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REPORT ON WATER TUBE BOILERS.

No. 69306

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Writing Report 19 When handed in at Local Office 10.2.1945 Port of **GLASGOW.**
 in Survey held at **RENFREW.** Date, First Survey 16.6.43 Last Survey 1st Feb., 1945
 on the **TW. SC. TRANSPORT FERRY J. 11723** (No. 3037) (Number of Visits 21) Gross 4157 Tons Net 2430
 at **GLASGOW.** By whom built **MESSRS. THE FAIRFIELD SHIPBUILDING & ENGINEERING Co. Ltd.,** When built 1945
 Plans made at **RENFREW** By whom made **BABCOCK & WILCOX, Ltd. 10/1630 No. 11.** When made 1945.
 nominal Horse Power 658.25 Owners **THE ADMIRALTY** Port belonging to

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Colvilles Ltd.
 of Approval of plan 24.2.43. Number and Description or Type
 of Boilers **1 - Three Drum Small Tube type** Working Pressure **225 lbs** Tested by Hydraulic Pressure to **387 lb.** Date of Test **16.2.44.**
 of Certificate **21649** Can each boiler be worked separately **Yes** Total Heating Surface of Boilers **5325 sq.ft.**
 of draught fitted Area of fire grate (coal) in each Boiler
 and type of burners (oil) in each boiler **4 - Admiralty type** No. and description of safety valves on
 boiler **1-4" High Lift Double** Area of each set of valve **25.12 sq.in.** Pressure to which they are adjusted **225 lb**
 they fitted with easing gear **Yes** In case of donkey boilers state whether steam from main boilers can enter the donkey boiler
 least distance between boilers or uptakes and bunkers or woodwork Height of boiler **10'1 1/2"** Width and Length **11'10 1/2" Width 11'9.0/16" Length**
 in Drums:—Number in each boiler **One** Inside diameter **4'2"** Thickness of plates **5/8" & 1 1/2"**
 of Tensile Strength **28/32 tons** Are drum shell plates welded or flanged **No.** Description of riveting:—
 seams **double** long. seams **DBS DR** Diameter of rivet holes in long. seams **29/32"** Pitch of rivets **3.4516"**
 of plate or width of butt straps **9 7/16"** Thickness of straps **1/2"** Percentage strength of long. joint:—Plate **73.74** Rivet **88.06**
 diameter of tube holes in drum **1", 1 1/8", 1 1/2"** Pitch of tube holes **1 1/2", 1.11/16"** Percentage strength of shell in way of tubes **32.3**
 working pressure by rules **app. 225 lbs.** Steam Drum Heads or Ends:—Range of tensile strength **26/30 tons** Thickness of plates **1.3/16" F 1" A.**
 size of manhole or handhole **4'2"** Size of manhole or handhole **16" x 12"** Working pressure by rules **app. 225** Water Drums:—Number
 in each boiler **2** Inside Diameter **22 3/4"** Thickness of plates **1 1/8"** Range of tensile strength **28/32 tons** Are drum shell plates
 welded or flanged **Seamless Forged** Description of riveting:—Cir. seams **Single** long. seam
 seams Pitch of rivets Lap of plates or width of butt straps Thickness of straps
 percentage strength of long. joint:—Plate Rivet Diameter of tube holes in drum **1", 1 1/8", 1 1/2"** Pitch of tube holes **1 1/2", 1.11/16"**
 percentage strength of drum shell in way of tubes **32.3** Working pressure by rules **app. 225 lb.** Water Drum Heads or Ends:—Range of
 tensile strength **26/30 tons** Thickness of plates **7/8"** Radius or how stayed **23"**
 size of manhole or handhole **16" x 12"** Working pressure by rules **app. 225 lb.** Headers or Sections:—Number
 material Thickness Tested by Hydraulic Pressure to Tubes:—Diameter **1", 1 1/8", 1 1/2"**
 thickness **.104", .116", .116"** Number **1530 @ 1", 364 @ 1 1/8", 186 @ 1 1/2"** Steam Dome or Collector:—Description of Joint to Shell
 diameter Thickness of shell plates Range of tensile strength
 description of longitudinal joint Diameter of rivet holes Pitch of rivets Lap of plate or width of
 straps Thickness of straps Percentage strength of long. joint Plate Rivet
 working pressure of shell by rules Crown or End Plates:—Range of tensile strength
 thickness Radius or how stayed Working pressure by rules
SUPERHEATER. Drums or Headers:—Number in each boiler Inside Diameter
 thickness Material Range of tensile strength Are drum shell plates welded
 flanged Description of riveting:—Cir. seams long. seams Diameter of rivet holes in
 seams Pitch of rivets Lap of plates or width of butt straps Thickness of straps
 percentage strength of long. joint:—Plate Rivet Diameter of tube holes in drum Pitch of tube holes
 percentage strength of drum shell in way of tubes Working pressure by rules Drum Heads or Ends:—
 thickness Range of tensile strength Radius or how stayed Size of manhole or handhole
 working pressure by rules Number, diameter, and thickness of tubes Tested by Hydraulic Pressure to
 Date of Test Is a safety valve fitted to each section of the superheater which can be shut off from the boiler
 and description of Safety Valves Area of each set of valves
 pressure to which they are adjusted Is easing gear fitted
 Easing Gear. Has the spare gear required by the rules been supplied

The foregoing is a correct description,
Babcock & Wilcox Ltd. Manufacturer.

During progress of work in shops - - - 1943 Jan 16, Feb 27, Apr 6, 30, Sep 13, 20, 29, Oct 28, Nov 2, 10, Dec 2, 16
 During erection on board vessel - - - 1944 Jan 5, Feb 4, 10, 16, Mar 3, 16, 1945 Feb 1
 Is the approved plan of boiler forwarded herewith **No.**
 Total No. of visits **21.**

This boiler a duplicate of a previous case **Yes.** If so, state vessel's name and report No. **Glasgow Report No. 68702.**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **This boiler has been built under Special Survey in accordance with the Rules and approved plans, and also in accordance with Admiralty Statement requirements and as otherwise modified and approved by the Admiralty, and the materials and workmanship are good. It has been sent to the Shipbuilders for installation in the vessel.**

Survey Fee ... £ 22 : 10 : } When applied for, **13 FEB 1945**
 Travelling Expenses (if any) £ : : } When received, 19
 Specification 22 10

A/c rendered from London 19/2/45.

Committee's Minute **GLASGOW 13 FEB 1945**
 signed *Approved for Completion* 19 JUN 1945

Engineer Surveyor to Lloyd's Register of Shipping

