

REPORT ON WATER TUBE BOILERS.

No. 41060

Date of writing Report

6/4

1921

When handed in at Local Office

27. 4. 1921

Port of

Glasgow

Received at London Office

WED. 4 MAY. 1921

No. in

Survey held at

Glasgow

Date, First Survey

7th Oct.

Last Survey

25th Oct.

1921

Reg. Bk.

0316

on the

2m Babcock & Wilcox Boilers M.V. "Scottish Maiden"

Number of Visits

2

Tons

Gross 6993.25

Net

4036.14

Master

Built at

Barron

By whom built

Vickers Ltd.

When built

1921

Engines made at

Barrow-in-Furness

By whom made

Vickers Ltd.

When made

1921

Boilers made at

Renfrew

By whom made

Babcock & Wilcox Ltd.

When made

1921

Registered Horse Power

Owners

Jankers Ltd.

Port belonging to

London

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

Colville & Co. Ltd.

Letter for Record

Date of Approval of plan

28/5/20

Number and Description or Type

Boilers 2m Babcock & Wilcox

Working Pressure

200

Tested by Hydraulic Pressure to

400 lbs.

Date of Test

7/7/21

No. of Certificate

325, 326

Can each boiler be worked separately

Yes

Total Heating Surface of Boilers

5326 sq. ft.

forced draught fitted

Yes

Area of fire grate (coal) in each Boiler

✓

Total grate area of boilers in vessel including

Main and Auxiliary

630 cub. ft.

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

4 off. White's system

No. and description of safety valves on

each boiler

Double-spring loaded

Area of each valve

15.9 sq. in.

Pressure to which they are adjusted

125 lbs.

Are they fitted with easing gear

Yes

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

1'-6"

Height of Boiler

16'-0"

Width and Length

12'-9 3/4" - 13'-6"

Steam Drums:—Number in each boiler

one

Inside diameter

4'-0"

Material of plates

S

Thickness

1 7/32 in.

Range of Tensile Strength

28/32

Are drum shell plates welded or flanged

No

Description of riveting:—

Cir. seams

double

long. seams

2.75 in. S.B.

Diameter of rivet holes in long. seams

27/32

Pitch of Rivets

3 3/4 in.

Lap of plate or width of butt straps

7 1/2 in.

Thickness of straps

7/16 in.

Percentage strength of long. joint:—Plate

75.8

Rivet

77.6

Diameter of tube holes in drum

3 3/16 in.

Pitch of tube holes

7 x 5 1/4 in.

Percentage strength of shell in way of tubes

43.3

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

234

Steam Drum Heads or Ends:—Material

S

Thickness

13/16 in.

Radius or how stayed

3'-6"

Size of Manhole or Handhole

none

Water Drums:—Number in each boiler

one

Diameter

7 1/2 in. sq.

Material of plates

S

Thickness

3/4 in.

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

3.97 in.

Pitch of tube holes

7 3/4 in.

Percentage strength of drum shell in way of tubes

43.3

Water Drum Heads or Ends:—Material

S

Thickness

7/16 in.

Radius or how stayed

✓

Size of manhole or handhole

✓

Headers or Sections:—Number

19

Material

S

Thickness

7/16 in.

Tested by Hydraulic Pressure to

600 lbs.

Material of Stays

✓

Area at smallest part

✓

Area supported by each stay

✓

Working Pressure by Rules

✓

Tubes:—Diameter

3 1/16 in. x 1 3/16 in.

Thickness

212; 192; 144; 128

Number

3 1/16 - 59

Steam Dome or Collector:—Description of Joint to Shell

None

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

SUPERHEATER. 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

During progress of work in shops - - - 1920 Oct 7 - 25

while

During erection on board vessel - - -

building

Is the approved plan of boiler forwarded herewith

Yes

Total No. of visits

2

GENERAL REMARKS

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

The workmanship and material good in accordance with approved plans. Headers & mud drums tested as above and with dished end plates forwarded to Barron for completion and test after assembling.

The above boilers have been efficiently fitted on board. For further particulars see

Survey Fee

£ 8 : 17 : 6

When applied for

191

Travelling Expenses (if any) £

:

When received

191

Barron Rpt No. 1928.

John Houston.

Committee's Minute

Assigned

GLASGOW 3-MAY 1921

TRANSMIT TO LONDON.

Engineer Surveyor to Lloyd's Register of Shipping.

16 DEC. 1921

Lloyd's Register Foundation

W81-0054