

## REPORT ON BOILERS.

No. 8970

Received at London Office

TUE. 2 OCT. 1923

Date of writing Report

191

When presented in at Local Office

191

Port of

Belfast

No. in Survey held at

Date, First Survey

Last Survey

191

Reg. Book.

on the

New Steel S. S. "Mooltan"

(Number of Visits)

Tons

Gross

Net

2084 1/2

12836

When built

1923

Master

Built at

By whom built

Harland &amp; Wolff Ltd

Engines made at

Belfast

By whom made

Harland &amp; Wolff Ltd

When made

1923

Boilers made at

Belfast

By whom made

Harland &amp; Wolff Ltd

When made

1923

Registered Horse Power

Owners

Peninsular &amp; Oriental S.N. Co

Port belonging to

Belfast

## MULTITUBULAR BOILERS—MAIN,

~~MANUFACTURED BY~~

Manufacturers of Steel

Deville &amp; Sons Ltd

(Letter for record

Total Heating Surface of Boilers

6114 sq ft

Is forced draft fitted

Yes

No. and Description of

Boilers

Two Single ended

Working Pressure

215 lbs

Tested by hydraulic pressure to

343 lbs

Date of test

13-2-22

No. of Certificate

816

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

Oil fuel

No. and Description of

safety valves to each boiler

Two Spring loaded

Area of each valve

11-0 x 11-0

Pressure to which they are adjusted

220 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

uptakes and bunkers

20"

Mean dia. of boilers

16'-3"

Length

11'-8"

Material of shell plates

Steel

Thickness

1 3/4"

Range of tensile strength

30-33 tons

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

V.R. lap

long. seams

V.R.D.S.

Diameter of rivet holes in long. seams

1 1/4"

Pitch of rivets

10 1/4"

width of butt straps

23"

Per centages of strength of longitudinal joint

rivets

90-8

Working pressure of shell by

rules

215 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

20 1/2 x 5 1/2 x 1 1/2"

No. and Description of Furnaces in each

boiler

1 corrugated

Material

Steel

Outside diameter

3'-4 1/2"

Length of plain part

top

bottom

Thickness of plates

crown

bottom

7 1/8"

Description of longitudinal joint

Weld

No. of strengthening rings

Working pressure of furnace by the rules

226 1/2 lbs

Combustion chamber

plates: Material

Steel

Thickness: Sides

2 1/2"

Back

2 1/2"

Top

2 1/2"

Bottom

Pitch of stays to ditto: Sides

8 1/2 x 8

Back

8 1/2 x 7 1/2

Top

8 1/2 x 8

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

217 lbs

Material of stays

Steel

smallest part

16 1/2 x 12

Area supported by each stay

68 sq

Working pressure by rules

224 lbs

End plates in steam space: Material

Steel

Pitch of stays

19 1/2 x 15 1/2

How are stays secured

V.R. Weld

Working pressure by rules

215 lbs

Material of stays

Steel

Area supported by each stay

296-34 sq

Working pressure by rules

221 lbs

Material of Front plates at bottom

Steel

Thickness

7/8"

Lower back plate

Steel

Thickness

7/8"

Greatest pitch of stays

12 1/2 x 7 1/2

Working pressure of plate by rules

281 lbs

Diameter of tubes

2 1/4"

Pitch of tubes

8 1/2 x 4 1/2

Material of tube plates

Steel

Thickness: Front

7/8"

Back

1 1/4"

Mean pitch of stays

9 x 5

Pitch across wide

water spaces

13 1/2 x 9

Working pressures by rules

221 lbs

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

20 1/2 x 9 1/2

Length as per rule

24"

Distance apart

8"

Number and pitch of Stays in each

3 @ 8 1/4"

Working pressure by rules

239 lbs

Superheater: how connected to boiler

Schmidt

Can the superheater be shut off and the boiler worked

separately

Yes

Diameter

15 1/2 in

Length

3 1/2 in

Thickness of shell plates

Date of approval of plan

12-2-22

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

Date of test

11-5-22

How stayed

Yes

If stiffened with rings

Yes

Distance between rings

Working pressure by rules

230 lbs

End plates: Thickness

How stayed

Yes

Are they fitted with easing gear

Yes

Working pressure of end plates

220 lbs

Area of safety valves to superheater

314 sq

The foregoing is a correct description,

FOR HARLAND &amp; WOLFF LTD

Manufacturer.

Is the approved plan of boiler forwarded herewith

Total No. of visits

Dates of Survey

During progress of work in shops - -

while building

During erection on board vessel - -

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

These boilers have been built under Special Survey. Materials & Workmanship good. Hydraulic test satisfactory

Survey Fee ... £

When applied for, 191

Travelling Expenses (if any) £

When received, 191

William Butler

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

Committee's Minute

FRI. 19 OCT. 1923

Assigned

Lloyd's Register

Foundation

W1650-0385 1/2



