

REPORT ON MACHINERY.

No. 27271

Received at London Office

SAT. MAR. - 7. 1914

Date of writing Report

19

When handed in at Local Office

2-3 1914 Port of Hull

No. in Survey held at
Reg. Book.

Hull.

Date, First Survey

Nov. 11

Last Survey

Feb. 25th 1914

(Number of Visits 19)

25^{sup} on the

Steam S.S. K. "JACINTH."

Tons

Gross 248

Net 98

Master

Built at

Hull.

By whom built

Cochrane & Sons Ltd.

When built

1913

Engines made at

By whom made

when made 1914.

Boilers made at

Hull.

By whom made

Messrs. Charles D. Thomas & Co. Ltd. when made 1914.

Registered Horse Power

Owners

Tingling Steam Trawling Co. Ltd. Port belonging to Hull.

Nom. Horse Power as per Section 28

45.

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

No.

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3.

No. of Cranks

3.

Dia. of Cylinders

13" - 21½" - 35"

Length of Stroke

24"

Revs. per minute

Dia. of Screw shaft

as per rule 2.48

Material of

screw shaft

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

If two

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

Length of stern bush

36"

Dia. of Tunnel shaft

as per rule 6.74

Dia. of Crank shaft journals

as per rule 4.08

Dia. of Crank pin

4½"

Size of Crank webs

4½" x 14"

Dia. of thrust shaft under

collars

4½"

Dia. of screw

9" 0"

Pitch of Screw

10" 6"

No. of Blades

4

State whether moveable

No.

Total surface

31½"

No. of Feed pumps

1

Diameter of ditto

2½"

Stroke

14½"

Can one be overhauled while the other is at work

No. of Bilge pumps

1

Diameter of ditto

2½"

Stroke

14½"

Can one be overhauled while the other is at work

No. of Donkey Engines

1

Sizes of Pumps

6" x 4½" x 6"

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

In Engine Room

Two 2½" 1/2" forward 2 1/2" aft.

In Holds, &c. One 2½" 1/2" forehold, one 2½" 1/2" fish wing.

No. of Bilge Injections

1

sizes

3½"

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

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

0

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

Hold suction pipes

How are they protected

Wood casing

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

29.11.13

of Stern Tube

29.11.13

Screw shaft and Propeller

29.11.13

Is the Screw Shaft Tunnel watertight

Yes.

Is it fitted with a watertight door

Yes.

worked from

Yes.

BOILERS, &c.—(Letter for record

S.)

Manufacturers of Steel

Messrs. W. & A. R. W. & Co. Ltd. of Hull.

Total Heating Surface of Boilers

1250 sq. ft.

Is Forced Draft fitted

No.

No. and Description of Boilers

One up. mult. cylinder m.d.

Working Pressure

200 lbs.

Tested by hydraulic pressure to

400 lbs.

Date of test

6.2.14

No. of Certificate

2054

Can each boiler be worked separately

Yes.

Area of fire grate in each boiler

43 sq. ft.

No. and Description of Safety Valves to

each boiler

Two Spring.

Area of each valve

4.9 sq. in.

Pressure to which they are adjusted

205 lbs.

Are they fitted with easing gear

Yes.

Smallest distance between boilers or uptakes and bunkers or woodwork

6"

Mean dia. of boilers

12.6"

Length

10.3"

Material of shell plates

S.

Thickness

1½"

Range of tensile strength

29,000 lbs.

Are the shell plates welded or flanged

No.

Descrip. of riveting: cir. seams

D. 9.2.

long. seams

D. B. S. T. P.

Diameter of rivet holes in long. seams

1½"

Pitch of rivets

4½"

Lap of plates or width of butt straps

14"

Per centages of strength of longitudinal joint

rivets 86.16

plate 85.24

Working pressure of shell by rules

207 lbs.

Size of manhole in shell

16" x 12"

Size of compensating ring

4" x 1½"

No. and Description of Furnaces in each boiler

3 plain

Material

S.

Outside diameter

36"

Length of plain part

top 6" 4½"

Thickness of plates

crown 13"

bottom 16"

Description of longitudinal joint

Weld.

No. of strengthening rings

0.

Working pressure of furnace by the rules

232 lbs.

Combustion chamber plates: Material

S.

