

REPORT ON WATER TUBE BOILERS.

MOB. RPT. No. 2030

No. 19536

Received at London Office 23 APR 1954

Date of writing Report 22-4-1954 When handed in at Local Office 22-4-1954 Port of West Hartlepool

No. in Survey held at West Hartlepool Date, First Survey 11th Sept, 1952, Last Survey 21st April, 1954
Reg. Bk. on the S.S. "MELIKA" (Number of Visits 190)

Built at Haverton Hill-on-Tees By whom built Furness Shipbuilding Co. When built 1954
Engines made at Hartlepool By whom made Richardsons Westgarth (Hartlepool) Ltd. When made 1954
Boilers made at Hartlepool By whom made Richardsons Westgarth (Hartlepool) Ltd. When made 1954
Nominal Horse Power Owners Afran Transport Co NY. U.S.A. Port belonging to

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel STEWARTS & LLOYD'S GLASGOW SCROLL SOUTH DURHAM STEEL CO. TALBOT STEEL TUBE

Date of Approval of plan 26-12-51, 17-3-53, 4-6-52, 8-10-53, 10-12-52, 22-2-53, 18-1-53, 24-3-53, 22-1-54 Number and Description of Type
of Boilers 2- FOSTER WHEELER "D" TYPE MARINE Working Pressure 600 LB/SQ. IN. Tested by Hydraulic Pressure to 1085 LB/SQ. IN. Date of Test 26-11-53

No. of Certificate 2- L.R. 4205 Can each boiler be worked separately YES Total Heating Surface of Boilers 6680 SQ. FT. (ONE BOILER 6680 SQ. FT. ONE BOILER 6680 SQ. FT.)

Is forced draught fitted YES Area of fire grate (coal) in each Boiler No. and description of safety valves on each boiler 1- 2" COCKBURN SINGLE FULLBORE TYPE Area of each set of valves per boiler per rule 2.50 SQ. INS Pressure to which they are adjusted as fitted 2.65 SQ. INS

Are they fitted with easing gear YES In case of donkey boilers state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork Width and Length 14'-9" x 22'-6" Height of boiler 22'-0"

Thickness of plates 3/8" TUBE PLATE Steam Drums:—Number in each boiler ONE Inside diameter 2'-3 3/4" RAD. WRAPPER PLATE

Are drum shell plates welded or flanged WELDED If fusion welded, state name of welding firm MARSHALL & ANDERSON LTD. MOTHERWELL Are drum shell plates welded

Have all the requirements of the rules for Class I vessels been complied with YES Description of riveting:—Cir. seams long. seams

Diameter of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of long. joint:—Plate Rivet Diameter of tube holes in drum 1 1/4" & 2" Pitch of tube holes 2 1/4" & 3 5/8"

Percentage strength of shell in way of tubes 44.5% Steam Drum Heads or Ends:—Range of tensile strength 26-30 TONS/SQ. INS

Thickness of plates 2" & 2 1/8" Radius or how stayed 4'-0" INT. RAD. Size of manhole or handhole 16" x 12" ELLIPTICAL Water Drums:—Number in each boiler ONE Inside Diameter 2'-9" Thickness of plates 2" Range of tensile strength 28-32 TONS/SQ. IN. Are drum shell plates welded or flanged WELDED If fusion welded, state name of welding firm MARSHALL & ANDERSON LTD. Have all the requirements of the rules for Class I vessels been complied with YES Description of riveting:—Cir. seams long. seam

Diameter of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of long. joint:—Plate Rivet Diameter of tube holes in drum 1 1/4" & 2" Pitch of tube holes 2 1/4" & 3 5/8"

Percentage strength of drum shell in way of tubes 44.5% Water Drum Heads or Ends:—Range of Tensile strength 26-30 TONS/SQ. INS

Thickness of plates 1 1/2" & 1 1/4" Radius or how stayed 2'-9" INT. RADIUS Size of manhole or handhole 16" x 12" ELLIPTICAL

Leaders or Sections:—Number 3 Material MILD STEEL Thickness 1" Tested by Hydraulic Pressure to 1085 LBS/SQ. IN.

Tubes:—Diameter 2" o.d. & 1 3/8" o.d. Thickness 5.1 W.G. & 10.1 W.G. Number 232 & 1026 Steam Dome or Collector:—Description of joint to Shell Inside diameter NOT CHECKED Thickness of shell plates Range of tensile strength Description of longitudinal joint If fusion welded, state name of welding firm Have all the requirements of the rules for Class I vessels been complied with YES Diameter of rivet holes Plate Rivet

Thickness of straps Percentage strength of long. Joint Pitch of rivets Thickness of straps Percentage strength of long. Joint Plate Rivet

Radius or how stayed Crown or End Plates:—Range of tensile strength Thickness Radius or how stayed

UPPER HEATER. Drums or Headers:—Number in each boiler TWO Inside Diameter 9"

Thickness 1 1/4" Material 1/2% MOLY STEEL Range of tensile strength Are drum shell plates welded or flanged WELDED If fusion welded, state name of welding firm FOSTER WHEELER LTD. Have all the requirements of the rules for Class I vessels been complied with YES Description of riveting:—Cir. seams long. seams

Diameter of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of long. joint:—Plate Rivet Diameter of tube holes in drum 1 1/4" Pitch of tube holes 2 1/8" Percentage strength of drum shell in way of tubes 41%

Drum Heads or Ends:—Thickness 1 3/4" Range of tensile strength

Radius or how stayed FLAT Size of manhole or handhole 2" Number, diameter, and thickness of tubes 234-1 1/4" o.d. x 10.1 W.G.

Tested by Hydraulic Pressure to 1085 LBS/SQ. IN. Date of Test 26-1-54 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 1- 2" COCKBURN DOUBLE FULLBORE Area of each set of valves 5.08 SQ. INS Pressure to which they are adjusted Is easing gear fitted YES

Spare Gear. Has the spare gear required by the rules been supplied YES

For RICHARDSONS WESTGARTH (HARTLEPOOL) LIMITED.
The foregoing is a correct description,
J B Hall
DIRECTOR

Dates } During progress of }
Survey } work in shops - - }
while } During erection on }
building } board vessel - - - }
Is the approved plan of boiler forwarded herewith NO
Total No. of visits

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under special survey in accordance with approved plans, Secretary's letters and the rules of the Society for a working pressure of 600 lbs/sq. in. The materials and workmanship are good. On completion the boiler was tested by hydraulic pressure to 1085 lbs/sq. in. and found sound and tight.

Survey Fee ... £ 168 : 18 : 0 When applied for, 22-4-1954.
Travelling Expenses (if any) £ : : When received, 19

TUESDAY 7-DEC 1954

H. A. Wilson
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
Signed See Rpt 4a

NOT CHECKED

24/6/54

NOT CHECKED

920-84348-0276
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