

REPORT ON MACHINERY.

No. 65618

Date of writing Report

10

When handed in at Local Office

APR 1 1916

Received at London Office

10

Port of

NEWCASTLE-ON-TYNE

No. in Survey held at

Newcastle-on-Tyne

Reg. Book.

Date, First Survey

16 Sept 1914

Last Survey

29 Mar 1916

(Number of Visits)

10

Gross Tons

2641

Net Tons

1306

Master

Built at Walker-on-Tyne

By whom built

Luan Hunter & Wigham Richardson

When built

1916

Engines made at Walker-on-Tyne

By whom made Luan Hunter & Wigham Richardson

When made

1916

Boilers made at Walker-on-Tyne

By whom made Luan Hunter & Wigham Richardson

When made

1916

Registered Horse Power

Owners

Anglo American Telegraph

Port belonging to

London

Nom. Horse Power as per Section 28

380

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

Three

No. of Cranks

Three

Dia. of Cylinders

14"-28½"-48"

Length of Stroke

33"

Revs. per minute

120

Dia. of Screw shaft

as per rule

11½"

Material of

Steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

Yes

Is the after end of the liner made water tight

in the propeller boss

Yes

If the liner is in more than one length are the joints burned

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

Yes

If two liners are fitted, is the shaft lapped or protected between the liners

Length of stern bush

3' 10"

Dia. of Tunnel shaft

as per rule 8.86"

Dia. of Crank shaft journals

as per rule 9.129.31"

Dia. of Crank pin

10"

Size of Crank webs

6½" x 15½"

Dia. of thrust shaft under

collars

10½"

Dia. of screw

11.6"

Pitch of Screw

12' 0"

No. of Blades

4

State whether moveable

Yes

Total surface

37 sq ft.

No. of Feed pumps

2

Diameter of ditto

4"

Stroke

24"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

4"

Stroke

19"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

3

Sizes of Pumps

8 x 9 x 8

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room

2" dia.

In Holds, &c.

2" dia.

No. of Bilge Injections

2

Connected to condenser, or to circulating pump

C.P.

Is a separate Donkey Suction fitted in Engine room of size

Yes

Are all the bilge suction pipes fitted with roses

Yes

Are the roses in Engine room always accessible

Yes

Are the sluices on Engine room bulkheads always accessible

Yes

Are all connections with the sea direct on the skin of the ship

Yes

Are they Valves or Cocks

Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stowhold plates

Yes

Are the Discharge Pipes above or below the deep water line

Both

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

Yes

Are the Blow Off Cocks fitted with a spigot and brass covering plate

Yes

What pipes are carried through the bunkers

Oil fuel suction pipes and ducts

How are they protected

By a cable tank

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Yes

Dates of examination of completion of fitting of Sea Connections

27.3.16

of Stern Tube

27.3.16

Screw shaft and Propeller

27.3.16

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Upper platform

BOILERS, &c.—(Letter for record)

Manufacturers of Steel

J. Spencer & Sons Limited

Total Heating Surface of Boilers

5880

Is Forced Draft fitted

Yes

No. and Description of Boilers

2

Cylindrical

Single

Working Pressure

190 lb

Tested by hydraulic pressure to

380 lb

Date of test

5/4/15

No. of Certificate

8791

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

2

Direct Spring loaded

Area of each valve

11.04"

Pressure to which they are adjusted

195 lb

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

9' 0"

Mean dia. of boilers

15' 9½"

Length

11' 9"

Material of shell plates

Steel

Thickness

1 3/8"

Range of tensile strength

29½ to 35 tons

Are the shell plates welded or flanged

No

Descrip. of riveting

cir. seams

Lap Double

long. seams

Diameter of rivet holes in long. seams

1 7/8"

Pitch of rivets

9" 4 1/2"

Gap of plates or width of butt straps

19 1/4"

Per centages of strength of longitudinal joint

rivets 87%

plates 85.44%

Working pressure of shell by rules

195 lb

Size of manhole in shell

16" x 12"

Size of compensating-ring

9 1/4" x 1 3/8"

No. and Description of Furnaces in each boiler

3

Deighton's

Material

Steel

Outside diameter

52 1/2"

Length of plain part

top 4' 9 1/2"

Thickness of plates

crown 5"

bottom 9"

Description of longitudinal joint

Weld

No. of strengthening rings

None

Working pressure of furnace by the rules

193 lb

Combustion chamber plates

Material

Steel

Thickness

Sides 2 1/2"

Back 2 1/2"

Top 2 1/2"

Bottom 3 1/2"

Pitch of stays to ditto

Sides 9' 9 1/4"

Back 9' 8 1/4"

Top 9' 9 1/4"

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

191 lb

Material of stays

Steel

Diameter at smallest part

2' 0 1/2"

Area supported by each stay

87 1/2"

Working pressure by rules

208 lb

End plates in steam space

Material

Steel

Thickness

1 3/8"

Pitch of stays

18 1/4" x 14 1/2"

How are stays secured

By nuts

Working pressure by rules

190 lb

Material of stays

Steel

Diameter at smallest part

5' 0 1/2"

Area supported by each stay

271"

Working pressure by rules

195 lb

Material of Front plates at bottom

Steel

Thickness

7/8"

Material of Lower back plate

Steel

Thickness

1 1/8"

Greatest pitch of stays

13 1/2"

Working pressure of plate by rules

298 lb

Diameter of tubes

2 1/2"

Pitch of tubes

3 1/4" x 3 1/4"

Material of tube plates

Steel

Thickness

Front 1 1/8"

Back 3/4"

Mean pitch of stays

9 3/8"

Pitch across wide water spaces

12 1/2"

Working pressures by rules

Front 194 lb

Back 228 lb

Girders to Chamber tops

Material

Steel

Depth and

thickness of girder at centre

Working pressure by rules

194 lb

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

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

Diam. of rivet

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

Diam. of rivet

Pitch of rivets

