

REPORT ON WATER TUBE BOILERS.

No. 59370

FEB -9 1938

Received at London Office

Date of writing Report 17/1 1938. When handed in at Local Office 7.2.1938 Port of Glasgow.

No. in Survey held at Renfrew. Date, First Survey 20-5-37 Last Survey 1-2-1938.

Reg. Bk. 2 Boilers No 6/1328 s/s "REBECA" Number of Visits 28

on the Built at Midalestrough By whom built Furness: L.B.G (No 244) When built 1938

Master Engines made at Hartlepool By whom made Richardson Westgarth (No 2689) When made 1938

Boilers made at Renfrew By whom made Babcock & Wilcox Ltd When made 1938

Registered Horse Power Owners Curacao'sche Sch. Mij Port belonging to Willemstad

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

(Letter for Record) Date of Approval of plan 8/3/34. Number and Description or Type of Boilers 2. Babcock & Wilcox Working Pressure 180 lb. Tested by Hydraulic Pressure to 320 lb. Date of Test 24/12/37.

No. of Certificate 20049. Can each boiler be worked separately? Yes. Total Heating Surface of Boilers 6520 sq. ft.

Is forced draught fitted? Yes. Area of fire grate (coal) in each boiler (oil burning) 3. Swinney No 7. Total grate area of boilers in vessel including Main and Auxiliary.

No. and type of burners (oil) in each boiler 2 - Imp. High Lift. Area of each valve 5.94 sq. (2 3/4" dia). Pressure to which they are adjusted 185 lbs.

Are they fitted with easing gear? Yes. In case of donkey boilers state whether steam from main boilers can enter the donkey boiler 12' 10 1/2" x 13' 6 3/4" approx. Width and Length 13' 6 3/4" approx. Thickness 1/2" 9 1/16".

Smallest distance between boilers or uptakes and bunkers 3' 6". Height of Boiler 11' 6" approx. Material of plates Steel. Thickness 1/2" 9 1/16".

Steam Drums:—Number in each boiler One. Inside diameter 3' 6". Material of plates Steel. Thickness 1/2" 9 1/16".

Range of Tensile Strength 28-32 Tons. Are drum shell plates welded or flanged? no. Description of riveting: Cir. seams D.R. long. seams D.R.-D.B.S. Diameter of rivet holes in long. seams 27/32". Pitch of Rivets 3.229".

Lap of plate or width of butt straps 9 1/16" 4 3/64". Thickness of straps 1/2". Percentage strength of long. joint:—Plate 73.87. Rivet 102.0.

Diameter of tube holes in drum 4 3/16" 4 3/64". Pitch of tube holes 4" x 6". Percentage strength of shell in way of tubes 41.7.

If Drum has a flat side state method of staying (if fitted) Distance apart Number and pitch of stays in each Working pressure by rules Steam Drum Heads or Ends:—Material Steel. Thickness 3/4" plate. Radius or how stayed 3'-0".

Size of Manhole or Handhole 16" x 12". Water Drums:—Number in each boiler 1. Inside Diameter 6" sq. section. Material of plates Steel. Thickness 3/4". Range of tensile strength 28-32 Tons. Are drum shell plates welded or flanged? Solid drawn. 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 4 3/16" 4 3/64". Pitch of tube holes 4" x 4. P.

Percentage strength of drum shell in way of tubes Headers or Sections:—Number 18 per boiler. Thickness 1/2" 9 1/16".

Radius or how stayed Size of manhole or handhole 4 1/16" sq. Material of Stays 4" x 1 1/16" O.D.

Material Steel. Thickness 32" minimum. Tested by Hydraulic Pressure to 320 lb. Working Pressure by Rules Tubes:—Diameter 4" x 1 1/16" O.D.

Area at smallest part Area supported by each stay 628 @ 1 1/16". Steam Dome or Collector:—Description of Joint to Shell

Thickness 6. L.S.G. 1/4", 10. L.S.G. Number 56 @ 4". Diameter Thickness of shell plates Material

Percentage strength of Joint Diameter of Rivet Holes Pitch of Rivets Working Pressure of shell

Description of longitudinal joint by Rules Crown or End Plates:—Material Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan 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

Diameter of Safety Valve Pressure to which each is adjusted Is easing gear fitted

Is a drain cock or valve fitted at lowest point of superheater Number, diameter, and thickness of tubes

Spare Gear. Tubes Gaskets or joints:—Manhole Handhole Handhole plates

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

Dates of Survey During progress of 1937 May: 20. 25 June: 14. 15. 24. 30 Aug 9 Is the approved plan of boiler forwarded herewith duplicate plan.

while building During erection on 18 Sep: 6. 8. 15 Oct: 6. 8. 12. 14. 21 Nov: 3. 9 Total No. of visits 28

board vessel 19. 25. 29 Dec: 1. 14. 16. 21. 24 (1938) Jan: 17 Feb: 1

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey, to approved plans in accordance with the Society's Rules. Materials and workmanship are good. They are intended for Mr Richardson Westgarth Eng No 2689, for Mr Furness L.B.G. and No 244.

7/2/38. Boilers examined during installation at West Hartlepool and afterwards under steaming conditions.

Survey Fee ... £ 34/4/0. When applied for, 19

Travelling Expenses (if any) £ : : When received, 19

Committee's Minute GLASGOW 8 FEB 1938 1 RH

Assigned TRANSMIT TO LONDON

See Indb 96. 16275

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