Sunderland 620 | Doxford 784

SUNDERLAND RPT. NO. 35815

REPORT ON WATER TUBE BOILERS.

No. 19297

Received at London Office 21 NOV 1951

...g Report 20-11-1951 When handed in at Local Office 20-11-1951. Port of West Hartlepool

Survey held at West Hartlepool Date, First Survey 26th January, Last Survey 26th October, 1951

on the "CALTEX TANGANYIKA" (Number of Visits 21) Tons Gross 8513 Net 4809

Sunderland By whom built Wm Doxford & Sons Ltd When built 1952

...ade at ... By whom made Wm Doxford & Sons Ltd When made 1952

...ade at West Hartlepool By whom made Richardsons, Westgarth & Co Ltd When made 1951

Horse Power M.N 288 each Owners Overseas Tankship (U.K) Ltd Port belonging to London

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

Approval of plan DESIGN PRESS 250 lbs Number and Description or Type ... Two Foster-Wheeler W.T. Boilers Working Pressure 220 lbs□" Tested by Hydraulic Pressure to 425 lbs□" Date of Test 11-10-51

...rtificate 4152 Can each boiler be worked separately Yes Total Heating Surface of Boilers Including Supt 100 □' = 6920 □' 3460 each boiler

...draught fitted Yes Area of fire grate (coal) in each Boiler —

...ype of burners (oil) in each boiler Two Todds system No. and description of safety valves on ... 2" Single Spring Cockburn high lift Area of each set of valves per boiler per rule — as fitted 3·14 Pressure to which they ...sted Supht 230 main 250 Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter ... boiler — Smallest distance between boilers or uptakes and bunkers or woodwork — Height of boiler 16'-8 9/16"

...d Length 10'-4 11/16" x 11'-6 3/4" **Steam Drums**:—Number in each boiler One Inside diameter 3'-5 3/4"

...of plates 1 5/16" Range of Tensile Strength 28/32 Tons Are drum shell plates welded ... Welded If fusion welded, state name of welding firm Marshall & Anderson Ltd Motherwell Have all the requirements of the rules ... vessels been complied with Yes Description of riveting:—Cir. seams — long. seams —

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

...strength of shell in way of tubes 3 = 33 1/3 %, 1 3/4 = 35·7 % **Steam Drum Heads or Ends**:—Range of tensile strength 26/30 Tons

...of plates 1 5/16" Radius or how stayed 3'-5 3/4" inside Size of manhole or handhole 16" x 12" **Water Drums**:—Number ...ler One Inside Diameter 2'-5 1/2" Thickness of plates 1 1/8" Range of tensile strength 28/32 Tons Are drum shell plates ...flanged Welded If fusion welded, state name of welding firm Marshall & Anderson Motherwell Have all the requirements of the rules ... vessels been complied with Yes Description of riveting:—Cir. seams — long. seam —

...of rivet holes in long. seams — Pitch of rivets — Thickness of straps —

...strength of long. joint:—Plate — Rivet — Diameter of tube holes in drum 2" & 1 1/8" Pitch of tube holes 3" & 1 3/4"

...strength of drum shell in way of tubes 3" = 33 1/3 %, 1 3/4 = 35·7 % **Water Drum Heads or Ends**:—Range of Tensile strength 26/30 Tons

...of plates 1 1/8" Radius or how stayed 2'-5 1/2" inside Size of manhole or handhole 16" x 12"

...or **Sections**:—Number — Material — Thickness — Tested by Hydraulic Pressure to —

Diameter 2" O.D. 1 1/8" O.D. Thickness 8 W.G. 11 W.G. Number 155 803 per boiler **Steam Dome or Collector**:—Description of ...shell — Inside diameter — Thickness of shell plates — Range of tensile ... — Description of longitudinal joint — If fusion welded, state name of welding ... — Have all the requirements of the rules for Class I vessels been complied with — Diameter of rivet holes ...rivets — Thickness of straps — Percentage strength of long. Joint — Plate — Rivet —

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

...RHEATER. **Drums or Headers**:—Number in each boiler One Inside Diameter 5 1/4" x 4 1/2" inside ... 3/4" Material Mild Steel Range of tensile strength 28/32 Tons Are drum shell plates welded ... Welded If fusion welded, state name of welding firm Foster Wheeler Ltd Have all the requirements of the rules ... vessels been complied with Yes Description of riveting:—Cir. seams — long. seams —

...of rivet holes in long. seams — Pitch of rivets — Thickness of straps — Percentage strength of ...—Plate — Rivet — Diameter of tube holes in drum 2" +·015/−·010 Pitch of tube holes 3 1/4" Percentage strength of ...in way of tubes 38·4 % **Drum Heads or Ends**:— Two Thickness 1 3/8" Range of tensile strength 28/32 Tons ...how stayed — Size of manhole or handhole 2·030 +·000/−·003 Number, diameter, and thickness of tubes 12 - 2" O.D. x 7 W.G.

Hydraulic Pressure to — Date of Test — Is a safety valve fitted to each section of the superheater which ...ut off from the boiler — No. and description of Safety Valves One 2" Double Spring Cockburn High Lift Area of each set 6·3 sq. ins. Pressure to which they are adjusted — Is easing gear fitted Yes

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

The foregoing is a correct description,

RICHARDSONS, WESTGARTH & CO. LIMITED [signature] DIRECTOR Manufacturer.

During progress of work in shops 1951. Jan. 26·29·31· Feb. 14·19· May 10·21·31· July 12· Aug. 8·16·27·28·31· Sept. 14· Oct. 1·11· Is the approved plan of boiler forwarded herewith Retained for use of Duplicate contract

During erection on board vessel 12·15·22·26· Total No. of visits 21.

...iler a duplicate of a previous case Yes. If so, state vessel's name and report No. 19295.

...RAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed ... special survey in accordance with approved plans, Secretary's letters and the rules of ... Society for a working pressure of 220 lbs; The materials and workmanship are good. On ...letion they were tested by hydraulic pressure to 425 lbs□" and found sound & tight

...y Fee ... £ 53 : 16 : 0 When applied for, 20-11-1951. These boilers have been securely fixed on board & S.V.s adjusted as above. [initials]

...lling Expenses (if any) £ 32 : 14 : 0 When received, 19

See Hpl Lr 15/12

TUES. 8 JUL 1952

H. A. Wilson

Engineer Surveyor to Lloyd's Register of Shipping.

...ttee's Minute

...ed See F.E. mchy. rpt. Sld. 35815.

JM 11/12/51

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