

REPORT ON MACHINERY.

No. 28196

FRI. JAN. 15, 1915

Date of writing Report

10

When handed in at Local Office

14-1 to 15 Port of

Hull

Received at London Office

No. in Survey held at

Hull

Reg. Book.

Date, First Survey

25-8-14

Last Survey

31-12-14

19

16 Suff on the steel screw tugger Jamaica

(Number of Visits 39)

Master

Built at

Lilly

By whom built

Cochrane Bros Ltd

Tons

Gross 205

Net 77

When built 1914-12

Engines made at

Hull

By whom made

C. D. Holmes & Co Ltd (No 1050)

when made 1914-12

Boilers made at

Hull

By whom made

C. D. Holmes & Co Ltd

when made 1914-12

Registered Horse Power

Owners Hull S.F. & Ice Coy. Ltd.

Port belonging to Hull

Nom. Horse Power as per Section 28

49

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

no

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders Three

No. of Cranks 3

Dia. of Cylinders 10"-17"-28"

Length of Stroke 24"

Revs. per minute

Dia. of Screw shaft

as per rule 7.32

Material of

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

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

Dia. of Tunnel shaft

as per rule 3.76

Dia. of Crank shaft journals

as per rule 6.05

Dia. of Crank pin

6 1/2"

Size of Crank webs

2 1/2" x 4 1/2"

Dia. of thrust shaft under

collars

Dia. of screw

10-3"

Pitch of Screw

8-6"

No. of Blades

4

State whether moveable

no

Total surface

30 sq ft

No. of Feed pumps

one

Diameter of ditto

2 1/2"

Stroke

11"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

one

Diameter of ditto

2 1/2"

Stroke

11"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

one

Horsepower

4

Sizes of Pumps

6" x 4 1/2" x 6"

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

one

2" dia in each compartment

In Engine Room

two 2" dia

all suction also connected to engine

yes

No. of Bilge Injections

one

Connected to condenser or to circulating pump

yes

Is a separate Donkey Suction fitted in Engine room & size

3" dia

yes

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

no

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

with casings

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

31-10-14

of Stern Tube

31-10-14

Screw shaft and Propeller

31-10-14

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

Phoenix

Alt

Horden

Twin

Horse

Horse

Total Heating Surface of Boilers

835

Is Forced Draft fitted

no

No. and Description of Boilers

one

single ended

Working Pressure

200 lbs

Tested by hydraulic pressure to

400

Date of test

19-11-14

No. of Certificate

3042

Can each boiler be worked separately

yes

Area of fire grate in each boiler

27 1/2 sq ft

No. and Description of Safety Valves to

each boiler

two spring loaded

Area of each valve

3 1/4"

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

18"

Mean dia. of boilers

129"

Length

9-3"

Material of shell plates

steel

Thickness

3/32"

Range of tensile strength

29-33 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

double

long. seams

T.R.B.B.

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

7 1/2"

Top of plates or width of butt straps

16 1/2"

Per centages of strength of longitudinal joint

rivets 93.9

plate 88.3

Working pressure of shell by rules

203

Size of manhole in shell

16" x 12"

Size of compensating ring

7" x 3/32"

No. and Description of Furnaces in each boiler

two plain

Material

S

Outside diameter

38 1/2"

Length of plain part

top 68"

bottom 62"

Thickness of plates

crown 7/16"

bottom 1/2"

Description of longitudinal joint

welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

212

Combustion chamber plates: Material

S

Thickness: Sides

1 1/16"

Back

2 1/32"

Top

3/8"

Bottom

1 1/16"

Pitch of stays to ditto: Sides

8 1/2" x 8 1/2"

Back

8 1/2" x 8 1/2"

Top

8 1/2" x 7 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

203

Material of stays

S

Diameter at smallest part

1 7/16"

Area supported by each stay

64"

Working pressure by rules

220

End plates in steam space

yes

Material

S

Thickness

1 1/16"

Pitch of stays

1 1/2" x 1 1/2"

How are stays secured

9 x 4"

Working pressure by rules

236

Material of stays

S

Diameter at smallest part

4 3/8"

Area supported by each stay

174"

Working pressure by rules

267

Material of Front plates at bottom

S

Thickness

1 1/16"

Material of Lower back plate

S

Thickness

1 1/16"

Greatest pitch of stays

1 1/2" x 8 1/2"

Working pressure of plate by rules

222

Diameter of tubes

3 1/2"

Pitch of tubes

4 1/2" x 4 1/2"

Material of tube plates

S

Thickness: Front

1 1/16"

Back

3/8"

Mean pitch of stays

9 1/2"

Pitch across wide water spaces

13 1/2"

Working pressures by rules

202

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

8 1/4" x 1 1/2"

Length as per rule

29 7/8"

Distance apart

7 1/2"

Number and pitch of stays in each

two 8 1/2"

Working pressure by rules

227

Superheater or Steam chest; how connected to boiler

yes

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

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 feed
belge & air pump valves one main & one donkey, check valve & 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 - - - *1914 - Aug 25. 28. Sep 3. 8. 14. 18. 28. Oct 1. 3. 6. 8. 16. 19. 20. 22. 23. 26. 27. 28. 29. 30. 31 Nov 3.*
During erection on board vessel - - - *5. 9. 11. 14. 16. 18. 19. 23. 25. 27. Dec 3. 14. 16. 18. 19. 21.*
Total No. of visits *39*

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

" " " *donkey* " " " ☒

Dates of Examination of principal parts—Cylinders *26-10-14* Slides *3-12-14* Covers *23-11-14* Pistons *9-11-14* Rods *23-11-14*
Connecting rods *23-11-14* Crank shaft *30-10-14* Thrust shaft *9-11-14* Tunnel shafts ☒ Screw shaft *23-10-14* Propeller *27-10-14*
Stern tube *29-10-14* Steam pipes tested *19-12-14* Engine and boiler seatings *31-10-14* Engines holding down bolts *16-12-14*
Completion of pumping arrangements *31-12-14* Boilers fixed *16-12-14* Engines tried under steam *31-12-14*
Main boiler safety valves adjusted *21-12-14* Thickness of adjusting washers *P 3/4 S 3/4*
Material of Crank shaft *Iron* Identification Mark on Do. *1363 FLS* Material of Thrust shaft *Steel* Identification Mark on Do. *1399 FLS*
Material of Tunnel shafts ☒ Identification Marks on Do. ☒ Material of Screw shafts *Iron* Identification Marks on Do. *1269 FLS*
Material of Steam Pipes *solid drawn copper* ☒ Test pressure *400* ☒
Is an installation fitted for burning oil fuel ☒ 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 Engines & Boiler of this vessel, have 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 as above & found sound & good. The machinery has been properly fitted & secured on board & on completion tried under steam & found to work satisfactorily. 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 record + L.M.C. 12-14.*

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 12 14.

J.M. 15/1/15

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

The amount of Entry Fee ... £ *1 : 0 :* When applied for, *14-1-1915*
Special ... £ *8 : 0 :*
Donkey Boiler Fee ... £ *8 : 2 :* When received, *29/1/15*
Travelling Expenses (if any) £ *8 2*

Committee's Minute *TUE JAN 19 1915*
Assigned *+ L.M.C. 12.14*

MACHINERY CERTIFICATE ENTERED

