

## REPORT ON WATER TUBE BOILERS.

No. 40911

Received at London Office

WED. 2 MAR. 1921

of writing Report 26. 2 1921 When handed in at Local Office 26/2/1921 Port of Glasgow.

No. in Survey held at Glasgow Date, First Survey 10/4/1918 Last Survey 11/1/1921

Reg. Bk. on the r.t. boilers for Gs Kinghorn Number of Visits 27

Master Built at Kinghorn By whom built Kinghorn Ship? Co. Ld. Tons { Gross  
Net

Engines made at Renfrew By whom made Babcock & Wilcox Ltd (N° 413) When made 1921

Boilers made at Renfrew By whom made Babcock & Wilcox Ltd (N° 413) When made 1921

Registered Horse Power Owners Port belonging to

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

Letter for Record S Date of Approval of plan Number and Description or Type

Boilers Three Babcock & Wilcox Working Pressure 200 Tested by Hydraulic Pressure to Date of Test

No. of Certificate 774 Can each boiler be worked separately. Total Heating Surface of Boilers 9636 sq

Is forced draught fitted Area of fire grate (coal) in each Boiler 85.45 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 Area of each valve Pressure to which they are adjusted

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 7/8 & 1 1/8

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

Cir. seams DR Lap long. seams T.R.S.B. Diameter of rivet holes in long. seams 29/32 Pitch of Rivets 3.534

Lap of plates or width of butt straps 4 1/4 Thickness of straps 7/16 Percentage strength of long. joint:—Plate 74.4 Rivet 76.4

Diameter of tube holes in drum 3 3/32 Pitch of tube holes 7 x 5 3/4 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 in shell Handhole 11 x 15 Water Drums: Number in each boiler one Inside Diameter 7 1/2 square

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 5/16 Pitch of tube holes 7

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 welded square Size of manhole or handholes 4 1/2 sq. Handhole or Sections: Number 22 in each

Material Steel Thickness 14/32 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 13/16 & 3 13/16

Thickness 14.4 & 192 Number 44 rivets 696 rivets 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

Survey request form

No. 2167 attached Slo. No. 38675.

The foregoing is a correct description,

Babcock &amp; Wilcox Limited. Manufacturer.

Dates of Survey } During progress of work in shops - 1918 Apr 10, May 15, 22, 30, July 5, Aug 26, Sep 12, Oct 11, Dec 19

while building } During erection on board vessel - 1919 Feb 24, Aug 25, Sep 8, 22, Oct 9, 13, 21, 27, Nov 11, 13 (1920) Jan 12

Is the approved plan of boiler forwarded herewith previously forwarded.

Total No. of visits 27

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey in accordance with rules and are duplicates of others previously approved. They have been despatched to Kinghorn to be fitted on board. The material workmanship are good. Duplicates of "N" standard class. 50% of work was done on these boilers under specification for Shipping Controller.

Survey Fee ... £ 26. 2. 9. When applied for, 20/9/1921

Travelling Expenses (if any) £ ... When received, 3. 11. 2/1921

C. Marshall & D. C. Barr.  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW, 1-MAR-1921

Assigned Transmit to London

FRI. 23 SEP. 1921

Lloyd's Register  
Foundation