

Received at London Office

Date of writing Report

18

When handed in at Local Office

23/6/17 Port of Hull

No. in Survey held at
Reg. Book.

Hull

Date, First Survey 17.7.16 Last Survey 22.6.1917

(Number of Visits 57)

Gross 268

Net 111

When built 1917-6

Master

Built at Lillib

By whom built Cochrane & Sons Ltd

Engines made at

Hull

By whom made

C. D. Holmes & Co Ltd

when made 1917-6

Boilers made at

Hull

By whom made

C. D. Holmes & Co Ltd

when made 1917-6

Registered Horse Power

Owners Teale & West Ltd

Port belonging to Cardiff

Nom. Horse Power as per Section 28

85

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 12 1/2" - 21" - 35" Length of Stroke 26" Revs. per minute

Dia. of Screw shaft as per rule 7 1/4" Material of screw shaft as fitted 7 1/4" Dia.

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 35 1/2"

Dia. of Tunnel shaft as per rule 6.57"

Dia. of Crank shaft journals as per rule 6.89"

as fitted 7 1/8"

Dia. of Crank pin 7 1/8"

Size of Crank webs 13 1/2" x 4 1/2" Dia. of thrust shaft under

collars 7 1/8"

Dia. of screw 9-3"

Pitch of Screw 10-9"

No. of Blades 4

State whether moveable no Total surface 32 1/2"

No. of Feed pumps one

Diameter of ditto 2 1/2"

Stroke 14 3/4"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps one

Diameter of ditto 2 1/2"

Stroke 14 3/4"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines one

Size of Pumps 6" 3 1/2" x 6"

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

In Engine Room two 2" dia

In Holds, &c. one 2" dia in each compartment

all suction also connected to 2 1/2" girth

No. of Bilge Injections one

size 3 1/2"

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size 2 1/2" girth

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

none

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

Forward suction

How are they protected strong wooden casings

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all better 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

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

yes

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

Stewart & Lloyd

Total Heating Surface of Boilers 1530 sq ft

Is Forced Draft fitted

no

No. and Description of Boilers

one

single ended

Working Pressure 180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test 25-1-17

No. of Certificate

3187

Can each boiler be worked separately

yes

Area of fire grate in each boiler

50.5 sq ft

No. and Description of Safety Valves to

each boiler

two spring loaded

Area of each valve

4.9 sq in

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

yes

Smallest distance between boilers

8" between uptakes and bunkers

8" between uptakes and bunkers

8" between uptakes and bunkers

8" between uptakes and bunkers

8" between uptakes and bunkers

8" between uptakes and bunkers

dia. of boilers 162"

Length 10-6"

Material of shell plates

steel

Thickness 1 1/8"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

double

long. seams

PRD.B.S.

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

7 3/8"

Lap of plates or width of butt straps

16 1/2"

Per centages of strength of longitudinal joint

rivets 88.7

plate 84.7

Working pressure of shell by rules

184

Size of manhole in shell

16" x 12"

Size of compensating ring

7" x 1 1/8"

No. and Description of Furnaces in each boiler

three

plain

Material

steel

Outside diameter

42"

Length of plain part

top 8.1"

bottom 7.3 1/2"

Thickness of plates

crown 3.26"

bottom 3.26"

Description of longitudinal joint

welded

No. of strengthening rings

one

per ft

Working pressure of furnace by the rules

187

Combustion chamber plates: Material

steel

Thickness: Sides

23/32"

Back 23/32"

Top 3/16"

Bottom 23/32"

Pitch of stays to ditto: Sides

10" x 9"

Back 10 1/8" x 8 1/4"

Top 10 1/2" x 8 1/4"

Bottom 10 1/2" x 8 1/4"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

191

Material of stays

steel

Area at smallest part

2.07 sq in

Area supported by each stay

90 sq in

Working pressure by rules

207

End plates in steam space:

Material

steel

Thickness

1 3/32"

