

REPORT ON WATER TUBE BOILERS.

No. 41284

Received at London Office

Date of writing Report Aug 8th 1921 When handed in at Local Office Aug 8th 1921 Port of GLASGOW

No. in Survey held at Renfrew Date, First Survey 8. 9. 1919 Last Survey 16. 8. 1920

Reg. Bk. on the Three Babcock & Wilcox Boilers Number of Visits 7 Tons } Gross

Master _____ Built at _____ By whom built _____ When built _____

Engines made at _____ By whom made _____ When made _____

Boilers made at Renfrew By whom made Babcock & Wilcox Ltd (1001.) When made _____

Registered Horse Power _____ Owners Australian Commonwealth. Port belonging to _____

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel D. Colville & Sons.

(Letter for Record _____) Date of Approval of plan _____ Number and Description or Type of Boilers 3 Babcock & Wilcox Working Pressure 200 lbs. Tested by Hydraulic Pressure to _____ Date of Test _____

No. of Certificate _____ Can each boiler be worked separately _____ Total Heating Surface of Boilers 8289 sq ft

Is forced draught fitted _____ Area of fire grate (coal) in each Boiler 84.5 sq ft Total grate area of boilers in vessel including Main and Auxiliary _____ No. and type of burners (oil) in each boiler _____ No. and description of safety valves on each boiler _____

Are they fitted with easing gear _____ 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 _____ Height of Boiler _____ Width and Length _____

Steam Drums:—Number in each boiler One Inside diameter 4'-0" Material of plates Steel Thickness 14" & 1"

Range of Tensile Strength 28-32 Are drum shell plates welded or flanged No. Description of riveting:—

Cir. seams DR Lap long. seams TR SBS Diameter of rivet holes in long. seams 24" Pitch of Rivets 3 3/4"

Lap of plate or width of butt straps 4" Thickness of straps 7/16" Percentage strength of long. joint:—Plate 45.8 Rivet 45.5

Diameter of tube holes in drum 3 3/32" Pitch of tube holes 4" x 5 1/4" Percentage strength of shell in way of tubes 43.3

If Drum has a flat side state method of staying _____ Depth and thickness of girders at centre (if fitted) _____ Distance apart _____ Number and pitch of stays in each _____ Working pressure by rules 210.

Steam Drum Heads or Ends:—Material Steel Thickness 13/16" Radius or how stayed 42"

Size of Manhole or Handhole _____ Material of plates S Thickness 3/4" Range of tensile strength 26-30 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 plates or width of butt straps _____ Thickness of straps _____

Percentage strength of long. joint:—Plate _____ Rivet _____ Diameter of tube holes in drum 3.94 Pitch of tube holes 4"

Percentage strength of drum shell in way of tubes _____ Water Drum Heads or Ends:—Material Steel Thickness 3/4"

Radius or how stayed _____ Size of manhole or handhole 4 1/6 sq. Headers or Sections:—Number 19

Material Steel Thickness 14" Tested by Hydraulic Pressure to 400 lbs Material of Stays _____

Area at smallest part _____ Area supported by each stay _____ Working Pressure by Rules _____ Tubes:—Diameter 1 1/16" & 3 1/16"

Thickness 125, 144, 212, 192. Number 590 & 39. Steam Dome or Collector:—Description of Joint to Shell None.

Percentage strength of Joint _____ Diameter _____ Thickness of shell plates _____ Material _____

Description of longitudinal joint _____ Diameter of Rivet Holes _____ Pitch of Rivets _____ Working Pressure of shell by Rules _____

Crown or End Plates:—Material _____ Thickness _____ How stayed _____

SUPERHEATER. Type None 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 _____

Survey request form

No. 2293 attached to rpt no. 39594

The foregoing is a correct description,

Babcock & Wilcox Manufacturer.

Dates of Survey } During progress of work in shops } 1919 Sep 8. 30. Nov 13. 1920 Jan 21. Feb 3 Apr 15. Aug 16. Is the approved plan of boiler forwarded herewith

building } During erection on board vessel } Total No. of visits 7

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The workmanship and materials are of good quality. The workmanship has been carried out under Special Survey in accordance with the approved plans. Headers and mud drums have been tested as above. Ends dished and shell plates rolled but not drilled. The boilers are intended for Australian Commonwealth Standard vessels and the boiler parts have been despatched to Sydney where the boilers will be completed.

Survey Fee ... £ 8 : 8 : When applied for. 151

Travelling Expenses (if any) £ : : When received. 191

MONTHLY ACCOUNT

David C Barr.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW, 16 AUG 1921

FRI. JUL 28 1921

Assigned TRANSMIT TO LONDON



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