

Rpt. 5a.

REPORT ON BOILERS.

No. 7770.

FRI. FEB. 14 1913

Received at London Office

Date of writing Report 12.2.13 1913

When handed in at Local Office

12.2.1913

Port of

No. in Survey held at Stockton-on-Tees

Reg. Book.

on the ship "Ellin"

Date, First Survey 27.11.1912

Last Survey

17.1.1913

(Number of Visits 10)

(S.S. No. 378)

Tons

Gross 4575

Net 2780

Master

Poulondria

Built at

Sunderland

By whom built

Messrs Short Bros Ltd

When built 1913

Engines made at

Sunderland

By whom made

J. Dickinson & Sons Ltd

When made 1913

Boilers made at

Stockton

By whom made

Messrs Riley Bros (No 4426)

When made 1913

Registered Horse Power

Owners

J. G. Embirico

Port belonging to

Andros

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

J. Spencer & Sons

(Letter for record (a))

Total Heating Surface of Boilers 1155 sq ft

Is forced draft fitted

No. and Description of

Boilers

One single ended

Working Pressure 100

Tested by hydraulic pressure to 200

Date of test 7.2.13

No. of Certificate 5020

Can each boiler be worked separately

one

Area of fire grate in each boiler 38 sq ft

No. and Description of

safety valves to each boiler 2

Area of each valve 6.4 sq in

Pressure to which they are adjusted 103 lb

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 about 12 in

Main dia. of boilers

11'-6"

Length 10'-6"

Material of shell plates

steel

Thickness

1/2"

Range of tensile strength 28-32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams 2 R. lap long, seams 2 B. 2 Riv

Diameter of rivet holes in long, seams

15/16"

Pitch of rivets

5 1/2"

Lap of plates or width of butt straps 9 x 1/2"

Per centages of strength of longitudinal joint

rivets 89.1

Working pressure of shell by

rules

119

Size of manhole in shell

19" x 15"

Size of compensating ring

7 1/2 x 3/4 in

No. and Description of Furnaces in each

boiler

2 plain

Material steel

Outside diameter 42"

Length of plain part

top 74"

bottom 103"

Thickness of plates

crown 5/8"

bottom 66 mean

Description of longitudinal joint

Weld

No. of strengthening rings none

Working pressure of furnace by the rules 109

Combustion chamber

plates: Material steel

Thickness: Sides 1/2"

Back 5/8"

Top 1/2"

Bottom 1/2"

Pitch of stays to ditto: Sides 9 x 8"

Back 8 1/2 x 9 1/2"

Top 8 x 8"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules 101

Material of stays iron

smallest part 1.45

Area supported by each stay 75.3

Working pressure by rules 115

End plates in steam space: Material steel

Thickness

3/4"

Pitch of stays 16 x 15"

How are stays secured

nuts

Area supported by each stay 240

Working pressure by rules 128

Material of Front plates at bottom steel

Thickness 3/4"

Material of

Lower back plate steel

Thickness 3/4"

Greatest pitch of stays 14 1/2 x 9 1/2"

Working pressure of plate by rules 139

Pitch of tubes 4 1/2 x 4 1/2"

Material of tube plates steel

Thickness: Front 3/4"

Back 5/8"

Mean pitch of stays 11 3/8"

Pitch across wide

water spaces 14 1/2"

Working pressures by rules 100

Girders to Chamber tops: Material steel

Depth and thickness of

girder at centre 7 x 1 1/2"

Length as per rule 28 1/2"

Distance apart 8"

Number and pitch of Stays in each 20 x 8"

Working pressure by rules 139

Superheater or Steam chest: how connected to boiler

none

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

The foregoing is a correct description,

Manufacturer.

Dates

During progress of

work in shops - - -

1912 Nov. 27

29 Dec 10

1913 Jan. 8

14 21

Is the approved plan of boiler forwarded herewith

yes

while

During erection on

board vessel - - -

29.1.13

Feb. 4 7

Mar. 6. 11. 17

Total No. of visits

10/13

Return for duplicate 136

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

This boiler has been built under

Special Survey, is of good material and workmanship and on completion was

tested by hydraulic pressure with satisfactory results

Secured in place. Examined under steam. Safety valves adjusted

Found satisfactory

Survey Fee

...

£ 3-17-0

When applied for,

MONTHLY A/c SURVEY

191

Travelling Expenses (if any) £

:

:

:

When received,

191

NO. 629

REQUEST

ATTACHED.

Wm Morrison & J. Lindley

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

FRI. APR. 4--1913

FRI. 12 MAY 1913

Assigned