Thickness: Sides

16"

Back 16"

Top 16"

Bottom 16"

Pitch of stays to ditto: Sides

9½" x 8"

Back 8" x 10"

Top 8" x 8½"

If stays are fitted with nuts or riveted heads

True.

Working pressure by rules

220 lbs.

Material of stays

S.

Diameter at smallest part

2.40"

Area supported by each stay

920"

Working pressure by rules

234 lbs.

End plates in steam space:

Material

S.

Thickness

1½"

Pitch of stays

16½" x 14"

How are stays secured

D. B. S. T. P.

Working pressure by rules

226 lbs.

Material of Front plates at bottom

S.

Diameter at smallest part

6.480"

Area supported by each stay

280.50"

Working pressure by rules

236 lbs.

Material of stays

S.

Thickness

1"

Material of Lower back plate

S.

Thickness

16"

Greatest pitch of stays

13" x 8"

Working pressure of plate by rules

200 lbs.

Diameter of tubes

3½"

Pitch of tubes

4½" x 5"

Material of tube plates

S.

Thickness: Front

1"

Back 1"

Mean pitch of stays

9½"

Pitch across wide water spaces

13½"

Working pressures by rules

202 lbs.

Girders to Chamber tops: Material

S.

Depth and

thickness of girder at centre

10" 1½"

Length as per rule

2.9½"

Distance apart

8½"

Number and pitch of stays in each

3.8" + 10"

Working pressure by rules

220 lbs.

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

separately

Yes.

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.

Foundation

003106-003115-0104

IS A DONKEY BOILER FITTED? *No.*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:—*Two each top & bottom end connecting rods bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set each side, a bilge pump valves, iron of various sizes, a quantity of assorted bolts, nuts etc.*

The foregoing is a correct description,

P. PRO CHARLES D. HOLMES & CO. LTD.

Arthur Holmes

DIRECTOR

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1913:- Nov 11. 14. 20. 29 Dec 23. 1914:- Jan 1. 6. 12. 14. 15. 21. 27. 29 Feb 6
During erection on board vessel - - - Feb 10. 13. 14. 19. 25
Total No. of visits 19

Is the approved plan of main boiler forwarded herewith *R/L 27083*

" " " *check* " " " ☒

Dates of Examination of principal parts—Cylinders *6.1.14* Slides *27.1.14* Covers *21.1.14* Pistons *21.1.14* Rods *21.1.14*

Connecting rods *27.1.14* Crank shaft *15.1.14* Thrust shaft *20.11.13* Tunnel shafts - Screw shaft *20.11.13* Propeller *20.11.13*

Stern tube *20.11.13* Steam pipes tested *14.2.14* Engine and boiler seatings *29.11.13* Engines holding down bolts *14.2.14*

Completion of pumping arrangements *25.2.14* Boilers fixed *19.2.14* Engines tried under steam *19.2.14*

Main boiler safety valves adjusted *19.2.14* Thickness of adjusting washers *Found $\frac{3}{16}$ " $\frac{3}{16}$ "*

Material of Crank shaft *Steel* Identification Mark on Do. *109874D* Material of Thrust shaft *Steel* Identification Mark on Do. *109874D*

Material of Tunnel shafts - Identification Marks on Do. - Material of Screw shafts *Iron* Identification Marks on Do. *109874D*

Material of Steam Pipes *Solid drawn copper* Test pressure *40 lbs. per sq. inch hydraulic*

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 *S/S "ONYX" "AGATE" & "BERYL"*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The engines & boiler of this vessel have been constructed under special survey in accordance with the Rules. The materials & workmanship are sound & good. The boiler tested by hydraulic pressure & with the engines secured on board & tested under steam. They are now in good order & safe working condition & respectfully submitted as being eligible in my opinion to be classed with the notation of "L.M.C. 2.14" in the Register Book.*

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 2.14.

A.R.S.

J.W.D.
9/3/14

The amount of Entry Fee ... £ *1 : 0 :* When applied for, *6/31/14*
Special ... £ *11 : 5 :*
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ *8/2 :* When received, *31/3/14*

Committee's Minute TUE. MAR. 10. 1914

Assigned

+ L.M.C. 2.14.

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



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Lloyd's Register
Foundation

MACHINERY CERTIFICATE
WRITTEN.