

REPORT ON WATER TUBE BOILERS.

No. 97250

Received at London Office

MAR -9 1939

Date of writing Report

19

When handed in at Local Office

7/31 1939

Port of

NEWCASTLE-ON-TYNE

No. in
Reg. Bk.

Survey held at

Wallsend

Date, First Survey

7 March 1938

Last Survey

4 March 1939

on the Steamer "SILVERLAUREL"

(Number of Visits)

Gross

Tons

Net

Master

Built at

Sunderland

By whom built

J.L. Thompson & Sons

When built

1939

Engines made at

Wallsend

By whom made

Wallsend Slipway & Engineering Co. Ltd.

When made

1939

Boilers made at

Wallsend

By whom made

Wallsend Slipway & Engineering Co. Ltd.

When made

1939

Registered Horse Power

Owners

Port belonging to

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.

(Letter for Record)

Date of Approval of plan

16 November 1937

Manufacturers of Steel

Press. & Walzwerk A.G. of Düsseldorf

of Boilers

Two Yarrow

Working Pressure

450 lbs

Tested by Hydraulic Pressure to

725 lbs

Date of Test

23-8-38

No. of Certificate

795

Can each boiler be worked separately

Yes

Total Heating Surface of Boilers

6090 sq

Is forced draught fitted

Yes

Area of fire grate (coal) in each Boiler

Oil fired

Total grate area of boilers in vessel including

Main and Auxiliary

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

3. Wallsend - Howden

No. and description of safety valves on

each boiler

One - Improved High Lift

Area of each valve

2.4053 sq

Pressure to which they are adjusted

455 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

24"

Height of Boiler

20'-3"

Width and Length

20'-6" x 16'-6"

Steam Drums:—Number in each boiler

One

Inside diameter

50"

Material of plates

Steel

Thickness

P. 2" S. 1 3/4"

Range of Tensile Strength

34-38 tons

Are drum shell plates welded or flanged

No

Description of riveting:—

Cir. seams

L.D.R.

long. seams

Forged drums

Diameter of rivet holes in long. seams

Pitch of Rivets

Lap of plate or width of butt straps

Thickness of straps

Percentage strength of long. joint:—Plate

Diameter of tube holes in drum

5 Rows - 1 3/4"

Pitch of tube holes

5 Rows - 1 3/4"

Percentage strength of shell in way of tubes

If Drum has a flat side state method of staying

No flat side

Depth and thickness of girders at centre

(if fitted)

Distance apart

Number and pitch of stays in each

Working pressure

by rules

452

Water Drum Heads or Ends:—Material

Steel

Thickness

1 3/4"

Radius or how stayed

50" Radius

Size of Manhole or Handhole

16" x 12"

Water Drums:—Number in each boiler

3

Inside Diameter

23"

Material of plates

Steel

Thickness

1 3/16" for 495 Rows

Range of tensile strength

28-32 tons

Are drum shell plates welded

or flanged

No

Description of riveting:—Cir. seams

L.D.R.

long. seams

Forged drums

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 drums

1 3/4" & 1 1/4"

Pitch of tube holes

Percentage strength of drum shell in way of tubes

33% - 48%

Water Drum Heads or Ends:—Material

Steel

Thickness

1 5/16"

Radius or how stayed

21 1/2" Spherical Radius

Size of manhole or handhole

16" x 12"

Headers or Sections:—Number

Material

Thickness

Tested by Hydraulic Pressure to

Material of Stays

Area at smallest part

Area supported by each stay

Working Pressure by Rules

Tubes:—Diameter

1 3/4" & 1 1/4"

Thickness

1 1/2" x 1645" & 1345"

Number

SUPERHEATER DRUM

Description of Joint to Shell

Percentage strength of Joint

Diameter

23"

Thickness of shell plates

1 1/4" Forged drum

Material

Steel

Description of longitudinal joint

Diameter of Rivet Holes

Pitch of Rivets

Working Pressure of shell

by Rules

720

Crown or End Plates:—Material

Steel

Thickness

1 5/16"

How stayed

21 1/2" Spherical Radius

SUPERHEATER. Type

Yarrow

Date of Approval of Plan

16 November 1937

Tested by Hydraulic Pressure to

725 lbs

Date of Test

23-8-38

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

Yes

Diameter of Safety Valve

2-1 3/4" Improved High Lift

Pressure to which each is adjusted

Is easing gear fitted

Yes

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

Yes

Number, diameter, and thickness of tubes

198

1 3/8" x 108" each boiler

Spare Gear. Tubes

1 3/4" dia 36

Gaskets or joints:—Manhole

Handhole

Handhole plates

The foregoing is a correct description,
FOR THE WALLSEND SLIPWAY & ENGINEERING CO. LIMITED.

J. M. Thompson. DIRECTOR

Manufacturer.

Dates of Survey
During progress of work in shops - -
while building - - -
During erection on board vessel - - -

Is the approved plan of boiler forwarded herewith

Yes

Total No. of visits

GENERAL REMARKS

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

These boilers have been built under Special Survey and in accordance with the Rules and approved plans. The materials and workmanship are good, on completion they were tested by hydraulic pressure to 725 lbs per square inch and found tight and satisfactory in all respects. Boilers installed & examined under steam.

Safety valves adjusted as stated on Machinery Report

Survey Fee

...

£ Charged on

When applied for,

19

Travelling Expenses (if any) £

Machinery Rpt

When received,

19

Committee's Minute

TUE. 21 MAR 1939

Assigned

See Std. JE 32593

J. Seller & R. Colloffitt

Engineer Surveyor to Lloyd's Register of Shipping.



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Lloyd's Register
Foundation

W261-0086