

## REPORT ON WATER TUBE BOILERS.

No. 50564

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.

20508 Sup on the

BOILERS No 6/1258 'F. H. BEDFORD JR

Number of Visits

27

Gross 11952

Tons

Net 6831.

Master

Built at

Haverhill Hillmire By whom built Furness S.B. Co Ltd

When built 1930

Engines made at

Kiel

By whom made

Fried. Krupp.

When made

1930.

Boilers made at

Renfrew

By whom made

Messrs Babcock &amp; Wilcox Ltd

When made

1930

Registered Horse Power

Owners

Balliol American Petroleum Import G.M.B.H. Danzig.

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel G. 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 Ltd

Working Pressure

200 lbs.

Tested by Hydraulic Pressure to

350 lbs.

Date of Test

2. 10. 30

No. of Certificate

6826.

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

yes

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. Lockburn Type.

Area of each valve

6.28 sq inches

Pressure to which they are adjusted

205 lbs.

Are they fitted with easing gear

Yes.

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

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

Distance

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

1/32 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

3.813"

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

yes

Steam Drum Heads or Ends:—Material

Steel

Thickness

15/16"

Radius or how stayed

3' 0"

Size of Manhole or Handhole

16" x 12"

MVD

Water Drums:—Number in each boiler

one

Inside Diameter

6" x 6"

Material of plates

S.D. Steel

Thickness

3/4"

Range of tensile strength

24-28 tons

Are drum shell plates welded

yes

Diameter of Rivet Holes in

or flanged

Solid drawn

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

Diameter of tube holes in drum

4 3/64"

Pitch of tube holes

7"

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

Headers or Sections:—Number

14 Pairs per Boiler

Material

Steel

Thickness

1/32"

Tested by Hydraulic Pressure to

400 lbs.

Material of Stays

yes

Area at smallest part

yes

Area supported by each stay

yes

Working Pressure by Rules

207 lbs.

Tubes:—Diameter

4" 11/16"

Thickness

4 1/16"

1/16"

Number

42

430"

Steam Dome or Collector:—Description of Joint to Shell

yes

Percentage strength of Joint

yes

Diameter

yes

Thickness of shell plates

yes

Material

yes

Description of longitudinal joint

yes

Diameter of Rivet Holes

yes

Pitch of Rivets

yes

Working Pressure of shell

by Rules

yes

Crown or End Plates:—Material

yes

Thickness

yes

How stayed

yes

UPERHEATER.

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

Diameter of Safety Valve

yes

Pressure to which each is adjusted

yes

Is easing gear fitted

yes

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

yes

Number, diameter, and thickness of tubes

yes

Spare Gear.

Tubes 7" 4 1/16"

1 3/4" - 16"

Gaskets or joints:—Manhole

6

Handhole

100

Handhole plates

14

The foregoing is a correct description.

Babcock &amp; Wilcox, Ltd.

Manufacturer.

Dates of Survey } During progress of } 1929 Dec 28-31 (1930) Jan 28-27 Feb 12-27 Mar 10-11 Is the approved plan of boiler forwarded herewith NO. 6/1259

while } During erection on } 17. 28. 29 Apr 1. 3. 4. 7. 9. 10. 14. 22. 28 May 5. 6. 7. 12 Total No. of visits 27

building } board vessel } 16. 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 material and workmanship are good. They are to the order Messrs Furness S.B. Co. Ltd and intended for their No. 176. These boilers have been securely fitted aboard, tested by

Survey Fee ... £ 15 : 12 : 0

When applied for,

191

hydraulic pressure to 350 lbs. per sq. inch

Travelling Expenses (if any) £

When received

191

with satisfactory results and then safety valve

MONTHLY ACCOUNT

adjusted under stamp G. Murdoch

Committee's Minute GLASGOW 8 - JUL 1930

Assigned TRANSMIT TO LONDON

Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 21 NOV 1930

See Indb 26

14269

002385-002400-0215