Pitch of stays

18" x 17"

How are stays secured

7.7 x 11"

Working pressure by rules

185

Area at smallest part

7.5 sq in

Area supported by each stay

306 sq in

Working pressure by rules

255

Material of Front plates at bottom

steel

Thickness

7/8"

Material of Lower back plate

steel

Thickness

7/8"

Greatest pitch of stays

14" x 8 1/2"

Working pressure of plate by rules

197

Diameter of tubes

3 1/2"

Pitch of tubes

5" x 4 3/4"

Material of tube plates

steel

Thickness: Front

7/8" + 3/16"

Back 7/8"

Mean pitch of stays

11"

Pitch across wide water spaces

13 3/4"

Working pressures by rules

226

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

10" x 1 3/4"

Length as per rule

34.65"

Working pressure by rules

9 1/2" + 1 1/2"

Steam dome: description of joint to shell

yes

% of strength of joint

yes

Diameter

yes

Thickness of shell plates

yes

Material

yes

Description of longitudinal joint

yes

Diam. of rivet holes

yes

Pitch of rivets

yes

Working pressure of shell by rules

yes

Crown plates

yes

Thickness

yes

How stayed

yes

SUPERHEATER. Type

yes

Date of Approval of Plan

yes

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

yes

Is Easing Gear fitted

yes

Date of Test

yes

Pressure to which each is adjusted

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

yes

Is a Report also sent on the Hull of the ship

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded? ✓

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, two donkey pump valves, 6 junk ring studs & nuts, one safety valve spring, one escape valve spring each size, 6 screwed stays & a quantity of bolts & nuts & iron of various sizes.

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 -- 1916: July 7. 10. 21. 24. 28. 31 Aug 4. 3. 7. 15. 19. 23. 28. 31. Nov 7. 9. 21. 24. 28. Dec 5. 9.
During erection on board vessel -- 14. 19. 21. 29. 1917: Jan 4. 5. 9. 10. 12. 16. 18. 23. 25. 28 Apr 2. 5. 11. 13. 18. 23. 24. 26. 27
Total No. of visits 57
Is the approved plan of main boiler forwarded herewith Yes

Is the approved plan of main boiler forwarded herewith Yes

" " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders 2-4-17 Slides 8-5-17 Covers 24-4-17 Pistons 24-4-17 Rods 5-4-17

Connecting rods 5-4-17 Crank shaft 18-4-17 Thrust shaft 28-8-16 Tunnel shafts ✓ Screw shaft 3-8-16 Propeller 3-8-16

Stern tube 31-7-16 Steam pipes tested 17-5-17 Engine and boiler seatings 7-8-16 Engines holding down bolts 21-5-17

Completion of pumping arrangements 7-6-17 Boilers fixed 24-5-17 Engines tried under steam 11-6-17

Completion of fitting sea connections 7-8-16 Stern tube 7-8-16 Screw shaft and propeller 15-8-16

Main boiler safety valves adjusted 7-6-17 Thickness of adjusting washers 7 1/16" & 5/32"

Material of Crank shaft Iron Identification Mark on Do. 1773 FLS Material of Thrust shaft Iron Identification Mark on Do. 1722 FLS

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Iron Identification Marks on Do. 1711 FLS

Material of Steam Pipes solid drawn copper ✓ Test pressure 400 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 Kurishi ✓

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 plan & 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 steam at full power & found satisfactory. The safety valves have been adjusted under steam & tested for accumulation which did not exceed 195 lbs.

In my opinion the vessel is eligible for the record & L.M.C.G. 17

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C.G. 17.

The amount of Entry Fee ... £ 1 : 0 :
Special ... £ 12 : 15 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : 82 :
When applied for, 23/6/1917
When received, 29/6/1917

Frank L. Sturgeon
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

MACHINERY CERTIFICATE
WRITTEN



© 2020

Lloyd's Register
Foundation