

REPORT ON WATER TUBE BOILERS.

No. 4180

Received at London Office

Date of writing Report 1.4.21 When handed in at Local Office 20.6.21 Port of Glasgow WED. 22 JUN. 1921

No. in Survey held at Glasgow Date, First Survey 16th August Last Survey 3rd Decr. 1920

Reg. Bk. on the Three Babcock Wilcox water tube Boilers for SS No 17 Number of Visits 6 Gross Tons 1124 Net Tons 1124

Master Sulbas Built at Sulbas By whom built Sociedad Espanola de Construcion Naval When built

Engines made at By whom made When made

Boilers made at Renfrew By whom made Babcock Wilcox Ltd 1124 When made 1920

Registered Horse Power Owners Port belonging to

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Colville & Co. L^d

Letter for Record S Date of Approval of plan 3/2/20 Number and Description or Type of Boilers 3 Babcock Wilcox water tube Working Pressure 780 lb. Tested by Hydraulic Pressure to Date of Test

No. of Certificate Can each boiler be worked separately. Total Heating Surface of Boilers 9636 sq. ft.

Is forced draught fitted. Area of fire grate (coal) in each Boiler 92.9 # 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 S Thickness 9/16 + 1/16

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

Cir. seams double long. seams J.T.W. S.B.S. Diameter of rivet holes in long. seams 29/32 Pitch of Rivets 3.537

Lap of plate or width of butt straps 7 1/2 Thickness of straps 7/16 Percentage strength of long. joint:—Plate 74.4 Rivet 76.7

Diameter of tube holes in drum 3 3/32 Pitch of tube holes 7x6 Percentage strength of shell in way of tubes 82

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

Steam Drum Heads or Ends:—Material S Thickness 13/16 Radius or how stayed 3'-6"

Size of Manhole or Handhole in shell 11x15 Water Drums:—Number in each boiler one Inside Diameter 7 1/2" eq.

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 Pitch of tube holes Percentage strength of drum shell in way of tubes 43.4 Water Drum Heads or Ends:—Material S Thickness 3/4 Radius or how stayed Size of manhole or handhole Headers or Sections:—Number 22 in each Material S Thickness 7/32 Tested by Hydraulic Pressure to 540 lb. Material of Stays Area at smallest part Area supported by each stay Working Pressure by Rules Tubes:—Diameter 3 15/16 + 1 13/16 Thickness .212 ; .192 ; .144 ; .128 Number 66 - 3 15/16 ; 686 - 1 13/16 Steam Dome or Collector:—Description of Joint to Shell 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

UPERHEATER. 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 Limited. Manufacturer.

Dates of Survey During progress of work in shops - - - 1920 Aug 16, Nov 8-11, 24, 29 Dec 3. Is the approved plan of boiler forwarded herewith Yes.
while building During erection on board vessel - - - Total No. of visits 6

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been shipped in sections to Bilbao. The workmanship and materials are of good quality. Headers, mud drums, steam drums tested. The boilers built in accordance with approved plans. To be completed and tested after erection at Bilbao.

Survey Fee ... £ 444.12 : : When applied for. 191
Travelling Expenses (if any) £ : : When received. 191

Committee's Minute GLASGOW 21 JUN 1921
Assigned TRANSMIT TO LONDON

C. Marshall
Engineer Surveyor to Lloyd's Register of Shipping.
TUE. 23 JAN. 1923
TUE. APR. 24 1923
Lloyd's Register Foundation
002659-002666-0276