

REPORT ON MACHINERY.

No. 29674

Date of writing Report 25-11-16

When written at Local Office 31-11-16

Received at London Office

AT. 2 DEC. 1916

No. in Survey held at

Hull

Port of

Hull

Date, First Survey

7-2-15

Last Survey 24-11-16

1916

(Number of Visits) 44

Master

Built at

Lillo

By whom built

Cochran & Sons Ltd

Tons Gross 251

Net 98

When built 1916-11

Engines made at

Hull

By whom made

C. D. Holmes & Co Ltd

Boilers made at

Hull

By whom made

C. D. Holmes & Co Ltd

when made 1916-11

Registered Horse Power

Owners Kingston & Thwing & Co Ltd

when made 1916-11

Nom. Horse Power as per Section 28

76

Is Refrigerating Machinery fitted for cargo purposes

Port belonging to

Hull

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

Three

No. of Cranks

3

Dia. of Cylinders 13"-2 1/2"-35" Length of Stroke 24" Revs. per minute

Dia. of Screw shaft as per rule 7 1/2"

Material of screw shafts

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

If the liner does not fit tightly at the part

in the propeller boss

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

yes

If two

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

Dia. of Tunnel shaft as per rule 6 3/4"

Dia. of Crank shaft journals as per rule 7 0/8"

Dia. of Crank pin 7 1/2"

Length of stern bush 35 1/2"

Dia. of screw 9-0"

Pitch of Screw 10-7 1/2"

No. of Feed pumps

Diameter of ditto 2 1/2"

Stroke 14 1/2"

No. of Bilge pumps

Diameter of ditto 2 1/2"

Stroke 14 1/2"

No. of Donkey Engines

SIZES OF PUMPS 6 1/2" x 6" duplex

In Engine Room

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

In Holds, &c.

No. of Bilge Injections

Connected to condenser, or to circulating pump

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

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

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

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

What pipes are carried through the bunkers

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

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

Dates of examination of completion of fitting of Sea Connections

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

BOILERS, &c.—(Letter for record

Manufacturers of Steel

Total Heating Surface of Boilers

Working Pressure

Is Forced Draft fitted

No. and Description of Boilers

Date of test

No. of Certificate

No. and Description of Safety Valves to

Are they fitted with easing gear

Thickens

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

Per centages of strength of longitudinal joint

Size of compensating ring

Length of plain part

Working pressure of furnace by the rules

Description of longitudinal joint

No. of strengthening rings

Pitch of stays to ditto: Sides

Material of stays

Thickens

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space

Material of stays

Thickens

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickens

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

thickens of girder at centre

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

Thickens of shell plates

Material

Description of longitudinal joint

Diam. of rivets

If stiffened with rings

Distance between rings

Working pressure by rules

Diameter of flue

Material of flue plates

Thickens

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

010440-010450-0198

IS A DONKEY BOILER FITTED? *Yes*

If so, is a report now forwarded? *Yes*

SPARE GEAR. State the articles supplied:— *Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set of air, feed & bilge pump valves, one main & one donkey check valve & seat, 12 junk ring studs & nuts, one impeller shaft, one feed or bilge pump cam, one set of donkey pump valves, one safety valve spring & a quantity of bolts & nuts & iron of various sizes.*

The foregoing is a correct description,

Harold & Sheardown

Manufacturer.

Dates of Survey while building { During progress of work in shops -- } *1916: Feb 7, 10, 14, 16, 17, 21, 22, 24, Aug 14, 8, 9, 11, 15, 19, 23, 28, 29, Sep 12, 5, 7, 12, 15, 19, 21, 23, Oct 5, 6.*
{ During erection on board vessel -- } *10, 17, 19, 20, 24, 25, 26, Nov 9, 14, 16, 21, 24.*
Total No. of visits *44.*

Is the approved plan of main boiler forwarded herewith *yes*

" " " donkey " " " *yes*

Dates of Examination of principal parts—Cylinders *18-8-16* Slides *21-9-16* Covers *28-8-16* Pistons *7-9-16* Rods *7-9-16*
Connecting rods *15-9-16* Crank shaft *5-9-16* Thrust shaft *14-7-16* Tunnel shafts *✓* Screw shaft *17-2-16* Propeller *17-2-16*
Stern tube *17-2-16* Steam pipes tested *16-11-16* Engine and boiler seatings *21-2-16* Engines holding down bolts *24-10-16*
Completion of pumping arrangements *24-11-16* Boilers fixed *9-11-16* Engines tried under steam *24-11-16*
Main boiler safety valves adjusted *21-11-16* Thickness of adjusting washers *7 1/32 & 5/16*
Material of Crank shaft *Iron* Identification Mark on Do. *1724 FLS* Material of Thrust shaft *Iron* Identification Mark on Do. *1563 FLS*
Material of Tunnel shafts *✓* Identification Marks on Do. *✓* Material of Screw shafts *Iron* Identification Marks on Do. *1561 FLS*
Material of Steam Pipes *Solid drawn copper* Test pressure *40 lbs*
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 *yes* If so, state name of vessel *Ruby, Garnet, Lopez*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery of this vessel has been constructed under special survey in accordance with the approved plans & the rules of this society, the materials & workmanship are good. The Boiler & steam pipes have been tested by hydraulic pressure as above & found sound & good. The machinery has been properly fitted & secured on board the vessel & on completion was tried under full working conditions & found satisfactory. The safety valves have been adjusted under steam & tested for accumulation which did not exceed 210 lbs.*

In my opinion the vessel is eligible for the next L.R.C. 11-16

It is submitted that this vessel is eligible for THE BROOD + LMC 11.16.

APR

JWD

4/12/16

The amount of Entry Fee ... £ *1* : *0* :
Special ... £ *11* : *8* :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ *2* : :
When applied for, *29/11/16*
When received, *1/12/16*

Frank A. Sturges
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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