

STEEL STEAMER OR MOTORSHIP. (TUG)

MARINE SECTION.

Received at London Office

19 JAN 1943

State if Report has been sent on the Freeboard of the Vessel Yes.State if Report is sent on the Machinery of the Vessel Yes.Date of completion of report 31st December 1942Port of HULLNo. 51866.Survey held at Selly and HullDate First Survey 3rd June 1942Last Survey 28th December 1942

In the (State if Machinery fitted Aft and if Single, Twin or Triple Screw)

Steel bridge screw tug "EMPIRE ACE"

Date Type (Full Scantling, Complete Superstructure with or without Scantling Openings)

Full ScantlingState Type of Erections None.Tonnage under Tonnage Deck ... 226.11of space or spaces between Tonnage Dk. and Upper Dk. ✓Tonnage 226.11Tonnage 274.35Tonnage Nil

REGISTERED DIMENSIONS.

FEET

Length 105.2

Breadth 26.65

Depth 12.25

CLASS *100 A-1.

"FOR TOWING SERVICES"

State if with freeboard as condition of Class No.

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a)

FEET

L 105'

Breadth (greatest moulded)

B 26'-6"

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c)

D 13'-0"

1st Longitudinal Number (L x D)

1365

2nd Numeral L x (B + D)

4147.5

Framing Depth "d," at middle of length. See Sec. 3 (1d)

11.58

Proportions—Depth to Length—Uppermost continuous deck to top of keel

8.1Do. Long Bridge to top of keel ✓Draught Moulded 11'-9 1/4"Built at SellyLaunched 12th September 1942 Yard No. 1255Builders Boehne & Sons Ltd.Owners Ministry of War TransportManagers ✓

(Where necessary to be entered in Reg. Book)

Residence ✓Port of Registry Goole

If surveyed while building, afloat, or in dry dock

During construction

FRAMES, DOUBLE BOTTOM AND BEAMS.

| | INCHES IN SHIP. | Any Departure from Approved Plans to be Noted. | | INCHES IN SHIP. | Any Departure from Approved Plans to be Noted. |
|--|-----------------|--|--|-----------------|--|
| FRAMES, Spacing amidships | 21 | - | Bracket Floors, Frame | | |
| " " from 1/2 length amidships to Collision bulkhead | 21 | - | " " Reversed Frame | | |
| " " in peaks | 21 | - | " " Vertical Struts | | |
| DE FRAMING. | | | Centre Girder, depth and thickness amidships | | |
| Frame Amidships, Angle, <u>5 x 3 .36</u> | | | " " top Angles | | |
| " " Extends up to <u>UPPER DECK</u> | | | " " bottom Angles | | |
| Reversed Frame Amidships, Angle <u>2 1/2 2 1/2 .30</u> | | | Side Girders, No. each side and thickness | | |
| " " Extends up to <u>ACROSS FLOORS</u> | | | Margin Plate depth (excl. of flange) and thickness | | |
| Depth of Framing Girder <u>5"</u> | | | " " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem | | |
| Frames in Uppermost Continuous 'tween Decks, Angle, <u>[or]</u> | | | " " Vertical Angle to Tank side Bracket from forward 1/4 len. from stem to Panting Area | | |
| " " Second 'tween Decks, Angle, <u>[or]</u> | | | " " Gussets, spacing and scantling abaft 1/4 len. from stem | | |
| " " Third " " " " " " | | | " " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area | | |
| " " from 1/2 len. for'd. to 15% len. from Stem | | | Tank Side Brackets, height above base line at toe of Frame and thickness | | |
| " " in Peaks, Angle <u>5 x 3 .36</u> | | | INNER BOTTOM PLATING. | | |
| Diameter and Spacing of Rivets through Frame and Shell Plating amidships <u>3/4" - 5 1/4"</u> | | | Breadth and thickness of Middle Line Strake | | |
| State if Frame Joggled | No. | - | Thickness of remainder in Holds | | |
| Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved? | AS APPROVED | - | Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room? | Yes | - |
| DOUBLE BOTTOM. | | | BEAMS. | | |
| Frames, Depth and thickness at mid-line in Holds | 17" x .30 | - | Uppermost Continuous Deck, amidships in | | |
| Height of Brackets at side above base line at toe of frame | NONE | - | Wells, Angle, <u>5 x 3 .34</u> | | |
| Margin Line Keelson, on Floors, Angles, <u>[or]</u> | 12" x 36 | - | " " in way of Bridge, Angle, <u>4 x 3 .34</u> | | |
| " " Through Plate or Inter-costal Plate | ✓ | - | Spacing | 21 | - |
| " " Foundation Plate on Floors | ✓ | - | Second Deck, amidships, Angle, <u>[or]</u> | | |
| " " Flat Plate Keel Angles | ✓ | - | Spacing | | |
| Keelsons, No. each side | ONE | - | Third Deck, amidships, Angle, <u>[or]</u> | | |
| " " thickness of Inter-costal Plate | ✓ | - | Spacing | | |
| " " Angle <u>5 x 4 .38</u> | | | Fourth Deck, amidships, Angle, <u>[or]</u> | | |
| " " in Boiler room <u>5 x 4 .48</u> | | | Spacing | | |
| DOUBLE BOTTOM. | | | Poop Deck, Angle, <u>[or]</u> | | |
| Floors, thickness and spacing | | | Spacing | | |
| " " Are Frame and Reversed Frame joggled? | | | Bridge Deck, Angle, <u>[or]</u> | | |
| " " Deck Floors, breadth and thickness at middle line | | | Spacing | | |
| " " breadth and thickness at margin plate | | | Forecastle Deck, Angle, <u>[or]</u> | | |
| | | | Spacing | | |

