

REPORT ON BOILERS.

No. 9296

- MAR 1925

Received at London Office

No. of writing Report 2-2

When handed in at Local Office

Port of

Belfast

No. in Survey held at
Reg. Book.

Date, First Survey

Last Survey

on the

New Steel Y. S. S. "Raymak" (10590K)

(Number of Visits)

Gross 10607

Net 10304

aster

Built at

Greenock

By whom built

Harland & Wolff Ltd

When built

1925

Engines made at

Belfast

By whom made

Harland & Wolff Ltd

When made

1925

Boilers made at

Belfast

By whom made

Harland & Wolff Ltd

When made

1925

Registered Horse Power

1949

Owners Peninsula & Oriental Steam Navigation Co

Port belonging to

Greenock

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

D. D. & Sons Ltd

Letter for record

S

Total Heating Surface of Boilers

6114 sq ft

Is forced draft fitted

yes

No. and Description of

5-9-24

Boilers

Two Single Ended (2.5E)

Working Pressure

215 lbs

Tested by hydraulic pressure to

343 lbs

Date of test

10-9-24

No. of Certificate

844-846

Can each boiler be worked separately

yes

Equivalent

Area of fire grate in each boiler

43.28 sq ft

No. and Description of

220 lbs

Safety valves to each boiler

Spring loaded high lift

Area of each valve

1.04 sq in

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 boilers or uptakes and bunkers or woodwork

24"

Inside

Mean dia. of boilers

16'-3"

Length

11'-8"

Material of shell plates

Steel

Thickness

1 3/4"

Range of tensile strength

30 to 33 tons

Are the shell plates welded or flanged

no

Description of riveting: cir. seams

D.R.

long. seams

T.R.D.B.S.

Diameter of rivet holes in long. seams

1 9/16"

Pitch of rivets

10 1/4"

Pitch of plates or width of butt straps

1-11"

Per centages of strength of longitudinal joint

rivets 90.8

Working pressure of shell by

plate 84.45

Size of manhole in shell

16" x 12"

Size of compensating ring

24" x 30"

No. and Description of Furnaces in each

Material

Steel

Outside diameter

34 1/2"

Length of plain part

top

Thickness of plates

crown 5/8"

bottom 5/8"

Description of longitudinal joint

weld.

No. of strengthening rings

Working pressure of furnace by the rules

226.5 lbs

Combustion chamber

Material

Steel

Thickness: Sides

2 1/2"

Back

2 1/2"

Top

2 1/2"

Bottom

1/8"

Pitch of stays to ditto: Sides

8 1/4" x 8 1/4"

Back

8 1/4" x 7 1/4"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

214 lbs

Material of stays

Steel

Area at

smallest part

1 1/2"

Area supported by each stay

68 sq in

Working pressure by rules

224 lbs

End plates in steam space: Material

Steel

Thickness

1 1/2"

Area at smallest part

5.9 sq in

How are stays secured

D.R. back

Working pressure by rules

221 lbs

Material of stays

Steel

Area at smallest part

7 1/8"

Material of

Front plates at bottom

Steel

Thickness

7 1/8"

Material of

Diameter of tubes

2 3/4"

Greatest pitch of stays

12 3/4" x 1 1/4"

Working pressure of plate by rules

281 lbs

Material of tube plates

Steel

Thickness: Front

1/8"

Back

1/8"

Mean pitch of stays

9" x 8"

Pitch across wide

ter spaces

13 3/4" x 9"

Working pressures by rules

331 lbs

Girders to Chamber tops: Material

Steel

Depth and thickness of

der at centre

20 9/16" x 1 1/8"

length as per rule

2'-10"

Distance apart

8"

Number and pitch of Stays in each

30 @ 8 1/4"

Working pressure by rules

239 lbs

Steam dome: description of joint to shell

none

% of strength of joint

Diam. of rivet holes

Description of longitudinal joint

Crown plates

Thickness

How stayed

Thickness of shell plates

Material

Working pressure of shell by rules

Crown plates

Thickness

How stayed

Type

none

Date of Approval of Plan

Tested by Hydraulic Pressure to

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Pressure to which each is adjusted

Is Easing Gear fitted

The foregoing is a correct description,

For HARLAND AND WOLFF, LIMITED.

J. D. Keay

Manufacturer.

Is the approved plan of boiler forwarded herewith

yes

Total No. of visits

1

During progress of
work in shops - -
During erection on
board vessel - -

See sketch report

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

These Boilers have been built under Special Survey. Materials and workmanship good. Hydraulic tests satisfactory. They have been securely fitted in the vessel & safety valves adjusted under steam.

Survey Fee ... £ ... When applied for, 191

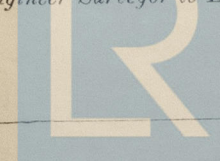
Travelling Expenses (if any) £ ... When received, 191

Committee's Minute

THURS. 10 MAR 1925

Signed

William Butler
Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
Foundation

9110-626300-116500
003971-003979-0116