--|---|---|----------------------|------|---|-----------------------------------|---|-------|----------------------|------|---|------------------------------|---|-----|--|---|---|---|---|---|--|-------|-------|
| | + | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Depth Correction ... | 9.18 | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Deduction for superstructures ... | - | 11.16 | | | | | | | | | | | | | | | | | | | | | | | | |
| Sheer correction ... | 5.42 | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Round of Beam correction ... | - | .10 | | | | | | | | | | | | | | | | | | | | | | | | |
| Correction for Thickness of Deck amidships ... | - | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Other corrections, scantlings, etc. ... | - | - | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14.60 | 11.26 | | | | | | | | | | | | | | | | | | | | | | | | |

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

| | | | |
|--|---------|------------------------------------|------------|
| Tropical Fresh Water Line above Centre of Disc ... | 14" | Tropical Fresh Water Freeboard ... | 5'-5" |
| Fresh Water Line " " ... | 7 1/4" | Fresh Water " " ... | 6'-5" |
| Tropical Line " " ... | 6 3/4" | Tropical " " ... | 6'-9 3/4" |
| Winter Line below " " ... | 6 3/4" | Winter " " ... | 6'-10 1/4" |
| Winter North Atlantic Line " " ... | 11 1/4" | Winter North Atlantic " " ... | 7'-11 3/4" |
| | | | 8'-4 1/4" |

Pontfield.

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.

Poop Equivalent Bulkhead

$$92.2 + (\frac{1}{3} \times 3.8) = \underline{\underline{94.73'}}$$

Bridge Equivalent Bulkhead.

$$28.4 + (\frac{1}{3} \times 6.3) = \underline{\underline{32.60'}}$$

Trade of ship

Names of sister ships Entsbergs No 287 M/S TRONDHEIM "ETC."

Builder's name and yard number Entsbergs Mek. Verkstads A.B. No 289.

Owners

Messrs. Hunting & Low, Ltd., Newcastle

Fee £ 420:00



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