PILLARS AND DECKS.

| | | INCHES IN SHIP. | Any Departure from Approved Plans to be Noted. | INCHES IN SHIP. | Any Departure from Approved Plans to be Noted. |
|---|-------------------|-----------------|--|-----------------|--|
| PILLARS, No. of Rows | | | | | |
| ACCOMMODATION FORWARD | | | | | |
| in Upper Decks, Size and Spacing | 2 1/2" DIAM - 42" | | | | |
| " " " " " " | ✓ | | | | |
| " " " " " " | ✓ | | | | |
| " " " " " " | ✓ | | | | |
| Centre Line Bulkhead. | | | | | |
| Stiffeners and Spacing | ✓ | | | | |
| Plating, thickness of | ✓ | | | | |
| STRINGERS AND DECKS. | | | | | |
| Uppermost Continuous Deck. | | | | | |
| Stringer Plate, breadth and thickness in Wells | 60 x 35 | | | | |
| " " " " in way of Bridge | ✓ | | | | |
| " " " " Angle in Well | 3 1/2 x 35 | | | | |
| Thickness of Plating abreast Deck openings in way of Well ENGINE CASING | 30 | | | | |
| Thickness of Plating abreast Deck openings in way of Bridge BOILER CASING | 35 | | | | |
| Thickness of Plating within line of openings... | 30 - 25 | | | | |
| If Sheathed, material and thickness..... | ✓ | | | | |
| Second Deck. | | | | | |
| Stringer Plate, breadth and thickness in Wells | ✓ | | | | |
| Stringer Plate, breadth and thickness in way of Wells | | | | | |
| Thickness of Plating abreast Deck openings in way of Bridge | | | | | |
| Thickness of Plating within line of openings... | | | | | |
| If Sheathed, material and thickness..... | | | | | |
| Third Deck. | | | | | |
| Stringer Plate, breadth and thickness..... | | | | | |
| If Plated, state thickness | | | | | |
| Fourth Deck. | | | | | |
| Stringer Plate, breadth and thickness..... | | | | | |
| If Plated, state thickness..... | | | | | |
| Poor Deck. | | | | | |
| Stringer Plate, breadth and thickness..... | | | | | |
| Plating, Sheathing, material and thickness ... | | | | | |
| Bridge Deck. | | | | | |
| Stringer Plate, breadth and thickness..... | | | | | |
| Plating, Sheathing, material and thickness ... | | | | | |
| Forecastle Deck. | | | | | |
| Stringer Plate, breadth and thickness..... | | | | | |
| Plating, Sheathing, material and thickness... | | | | | |

SHELL PLATING.

[illegible]

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—

Extending to Upper Deck (Sec. 3 c).....

„ Deck next below.....

As per Rule.....

