

## REPORT ON BOILERS.

No. 9761

Received at London Office

25 JUN 1927

Date of writing Report

191

When handed in at Local Office

No. 6-127 Port of

Belfast

No. in Survey held at

Belfast

Date, First Survey

17<sup>th</sup> March

Last Survey

14<sup>th</sup> June

191

Reg. Book.

89495 on the

STEEL TW. SC. ICOTEA

(Number of Visits

12

Gross

2370

Tons

Net 1230

Master

Built at Belfast

By whom built Harland &amp; Wolff Ltd. No. 793

When built

1927

Engines made at

Belfast

By whom made

Harland &amp; Wolff Ltd. No. 793

When made

1927

Boilers made at

Belfast

By whom made

Harland &amp; Wolff Ltd. No. 793

When made

1927

Registered Horse Power

Owners

A. Weir &amp; Co.

Port belonging to

London

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel D. Colville &amp; Sons Ltd.

(Letter for record

S.

Total Heating Surface of Boilers

3702 sq ft

Is forced draft fitted

No.

No. and Description of

Boilers Two single-ended cylindrical

Working Pressure

180 lb

Tested by hydraulic pressure to

320 lb

Date of test

24.5.27

No. of Certificate

894

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

49 sq ft

No. and Description of

safety valves to each boiler Two spring-loaded

Area of each valve

9.62 sq ft

Pressure to which they are adjusted

180 lb

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

22"

Inter.

Mean dia. of boilers

14'-0 1/2"

Length

10'-6"

Material of shell plates

Steel

Thickness

1 1/2"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

No.

Descrip. of riveting: cir. seams

double

long. seams

Kettle D.B.S.

Diameter of rivet holes in long. seams

1 1/4"

Pitch of rivets

8 3/8"

Top of plates or width of butt straps

18"

Per centages of strength of longitudinal joint

rivets 97.5

Working pressure of shell by

rules

Size of manhole in shell

16"x12"

Size of compensating ring

36"x32"x1 1/8" double

No. and Description of Furnaces in each

boiler Three in one

Material

Steel

Rule

Outside diameter

40 1/2"

Length of plain part

top

bottom

Thickness of plates

crown

17"

bottom

3 1/2"

Description of longitudinal joint

weld

No. of strengthening rings

Working pressure of furnace by the rules

19 1/2 lb

plates: Material

Steel

Thickness: Sides

5/8"

Back

5/8"

Top

5/8"

Bottom

3/4"

Pitch of stays to ditto: Sides

8 1/2" x 8 1/2"

Back

9 1/2" x 7 1/2"

Top 8 1/2" x 8"

If stays are fitted with nuts or riveted heads

Kettle

Working pressure by rules

187 lb

Material of stays

Steel

Diameter at

smallest part

760"

Area supported by each stay

72.25 sq ft

Working pressure by rules

210 lb

End plates in steam space: Material

Steel

Thickness

1 1/8"

Pitch of stays

17 1/2" x 20 1/2"

How are stays secured

D.B. &amp; washers

Working pressure by rules

184 lb

Material of stays

Steel

Diameter at smallest part

2.74"

Area supported by each stay

295 sq ft

Working pressure by rules

242 lb

Material of Front plates at bottom

Steel

Thickness

3/8"

Lower back plate

Steel

Thickness

1 1/2"

Greatest pitch of stays

13 1/2" x 7 1/2"

Working pressure of plate by rules

225 lb

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2" x 4 3/8"

Material of tube plates

Steel

Thickness: Front

3/8"

Back

1 1/2"

Mean pitch of stays

10.27"

Pitch across wide

water spaces

14 1/2"

Working pressures by rules

front 188 lb back 225 lb

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

8 1/4" - 1 1/2"

Length as per rule

30 5/8"

Distance apart

8 3/8"

Number and pitch of Stays in each

Kettle 8"

Working pressure by rules

215 lb

Superheater or Steam chest: how connected to boiler

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,  
For HARLAND AND WOLFF, LIMITED.

J. E. Kebleck

Manufacturer.

Dates

During progress of

1927 Mar 17.24.29 Apr 2.6.8.15

Is the approved plan of boiler forwarded herewith

Yes

while

work in shops - - -

building

During erection on

27 May 2.8.24 June 14

Total No. of visits

12

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

The Boilers of this vessel have been constructed under special survey and to approved plans. The materials and workmanship are found to be of good quality. They were tested by hydraulic pressure with satisfactory results, efficiently installed and fastened on the vessel and the safety valves adjusted under steam.

Survey Fee

£

When applied for,

191

Travelling Expenses (if any) £

When received,

191

Committee's Minute

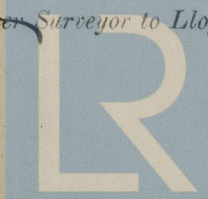
TUES. 28 JUN 1927

Assigned

See Report attached

R. Lee Amers.

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register  
Foundation

011586-011594-0264