

Rpt. 4.

REPORT ON MACHINERY.

No. 61264

Received at London Office

WED. NOV. - 1. 1911

Date of writing Report

Oct. 28th 1911

When loaded in at Local Office

Oct. 30th 1911

Port of

NEWCASTLE ON TYNE.

No. in Survey held at

North Shields

Date, First Survey

14th Jan.

Last Survey

23rd Oct 1911

Reg. Book.

(Number of Visits)

11 Supp on the

Machinery of the Ss Overton

Master

Built at

South Shields

By whom built

J. T. Uttingham & Co. Ltd

Tons { Gross 426
Net 185

Engines made at

North Shields

By whom made

Messrs Baird Bros.

when made 1911-10.

Boilers made at

South Shields

By whom made

J. T. Uttingham & Co. Ltd

when made 1911-10

Registered Horse Power

Owners

Overton S.S. Co. Ltd

Port belonging to

Liverpool

Nom. Horse Power as per Section 28

74

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

ENGINES, &c.—Description of Engines

Compound, Surface Condensing

No. of Cylinders

No. of Cranks

Dia. of Cylinders

17" x 36"

Length of Stroke

24"

Revs. per minute

112

Dia. of Screw shaft

as per rule 7.62
as fitted 8"

Material of

S. Iron

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

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

Length of stern bush

2'-8 1/2"

Dia. of Tunnel shaft

as per rule 6.46
as fitted 7 1/4"

Dia. of Crank shaft journals

as per rule 7 3/8"
as fitted 7 3/8"

Dia. of Crank pin

7 3/8"

Size of Crank webs

4" x 5 1/4"

Dia. of thrust shaft under

collars

7 5/8"

Dia. of screw

9'-0"

Pitch of Screw

9'-9"

No. of Blades

4

State whether moveable

No

Total surface

31.2 sq ft

No. of Feed pumps

1

Diameter of ditto

3"

Stroke

12"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

1

Diameter of ditto

3"

Stroke

12"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

One

Sizes of Pumps

6" x 4 1/2" x 6"

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

In Engine Room

3 - 2 1/2" diam.

In Holds, &c.

1 - 2" diam.

No. of Bilge Injections

One

Connected to condenser, or to circulating pump

Circulating

A separate Donkey Suction fitted in Engine room & size

Yes. 2 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 fixed 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

None

How are they protected

Yes

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

29/9/11

of Stern Tube

29/9/11

Screw shaft and Propeller

4/10/11

Is the Screw Shaft Tunnel watertight

Mch. aft.

Is it fitted with a watertight door

Yes

worked from

BOILERS, &c.—(Letter for record

S.)

Manufacturers of Steel

John Spencer & Sons Ltd

Total Heating Surface of Boilers

408 sq ft

Is Forced Draft fitted

No

No. and Description of Boilers

One, Single ended

Working Pressure

130 lbs per sq in

Tested by hydraulic pressure to

260 lbs

Date of test

18/8/11

No. of Certificate

8181

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

46.2 sq ft

No. and Description of Safety Valves

each boiler

2, Spring loaded

Area of each valve

12.56 sq in

Pressure to which they are adjusted

133 lbs

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

4'-6"

Dia. of boilers

12'-9"

Length

10'-3"

Thickness

25/32"

Range of tensile strength

29/33 TONS

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

D.R.L.A.P.

long. seams

D.R.D.B.S.

Diameter of rivet holes in long. seams

7/8"

Pitch of rivets

5 3/8"

Length of butt straps

13 1/2"

Per centages of strength of longitudinal joint

rivets 85
plate 83.7

Working pressure of shell by rules

131 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

See Report

No. and Description of Furnaces in each boiler

Attached

Material

Outside diameter

Length of plain part

top
bottom

Thickness of plates

crown
bottom

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

Working pressure by rules

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

002215-002221-0081

VERTICAL DONKEY BOILER—

Manufacturers of Steel

No donkey boiler fitted

No. Description
Made at By whom made When made Where fixed
Working pressure tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of Safety
Valves No. of Safety Valves Area of each Pressure to which they are adjusted Date of adjustment
If fitted with easing gear If steam from main boilers can enter the donkey boiler Dia. of donkey boiler Length
Material of shell plates Thickness Range of tensile strength Descrip. of riveting long. seams
Dia. of rivet holes Whether punched or drilled Pitch of rivets Lap of plating Per centage of strength of joint Rivets
Working pressure of shell by rules Thickness of shell crown plates Radius of do. No. of stays to do. Dia. of stays
Diameter of furnace Top Bottom Length of furnace Thickness of furnace plates Description of joint
Working pressure of furnace by rules Thickness of furnace crown plates Radius of do. Stayed by
Diameter of uptake Thickness of uptake plates Thickness of water tubes Dates of survey

SPARE GEAR.

State the articles supplied:—One propeller, two top end bolts and nuts, two bottom end bolts and nuts, two main bearing bolts and nuts, one set of coupling bolts, one set of feed and bilge pump valves, a quantity of assorted bolts and nuts, bar and sheet iron of various sizes.

The foregoing is a correct description,

Manufacturer.

David R. B.

Dates of Survey of work in shops— 1911 Jan. 14 Feb. 7 31 Aug. 21 22 23 24 29 Sept. 1 4 7 12 19 21 25 26 28 Oct. 4 11 12 16 20 21 22
During erection on board vessel—
Total No. of visits 24
Is the approved plan of main boiler forwarded herewith ☒

Dates of Examination of principal parts—Cylinders 22/2/11 Slides 19/9/11 Covers 4/10/11 Pistons 25/9/11 Rods 7/9/11
Connecting rods 7/9/11 Crank shaft 4/2/11 Thrust shaft 25/9/11 Tunnel shafts No shaft Screw shaft 4/9/11 Propeller 2/9/11
Stern tube 26/9/11 Steam pipes tested 10/10/11 Engine and boiler seatings 26/9/11 Engines holding down bolts 4/10/11
Completion of pumping arrangements 2/10/11 Boilers fixed 2/10/11 Engines tried under steam 20/10/11
Main boiler safety valves adjusted 2/10/11 Thickness of adjusting washers Port Valve 1/4" Pist Valve 7/16"
Material of Crank shaft S. Iron Identification Mark on Do. 2816 Material of Thrust shaft S. Iron Identification Mark on Do. 8446
Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts S. Iron Identification Marks on Do. 817D
Material of Steam Pipes Solid drawn Copper Test pressure 260 lbs per sq. in.

General Remarks

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

Workmanship good.

The Boiler and Machinery of this Vessel has been constructed under Special Survey and placed on board in accordance with the Society's Rules. They are now in our opinion in safe working condition, and the case is respectfully submitted for the notation **L.M.C. 10-11** in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 10. 11.

The amount of Entry Fee .. £ 1 : 0 : 0 When applied for, Special .. £ 11 : 2 : 0 OCT 31 1911
Donkey Boiler Fee .. £ : : :
Travelling Expenses (if any) £ : : :
When received, 2-11-1911

Committee's Minute

Assigned

FRI NOV 3-1911

+ L.M.C. 10. 11

C. Hudson & W. C. Currie
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Lloyd's Register Foundation