

Rpt. 5c. *97M*

REPORT ON WATER TUBE BOILERS.

No. 41621

Received at London Office

THE 29 DEC 1921

Date of writing Report *19th Dec. 1921* When handed in at Local Office *24th Dec. 1921* Port of *Glasgow*
No. in Survey held at *Renfrew* Date, First Survey *10th Apr 1918* Last Survey *15th Dec. 1921*
Reg. Bk. on the *3 Babcock & Wilcox Bhs. No 1107* Number of Visits *21*
Built at _____ By whom built _____ When built _____
By whom made _____ When made _____
By whom made *Messrs. Babcock & Wilcox Ltd.* When made *1921*
Horse Power _____ Port belonging to _____

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY. Manufacturers of Steel *D. Chibb & Sons (Gt) Steel Co of Scotland*

for Record *S* Date of Approval of plan *as per B.W.S. Bhs. 407, 8, 9, 10 etc.* Number and Description or Type
Boilers *3: Babcock & Wilcox* Working Pressure *200 lbs./sq. in.* Tested by Hydraulic Pressure to _____ Date of Test _____

Certificate Can each boiler be worked separately. Total Heating Surface of Boilers *9636 ft. 2*

draught fitted Area of fire grate (coal) in each Boiler *85.75 ft. 2* Total grate area of boilers in vessel including

Auxiliary No. and type of burners (oil) in each boiler *none fitted* No. and description of safety valves on

2: Spring loaded Area of each valve *9.62 ins. 2* Pressure to which they are adjusted _____

with easing gear. In case of donkey boilers state whether steam from main boilers can enter the donkey boiler ☒

Distance between boilers or uptakes and bunkers or woodwork. Height of Boiler *14' 8"* Width and Length *15' 8" x 13' 0"*

Boilers:—Number in each boiler *One* Inside diameter *4' 0"* Material of plates *steel* Thickness *9/16" + 1 1/16"*

Tensile Strength *28/32 tons* Are drum shell plates welded or flanged *No* Description of riveting:—

J.R. Lap long. seams *combined for S.S.* Diameter of rivet holes in long. seams *29/32* Pitch of Rivets *3.537 ins*

width of butt straps *5 1/2" + 7 1/4"* Thickness of straps *7/16"* Percentage strength of long. joint:—Plate *74.4* Rivet *76.7*

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*

has a flat side state method of staying. Depth and thickness of girders at centre

Distance apart. Number and pitch of stays in each. Working pressure

206 lbs./sq. in. Steam Drum Heads or Ends:—Material *steel* Thickness *13/16"* Radius or how stayed:— *3' 6"*

(fitted in cylindrical shell) *15" x 11"* Water Drums:—Number in each boiler *One* Inside Diameter *62.6 square*

plates *steel* Thickness *3/4"* Range of tensile strength *26/30 tons* Are drum shell plates welded

welded Description of riveting:—Cir. seams _____ long. seams _____ Diameter of Rivet Holes in

Pitch of rivets _____ Lap of plates or width of butt straps _____ Thickness of straps _____

strength of long. joint:—Plate _____ Rivet _____ Diameter of tube holes in drum *3 3/4"* Pitch of tube holes *7"*

strength of drum shell in way of tubes *43.4* Water Drum Heads or Ends:—Material *steel* Thickness *3/4"*

fixed welded in Size of manhole or handhole *none* Headers or Sections:—Number *22 per boiler*

steel Thickness *17/32"* Tested by Hydraulic Pressure to *400 lbs./sq. in.* Material of Stays _____

allest part. Area supported by each stay. Working Pressure by Rules. Tubes:—Diameter *1 1/16" + 3 15/16"*

128" + 144" + 192" + 242" Number *686* Steam Dome or Collector:—Description of Joint to Shell *None fitted*

strength of Joint. Diameter. Thickness of shell plates. Material.

of longitudinal joint. Diameter of Rivet Holes. Pitch of Rivets. Working Pressure of shell

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

EATER. Type *None fitted* Date of Approval of Plan. Tested by Hydraulic Pressure to.

Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler.

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

cock or valve fitted at lowest point of superheater. Number, diameter, and thickness of tubes.

UR. Tubes *80 3/16" + 120 1/16"* Gaskets or joints:—Manhole *12* Handhole *1150* Handhole plates *24*

Survey request form:

The foregoing is a correct description,

No. 2167 attached *Glasgow* No 38228

Babcock & Wilcox Limited. Manufacturer.

During progress of *1918 Apr 10 May 15-22-30 Jul 5 Aug 26 Sep 12 Oct 11 (1919)* Is the approved plan of boiler forwarded herewith *Yes 407, 8, 9, 10 etc.*
work in shops -- *Sep 30 Oct 26.13 (1920) Sep 13 (1921) Apr 1.3.15.25 May 13 Jul 6.8. Dec 5*
During erection on board vessel --- Total No. of visits *21*

AL REMARKS (State quality of workmanship, opinions as to class, &c.) *These boilers (for Standard H class vessels) have been*
the special survey: they are duplicates of others previously built: the materials & workmanship are good: the headers & the drum drums
tested to 750 lbs./sq. in. the built sections & the steam drums to 400 lbs./sq. in. hydraulic pressure. The boilers are at present loosely
in the shops at Renfrew but it is not yet known to what vessel they will be fitted. When finally
on board, the boilers require to be hydraulically tested as complete units.

Fee ... *£ 36-0-0* When applied for, *191*
Log Expenses (if any) *£* When received, *2003.23*

J. D. Boyle
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
Assigned

GLASGOW 27 DEC 1921
TRANSMIT TO LONDON

FRI 4 APR 1930

FRI 4 JUL 1930

TUE 8 JUL 1930

Lloyd's Register
Foundation