

REPORT ON MACHINERY.

No. 70767

Received at London Office

MON. 18 MAR. 1918

Date of writing Report 15th March 1918

When handed in at Local Office 15th March 1918

No. in Survey held at

South Shields

Date, First Survey 15th Aug. 1917

NEWCASTLE-ON-TYNE

Last Survey 17th March 1918

Reg. Book.

on the S. S. Treneglos

(Number of Tons 59

Gross 5768

Net 3702

When built 1918

Master

Built at

S. Shields

By whom built

John Radhead & Son Ltd

Engines made at

S. Shields

By whom made

John Radhead & Son Ltd when made 1918

Boilers made at

S. Shields

By whom made

John Radhead & Son Ltd when made 1918

Registered Horse Power

Owners

Hain Beauden & Co Ltd

Port belonging to

St Ives

Nom. Horse Power as per Section 28 488

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

No. of Cranks

Dia. of Cylinders 26" 43" 71"

Length of Stroke 48"

Revs. per minute

63

Dia. of Screw shaft

Material of

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

Is the propeller boss

Yes

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

Yes

If the liner does not fit tightly at the part

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

Yes

Length of stern bush

59"

Dia. of Tunnel shaft

as per rule 13.04

as fitted 13.14

Dia. of Crank shaft journals

as per rule 13.69

as fitted 13.74

Dia. of Crank pin

13.74

Size of Crank web

18x9 1/2

Dia. of thrust shaft under

collars 14 1/2"

Dia. of screw

17-6"

Pitch of Screw

17-0"

No. of Blades

4

State whether moveable

No

Total surface

914 sq ft

No. of Feed pumps

2

Diameter of ditto

4 1/2"

Stroke

30"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

4 1/2"

Stroke

30"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

Three

Sizes of Pumps

10x10 1/2 x 10 1/2

7 1/2 x 5 1/2

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

In Engine Room

Three 3 1/2" one 2 1/2"

In Holds, &c.

Two 3 1/2" in each

No. 1. 2.

No. of Bilge Injections

1

sizes 6 1/2"

Connected to condenser, or to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room & size

Yes 3 1/2"

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 sized sufficiently high on the ship's side to be seen without lifting the stokehold plates

Yes

Are the Discharge Pipes above or below the deep water line

Above

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

Bilge pipes to 11 holds

How are they protected

Wood boxing

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

Jul. 17

of Stern Tube

Jul. 17

Screw shaft and Propeller

6/12/17

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Engine Room

Top platform

OILERS, &c.—(Letter for record)

Yes

Manufacturers of Steel

S. Shields

S. Shields

S. Shields

S. Shields

S. Shields

S. Shields

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S. Shields

S. Shields

S. Shields

S. Shields

S. Shields

Total Heating Surface of Boilers

7198 sq ft

Is Forced Draft fitted

Yes

No. and Description of Boilers

3, Single Ended

Working Pressure

180 lb per sq in

Tested by hydraulic pressure to

360 lb per sq in

Date of test

20/12/17

No. of Certificate

9034

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

59 sq ft

No. and Description of Safety Valves to

each boiler

No, direct spring

Area of each valve

7.62 sq in

Pressure to which they are adjusted

185 lb per sq in

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

5-0"

Mean dia. of boilers

15.3 1/2"

Length

11-3"

Material of shell plates

Steel

Thickness

1 1/4"

Range of tensile strength

28,000 tons

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

2 R Lap

long. seams

5 R Butt

Diameter of rivet holes in long. seams

1 5/16"

Pitch of rivets

9 7/16"

Lap of plates or width of butt straps

21 3/4"

Per centages of strength of longitudinal joint

rivets 86.4

plate 86.0

Working pressure of shell by rules

185 lb

Size of gunhole in shell

16" x 12"

Size of compensating ring

7 1/2" x 1 1/4"

No. and Description of Furnaces in each boiler

3, Horizontal

Material

Steel

Outside diameter

4.5"

Length of plain part

top

Thickness of plates

crown

7 9/16"

Description of longitudinal joint

Welded

No. of strengthening rings

Yes

Working pressure of furnace by the rules

192

Combustion chamber plates: Material

Steel

Thickness: Sides

23/32"

Back

23/32"

Top

23/32"

Bottom

1"

Pitch of stays to ditto: Sides

10x9 1/2"

Back

7 1/8 x 9 1/2"

Top

10x9 1/2"

Stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

188

Material of stays

Iron

Diameter at smallest part

3.03"

Area supported by each stay

9.50"

Working pressure by rules

182

End plates in steam space

Material

Steel

Thickness

1 1/4"

Pitch of stays

21x19 1/2"

How are stays secured

Nuts

Material of Front plates at bottom

Steel

Thickness

7/8"

Greatest pitch of stays

13 1/2"

Working pressure of plate by rules

198

Diameter of tubes

2 3/4"

Pitch of tubes

8"

Material of tube plates

Steel

Thickness: Front

7/8"

Back

7/8"

Mean pitch of stays

8"

Pitch across wide water spaces

13 7/8"

Working pressures by rules

254 lb

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

8 1/4" x 1 3/4"

Length as per rule

31"

Distance apart

10"

Number and pitch of stays in each

Two, 9 1/2"

Working pressure by rules

190 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

Yes

Lloyd's Register

W 398 F 01