FORGINGS AND CASTINGS.

| Requested. | Casting or Forging. | Scantlings. | Maker's Name. | Any Departure from Approved Plans to be Noted. |
|------------------------------|---------------------|-----------------|---------------|--|
| KEEL, Bar | ROLLED | 7" x 1 1/2" | | 6" x 1 1/4" |
| STEM | | 7" x 1 1/2" | | 6" x 1 1/4" |
| STERN FRAME { Propeller Post | FORGED | 5 1/2" x 2 1/2" | T.S. FORSTER | |
| { Rudder | " | 5 1/2" x 2 1/2" | 2 SONS L.O. | |
| Speed of Vessel | | 11 KNOTS | | |
| RUDDER—Type | | ORDINARY TYPE | | |
| " A x D | | 82.5 | | |
| " Diam. of head | | 5 7/8" | | |
| " Mainpiece at top pintle | | 5 1/2" | | |
| " heel | | 4" | | |
| " how constructed | | FORGED & BUILT. | | |
| " double or single plate | | SINGLE | | |
| " coupling, vertical or | | 80 | | |
| " horizontal | | HORIZONTAL. | | |

| | | Plating Thickness. | STIFFENERS. | | | |
|------------|------------------------|-----------------------|---------------|---------------|-------------|----------------|
| | | | VERTICAL. | | HORIZONTAL. | |
| | | | Scantlings. | Spacing. | Scantlings. | Spacing. |
| MIDSHIP | BULKH'D, Upper | | | | | |
| | ON FRAMEN ^g | | 6" x 3" x 20" | | | |
| " | Second | 11 | 375 | 5" x 3" x 34" | 30" | ✓ |
| " | Third | 13 | 26 | 4" x 3" x 30" | 30" | |
| " | Hold | 4 | 34-26 | 4" x 3" x 38" | 24" | |
| | " | | | 4" x 3" x 20" | 30" | W.T. FLAT. |
| COLLISION | (in Hold) | 5 | 34-26 | 3" x 3" x 38" | 24" | PEAK TANK TOP. |
| AFTER PEAK | | 5 | 43-30 | 5" x 3" x 30" | 24" | STEEL FLAT. |

STEEL. Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) OPEN HEARTH PROCESS.
PLATES: - APPLEBY-FRODINGHAM STEEL CO. LD. CONSETT IRON CO. LD. DORMAN, LONG & CO. LD.
SECTIONS: - DORMAN, LONG & CO. LD. APPLEBY-FRODINGHAM STEEL CO. LD. CARGO FLEET IRON CO. LD. CONSETT IRON CO. LD.
 Has the Steel been tested as required by the Rules? Yes. SKINNING ROVE IRON CO. LD.

GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

The approved plans are being retained for reference in dealing with sister vessels under construction.

The following reports are enclosed herewith:—

Stem frame
Rudder frame & rudder head.

Old Rpt. No. 7556

" " " 7642.

This vessel is a sister ship to Cochrane Sons Ltd yard No. 1250. Hull Rpt. No. 51708.

"EMPIRE SAM"

Copy of completion, interior & steering chain test certificates are enclosed herewith.

PARTICULARS OF ELECTRIC WELDING (if employed)

W.T. flats electrically welded at ship's sides.

Approved electrodes used.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book.

*100 A-1.

"FOR TOWING SERVICES"

Particulars of Drop Test of Cast Steel Anchors, viz.:—
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower

4-0-7 incl. cup + pins. A.E.G. 7190. 3942.

2nd "

3-3-19 " " " A.E.G. 7223. 14962.

3rd "

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ft., R.O.D. ft., Bridge ft., Forecastle ft.

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 169078.

Signal Letters.

Extreme Breadth over Belting

28' 4 1/2"

Over-all Length

111' 8"

No. and Material of Decks

1 OK (STL)

Parts of Bottom of Vessel coated with cement or approved composition

Bottom cemented.

Particulars of composition (if fitted) and of approval

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Tanks (if tested) are to be included.)

| Where Fitted. | Length. | Water Capacity. | Where Fitted. | Length. | Water Capacity. |
|---|---------|-----------------|---|---------|-----------------|
| | Feet. | Tons. | | Feet. | Tons. |
| Double bottom, aft, | | | Fore peak tank, | 8' 4" | 5 |
| Double bottom, under Engines and Boilers, | | | After peak tank, | 9' 2" | 20 |
| Double bottom, if under Engines only, | | | Deep tank, aft, | | |
| Double bottom, if under Boilers only, | | | Deep tank, forward, | | |
| Double bottom, forward, | | | Other tanks, if fitted, | | |
| Total length (if continuous) and Capacity | | | (If necessary furnish further information by sketch.) | | |

Order for Special Survey No. 3313

Date 10th July 1942.

Dates of Surveys held while building

1942: June 3. 12. 17. 20. 24. 29. July 2. 6. 10. 15. 21. 24. 28. 31. August 12. 19. 21. 25. Sept. 2. 9. 15. 18. 22. Oct. 2. 9. 14. 19. 27. 30. Nov. 3. 9. 13. 25. 30. Dec. 2. 3. 4. Dec. 9. 10. 14. 15. 21. 22. 24. 28.

Total No. of Visits 45