

REPORT ON WATER TUBE BOILERS. No. 19880

28 APR 1958

Received at London Office

of writing Report 25-4-1958 When handed in at Local Office 25-4-1958 Port of WEST HARTLEPOOL
 in Survey held at Hartlepool Date, First Survey 22-11-57 Last Survey 3-4-1958
 Book No. 312 on the Waste Heat Foster Wheeler Water Tube Donkey Boilers for M/V STANVAC NAIROBI (Number of Visits 7)
 at West Hartlepool By whom built Richardsons Westgirth Yard No. D 650 When built 1958-3
 Engines made at West Hartlepool By whom made Richardsons Westgirth Boiler No. D 650 When made 1958-3
 Plans made at West Hartlepool By whom made Richardsons Westgirth Boiler No. D 650 When made 1958-3
 for Register Book 2250 ft² Owners Standard-Vacuum Transportation Co. Ltd Port belonging to London

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

Date of Approval of plan 24/7/57 DESIGN PRESSURE 250 No. and Description or Type Boilers 1- Foster Wheeler Waste Heat Water Tube Boilers
 Working Pressure 200 Tested by Hydraulic Pressure to 4.25 Date of Test 2/4/58

of Certificate 4277 Hpl. Can each boiler be worked separately Yes Total Heating Surface of Boilers 2250 ft² Superheaters None

Half Economisers None Is forced draught fitted Yes Area of Fire Grate (coal) in each Boiler None

and type of burners (oil) in each boiler None No. and description of safety valves on each boiler 1- 2" lockburn double spring improved high lift
 Area of each set of valves per boiler 6.28 ins² Pressure to which they are adjusted None

Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler Yes Smallest distance between boilers or uptakes and bunkers or woodwork None Height of boiler 10' 5 1/2"

Width and length 7' 6" x 10' 1/4" Steam Drums:—Number in each boiler 1 Inside diameter 2' 6"
 Thickness of plates 3/4" Range of tensile strength 28-32 tons/in² Are drum shell plates welded Yes

flanged welded If fusion welded, state name of welding firm Marshall & Anderson Have all the requirements of the Rules for Class I vessels been complied with Yes
 Description of riveting:—Circ. seams None long. seams None

Diameter of rivet holes in long. seams None Pitch of rivets None Thickness of straps None Percentage strength of long. joint:—Plate None Rivet 63.3%
 Diameter of tube holes in drum 2.015" Pitch of tube holes 5 1/2"

Percentage strength of shell in way of tubes 63.6% Steam Drum Heads or Ends:—Range of tensile strength 26-30 tons/in²
 Thickness of plates 3/4" Radius or how stayed 2' 6" Size of manhole or handhole 16" x 12" Water Drums:—Number in each boiler None
 Inside diameter None Thickness of plates None Range of tensile strength None Are drum shell plates welded or flanged None
 If fusion welded, state name of welding firm None Have all the requirements of the Rules for Class I vessels been complied with Yes
 Description of riveting:—Circ. seams None long. seams None

Diameter of rivet holes in long. seams None Pitch of rivets None Thickness of straps None Percentage strength of long. joint:—Plate None Rivet None
 Diameter of tube holes in drum None Pitch of tube holes None

Percentage strength of drum shell in way of tubes None Water Drum Heads or Ends:—Range of tensile strength None
 Thickness of plates None Radius or how stayed None Size of manhole or handhole None

Sections:—Number 2 Material Mild Steel Thickness 1" Tested by hydraulic pressure to 4.25 lbs/in²
 Diameter 2" Thickness 9 SWG Number 50 'U' tubes Steam Dome or Collector:—Description of joint to shell None
 Inside diameter None Thickness of shell plates None Range of tensile strength None

Description of longitudinal joint None If fusion welded, state name of welding firm None Have all the requirements for the Rules for Class I vessels been complied with Yes
 Diameter of rivet holes None Pitch of rivets None Thickness of straps None Percentage strength of long. joint:—Plate None rivet None

Down or End Plates:—Range of tensile strength None Thickness None Radius or how stayed None

SUPERHEATER Drums or Headers:—Number in each boiler None Inside diameter None
 Thickness None Material None Range of tensile strength None Are drum shell plates welded or flanged None
 If fusion welded, state name of welding firm None Have all the requirements of the Rules for Class I vessels been complied with Yes
 Description of riveting:—Circ. seams None long. seams None

Diameter of rivet holes in long. seams None Pitch of rivets None Thickness of straps None Percentage strength of long. joint:—Plate None Rivet None
 Diameter of tube holes in drum None Pitch of tube holes None Percentage strength of drum shell in way of tubes None

Drum Heads or Ends:—Thickness None Range of tensile strength None
 Radius or how stayed None Size of manhole or handhole None Number, diameter, and thickness of tubes None

Tested by hydraulic pressure to None Date of test None Is a safety valve fitted to each section of the superheater which can be shut off from the boiler None
 No. and description of safety valves None Area of each set of valves None Pressure to which they are adjusted None Is easing gear fitted None

Spare Gear. Has the spare gear required by the Rules been supplied Yes

By RICHARDSONS WESTGIRTH (HARTLEPOOL) LIMITED.
 The foregoing is a correct description,
R. Bolton Director, Manufacturer.

Dates of Survey:—During progress of work in shops 1957 Nov. 22, 1958 March 21, 24, 26, 31 April 2, 3 Is the approved plan of boiler forwarded herewith Yes
 while building During erection on board vessel Total No. of visits 7

Is this boiler a duplicate of a previous case No If so, state vessel's name and report No. None

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. This Waste Heat Water Tube boiler has been constructed under Special Survey in accordance with the Rules, the Approved Plans & the Secretary's letters. The material used has been tested according to the Rules and the workmanship is good, is eligible in our opinion to be fitted on board a vessel classed with the Society. The boiler has been despatched to Japan for fitting on board the M/V STANVAC NAIROBI.

Survey Fee £ 33 : 15 : - When applied for 25-4-1958
 Travelling Expenses (if any) £ : : - When received 19

Date 25-4-1958
R. Bolton & J. E. Ladmont
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute None