

REPORT ON MACHINERY.

No. 69387

Received at London Office SAT. 2-DEC. 1916

of writing Report

When handed in at Local Office

1-DEC-1916

Port of

NEWCASTLE-ON-TYNE

in Survey held at
g. Book.

North Shields

Date, First Survey

17- Aug 1916

Last Survey

18- Nov 1916

on the

S.S. Bureaucrat

ater

Built at

Selby

By whom built

Cochrane & Sons

When built

1916

gines made at

North Shields

By whom made

The Shields Engineering Co

when made

1916

ilers made at

Hebburn

By whom made

Palmer Shipbuilding & Iron Co

when made

1916

gistered Horse Power

Owners

J.C. Smith

Port belonging to

Hull

m. Horse Power as per Section 28

69

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

no

GINES, &c.—Description of Engines Vertical triple expansion

No. of Cylinders

3

No. of Cranks

3

No. of Cylinders

12" 20" 34"

Length of Stroke

24

Revs. per minute

110

Dia. of Screw shaft

as per rule 7.315"

Material of

S. Iron

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

no liner

Is the after end of the liner made water tight

the propeller boss

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

oil service

If two

ers are fitted, is the shaft lapped or protected between the liners

yes

Length of stern bush

2'-8"

No. of Tunnel shaft

as per rule 6.21"

Dia. of Crank shaft journals

as per rule 6.52"

as fitted 6 3/4"

Dia. of Crank pin

6 3/4"

Size of Crank webs

4 3/8 x 9 3/4"

Dia. of thrust shaft under

lars

6 3/4"

Dia. of screw

8'-6"

Pitch of Screw 11'-0" 6' 10'-0" 6' 10'-0"

No. of Blades

4

State whether moveable

no

Total surface

28 sq

No. of Feed pumps

2

Diameter of ditto

2 1/4"

Stroke

12"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

2 1/4"

Stroke

12"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

ONE

Size of Pumps

6" x 4" x 6"

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

Engine Room

Two 2"

In Holds, &c.

Fore peak one 2"

Boiler room one 2"

No. of Bilge Injections

1

size 3"

Connected to condenser, or to circulating pump

to pump

a separate Donkey Suction fitted in Engine room & size

yes 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

17.10.16

of Stern Tube

17.10.16

Screw shaft and Propeller

17.10.16

and the Screw Shaft Tunnel watertight

no tunnel

Is it fitted with a watertight door

yes

worked from

yes

ILERS, &c.—(Letter for record)

Manufacturers of Steel

Total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

35 sq

No. and Description of Safety Valves to

Each boiler

two spring loaded

Area of each valve

5.94 sq

Pressure to which they are adjusted

185

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

9"

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

No. of seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Percentages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

Use of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

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

No. of rivets

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

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

011304-011315-0014

Lloyd's Register
Foundation

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:-

Two main bearing bolts and nuts, two top end bolts and nuts, two bottom end bolts and nuts, one set of coupling bolts and nuts, one set of feed and bilge pump valves & seats, one propeller, two safety valve springs, one set of air and circulating pump valve, iron and nuts of assorted sizes

The foregoing is a correct description,

E. S. Bradshaw

Manufacturer.

Nov^r 21st 1916.

Dates of Survey while building

During progress of work in shops - - -

During erection on board vessel - - -

Total No. of visits

1916 Aug. 17. 23. 28 Sep. 18 Oct. 9. 11. 17. 20. 24. 26. 27. 30 Nov. 17. 18

14

Is the approved plan of main boiler forwarded herewith

No

donkey

Dates of Examination of principal parts—Cylinders 17.8.16 Slides 28.8.16 Covers 17.8.16 Pistons 28.8.16 Rods 28.8.16

Connecting rods 28.8.16 Crank shaft 23.8.16 Thrust shaft 23.8.16 Tunnel shafts 23.8.16 Screw shaft 23.8.16 Propeller 11.10.16

Stern tube 11.10.16 Steam pipes tested 17.11.16 Engine and boiler seatings 24.10.16 Engines holding down bolts 24.10.16

Completion of pumping arrangements 30.10.16 Boilers fixed 24.10.16 Engines tried under steam 18.11.16

Main boiler safety valves adjusted 18.11.16 Thickness of adjusting washers Star valve $\frac{5}{16}$ Port valve $\frac{9}{16}$

Material of Crank shaft Steel Identification Mark on Do. 2367N WC Material of Thrust shaft Steel Identification Mark on Do. 2367N WC

Material of Tunnel shafts Steel Identification Marks on Do. 2367N WC Material of Screw shafts Iron Identification Marks on Do. 2367N WC

Material of Steam Pipes Copper Test pressure 360 lbs per square inch

Is an installation fitted for burning oil fuel No

Is the flash point of the oil to be used over 150°F. ✓

Have the requirements of Section 49 of the Rules been complied with ✓

Is this machinery duplicate of a previous case No If so, state name of vessel ✓

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

The machinery of this vessel has been built under special survey the material & workmanship were found good & efficient. The machinery fitted up on board & tested under steam (vessel at moorings) & found satisfactory.

In my opinion this vessel is now eligible for the ratification of LMC 11.16 to be made in the Register Book.

It is submitted that this vessel is eligible for THE RECORD.

+ LMC 11.16

S/S 4.12.16

RRR

The amount of Entry Fee ... £ 1 : 0 :
Special (Expenses) ... £ 6 : 9 :
Donkey Boiler Fee ... £
Travelling Expenses (if any) £

When applied for,

1 - DEC 1916

When received,

3.2.16

Reginald A. Bain
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

Committee's Minute TUE. DEC. 5 - 1916

Assigned

+ LMC 11.16



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