

Rpt. 5c.

## REPORT ON WATER TUBE BOILERS.

No. 50565

Received at London Office

9 JUL 1930

Date of writing Report

191

When handed in at Local Office

12. 6. 1930

Port of

Glasgow.

No. in

Survey held at

Renfrew.

Date, First Survey

25. 12. 29

Last Survey

12<sup>th</sup> June 1930

Reg. Bk.

on the

BOILER No. 61259

Number of Visits

30

Tons

Gross 12043

Net 6857

Master

Built at

By whom built

When built

Engines made at

By whom made

When made

Boilers made at

Renfrew

By whom made

Messrs Babcock &amp; Wilcox Ltd

When made

1930

Registered Horse Power

Owners

Port belonging to

## WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

S. Colville &amp; Sons

(Letter for Record

S.

Date of Approval of plan

6-3-30, 4-3-30, 21-1-30

Number and Description or Type

of Boilers

Two Babcock &amp; Wilcox

Working Pressure

200 lb

Tested by Hydraulic Pressure to

350 lb

Date of Test

No. of Certificate

Can each boiler be worked separately

yes

Total Heating Surface of Boilers

4068 sq

Is forced draught fitted

yes

Area of fire grate (coal) in each Boiler

Total grate area of boilers in vessel including

Main and Auxiliary

No. and type of burners (oil) in each boiler

3- Todd Pressure Burners

No. and description of safety valves on

each boiler

1 Pair 2" J.H.L. Cochburns

Area of each valve

6.28 sq inches

Pressure to which they are adjusted

200 LBS

Are they fitted with easing gear

yes

In case of donkey boilers state whether steam from main boilers can enter the donkey boiler

No

Smallest distance between boilers or uptakes and bunkers or woodwork

yes

Height of Boiler

15'0"

Width and Length

10'6" x 14'6"

Steam Drums:—Number in each boiler

One

Inside diameter

3' 5 1/2"

Material of plates

Steel

Thickness

3/32" T.P. 1/16"

Range of Tensile Strength

28-32 tons

Are drum shell plates welded or flanged

no.

Description of riveting:—

Cir. seams

D.R.Lap

long. seams

D.R.D.B.S.

Diameter of rivet holes in long. seams

27/32"

Pitch of Rivets

3.313"

Lap of plate or width of butt straps

MEAN 9"

Thickness of straps

17/32"

Percentage strength of long. joint:—Plate

71.88

Rivet

94

Diameter of tube holes in drum

4 3/64"

Pitch of tube holes

7"

Percentage strength of shell in way of tubes

42.2

If Drum has a flat side state method of staying

yes

Depth and thickness of girders at centre

(if fitted)

yes

Distance apart

yes

Number and pitch of stays in each

yes

Working pressure

by rules

SHELL

Steam Drum Heads or Ends:—Material

Steel

Thickness

15/16"

Radius or how stayed

3'0"

Size of Manhole or Handhole

16" x 12"

Material of plates

S.D. Steel

Thickness

3/4"

Range of tensile strength

24-28 tons

Are drum shell plates welded

yes

or flanged

Solid chain

Description of riveting:—Cir. seams

yes

long. seams

yes

Diameter of Rivet Holes in

long. seams

yes

Pitch of rivets

yes

Lap of plates or width of butt straps

yes

Thickness of straps

yes

Percentage strength of long. joint:—Plate

yes

Rivet

yes

Percentage strength of drum shell in way of tubes

42.2

Water Drum Heads or Ends:—Material

Steel

Thickness

3/4"

Radius or how stayed

Flat

Size of manhole or handhole

yes

Material

Steel

Thickness

11/32"

Tested by Hydraulic Pressure to

400 lb.

Material of Stays

yes

Working Pressure by Rules

207 lb.

Tubes:—Diameter

4" x 1 1/8"

Area at smallest part

4 1/4"

Area supported by each stay

yes

Working Pressure by Rules

207 lb.

Tubes:—Diameter

4" x 1 1/8"

Thickness

13/16"

Number

4-42

Thickness

4 1/4"

Area supported by each stay

yes

Working Pressure by Rules

207 lb.

Tubes:—Diameter

4" x 1 1/8"

Thickness

13/16"

Number

4-42

Percentage strength of Joint

yes

Description of longitudinal joint

yes

Diameter of Rivet Holes

yes

Pitch of Rivets

yes

Working Pressure of shell

yes

by Rules

yes

Crown or End Plates:—Material

yes

Thickness

yes

How stayed

yes

SUPERHEATER.

Type

yes

Date of Approval of Plan

yes

Tested by Hydraulic Pressure to

yes

Date of Test

yes

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

yes

Pressure to which each is adjusted

yes

Is easing gear fitted

yes

Diameter of Safety Valve

yes

Is a drain cock or valve fitted at lowest point of superheater

yes

Number, diameter, and thickness of tubes

Spare Gear.

Tubes

7 1/2" x 16"

Gaskets or joints:—Manhole

6

Handhole

100

Handhole plates

14

The foregoing is a correct description,

Babcock &amp; Wilcox, Ltd. Manufacturer.

Dates

During progress of

work in shops

1929 Dec 25-31 (1930) Jan 22-27 Feb 12-27 Mar 10-11

Is the approved plan of boiler forwarded herewith

yes

During erection on

board vessel

17. 28. 29 Apr 1. 4. 7. 8. 9. 10. 14. 22. 28. 30 May 5. 7

Total No. of visits

30

while

building

8. 12. 15. 16. 21. 24 June 12.

## GENERAL REMARKS

(State quality of workmanship, opinions as to class, &amp;c.)

These steam drums, Sections,

and mud drums have been built under survey in accordance with the Rules and approved plans. The materials and workmanship are good. They are to the order Messrs Palmers

S. B. &amp; I. Co. Ltd and intended for their No. 1000

3/5 Survey Fee

£ 15. 12. 0

When applied for,

193

Travelling Expenses (if any) £

When received,

191

Committee's Minute

GLASGOW

8 - JUL 1930

Assigned

TRANSMIT TO LONDON

Engineer Surveyor to Lloyd's Register of Shipping.

TUE. 25 NOV 1930

Lloyd's Register Foundation

003298-003306-0245