

REPORT ON WATER TUBE BOILERS.

No. 74046

Received at London Office

1-JUN 1949

Date of writing Report 21-5-1949 When handed in at Local Office 30 MAY 1949

Port of GLASGOW

No. in Survey held at GLASGOW Date, First Survey 17-1-49 Last Survey 3-5-1949
 Reg. Bk. 49558 on the S.S. "WAVE MONARCH" (Number of Visits 22) Gross 8159 Tons Net 4545
 Built at GLASGOW By whom built HARLAND & WOLFF LTD When built 1944
 Engines made at GLASGOW By whom made BARCLAY CURLE & CO LTD When made 1944
 Boilers made at RENFREW By whom made BABCOCK & WILCOX When made 1944
 Nominal Horse Power 1496 Owners THE ADMIRALTY Port belonging to LONDON

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel

Date of Approval of plan Number and Description or Type
 of Boilers Two - BABCOCK & WILCOX Working Pressure 460 LBS/A Tested by Hydraulic Pressure to 440 LBS/A Date of Test
 No. of Certificate Can each boiler be worked separately YES Total Heating Surface of Boilers 12050 sq ft
 Is forced draught fitted YES Area of fire grate (coal) in each Boiler No. and description of safety valves on each boiler 4 - BABCOCK & WILCOX Pressure to which they are adjusted 460 LBS/A
 No. and type of burners (oil) in each boiler 2 @ 2 1/2 DOUBLE IMP. HIGH LIFT Area of each set of valve 9.82 sq ft
 Are they fitted with easing gear YES In case of donkey boilers state whether steam from main boilers can enter the donkey boiler No
 Smallest distance between boilers or uptakes and bunkers or woodwork Height of boiler 13-2 1/2 Width and Length 14'-4 1/4 x 14'-4 1/4
 Steam Drums:—Number in each boiler ONE Inside diameter 3'-6" Thickness of plates 1 7/16
 Range of Tensile Strength Are drum shell plates welded or flanged WELDED Description of riveting:—
 Cir. seams long. seams Diameter of rivet holes in long. seams Pitch of rivets
 Lap of plate or width of butt straps Thickness of straps Percentage strength of long. joint:—Plate Rivet
 Diameter of tube holes in drum 4" Pitch of tube holes 4 1/4 Percentage strength of shell in way of tubes
 Working pressure by rules Steam Drum Heads or Ends:—Range of tensile strength Thickness of plates 1 5/16
 Radius or how stayed 36 SPHER. RAD Size of manhole or handhole 16" x 12" Working pressure by rules Water Drums:—Number in each boiler Inside Diameter Thickness of plates Range of tensile strength Are drum shell plates welded or flanged Description of riveting:—Cir. seams long. seams Diameter of rivet holes in long. 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 Water Drum Heads or Ends:—Range of Tensile strength Thickness of plates Radius or how stayed
 Size of manhole or handhole Working pressure by rules Headers or Sections:—Number 38 Tubes:—Diameter 1 1/4, 2, 4" O.D.
 Material Thickness 3/4 Tested by Hydraulic Pressure to Steam Dome or Collector:—Description of Joint to Shell
 Thickness 11, 1/4, 1/2 L.S.G. Number 132, 183, 38 Range of tensile strength
 Inside diameter Thickness of shell plates Diameter of rivet holes Pitch of rivets Lap of plate or width of butt 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 TWO Inside Diameter 9 1/2
 Thickness 1 1/4 Material STEEL Range of tensile strength 28-32 TONS/A Are drum shell plates welded or flanged FORGED SEAMLESS Description of riveting:—Cir. seams long. seams Diameter of rivet holes in long. 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 2 1/8
 Percentage strength of drum shell in way of tubes Working pressure by rules Drum Heads or Ends:—FLAT
 Thickness 1 1/4 Range of tensile strength Radius or how stayed Size of manhole or handhole 3 5/8 x 3 5/8
 Working pressure by rules Number, diameter, and thickness of tubes 90-1 1/2 O.D. 9 W.G. 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
 No. and description of Safety Valves ONE @ 2 1/2 HIGH LIFT Area of each set of valves 4.91 sq ft
 Pressure to which they are adjusted 450 LBS/A Is easing gear fitted YES
 Spare Gear. Has the spare gear required by the rules been supplied YES

H.S. 2600 = 10400
 244 = 1650

Totals = 12050 sq ft

The foregoing is a correct description,

Manufacturer.

Dates { During progress of
 Survey { work in shops - -
 while { During erection on
 building { board vessel - -

Is the approved plan of boiler forwarded herewith

Total No. of visits

Is this boiler a duplicate of a previous case. If so, state vessel's name and report No.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The boilers were built & installed under British Corporation Survey. The boilers were opened out & examined in their entirety & found or placed in good condition. Please see report of herewith.

Survey Fee ... £ : : When applied for, 19
 Travelling Expenses (if any) £ : : When received, 19

Committee's Minute GLASGOW 31 MAY 1949

Assigned SEE ACCOMPANYING MACHINERY REPORT.

Engineer Surveyor to Lloyd's Register of Shipping.

004653-004661-004673