

REPORT ON MACHINERY.

No. 28296

Received at London Office

JULY 23. 1915

Date of writing Report

When handed in at Local Office

20/2/15 Port of

Hull

No. in Survey held at Reg. Book.

Date, First Survey

25-7-14

Last Survey

12-2-1915

APP. 46 on the

S. T. MARNE.

(Number of Visits 48

Master

Built at

Hull

By whom built

Livingstone & Cooper Ltd

When built

Engines made at

Hull

By whom made

C. D. Holmes & Co. Ltd

when made 1915-2

Boilers made at

do

By whom made

do

when made 1915-2

Registered Horse Power

Owners East Riding S.F. Co. Ltd. (T. HUDSON MGR)

Port belonging to

Hull

Nom. Horse Power as per Section 28

49

Is Refrigerating Machinery fitted for cargo purposes

✓

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines Triple Expansion

No. of Cylinders Three

No. of Cranks 3

Dia. of Cylinders 12 3/4", 22", 36"

Length of Stroke 24

Revs. per minute

Dia. of Screw shaft

as per rule 4.56

Material of screw shaft

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

✓

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 6.43

Dia. of Crank shaft journals

as per rule 4.06

Dia. of Crank pin

4.25

Size of Crank webs

14x4 1/8

Dia. of thrust shaft under

collars 7 1/4"

Dia. of screw 9-3"

Pitch of Screw 11-2"

No. of Blades 4

State whether moveable

no

Total surface

30 sq

No. of Feed pumps 1

Diameter of ditto 2 1/2"

Stroke 14 1/4"

Can one be overhauled while the other is at work

✓

No. of Bilge pumps 1

Diameter of ditto 2 1/2"

Stroke 14 1/4"

Can one be overhauled while the other is at work

✓

No. of Donkey Engines one

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

flywheel

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

In Engine Room 2-2" dia

In Holds, &c. 4-2" dia

Forecastle, mainhold

ford slushwell, aft slushwell.

(Ejector connected to all bilges)

No. of Bilge Injections 1

size 3 1/2"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

2 1/2" ejector

Are all the bilge suction pipes fitted with roses

yes

Are the roses in Engine room 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

What pipes are carried through the bunkers

Forward suction

How are they protected

wood & iron

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

30-10-14

of Stern Tube

24-10-14

Screw shaft and Propeller

24-10-14

Is the Screw Shaft Tunnel watertight

✓

Is it fitted with a watertight door

worked from

✓

BOILERS, &c.—(Letter for record S)

Manufacturers of Steel

Stewarts & Lloyd

Total Heating Surface of Boilers 1310

Is Forced Draft fitted

no

No. and Description of Boilers

one single ended

Working Pressure 200 lbs

Tested by hydraulic pressure to

400 lbs

Date of test

20-10-14

No. of Certificate

3030

Can each boiler be worked separately

✓

Area of fire grate in each boiler

46.8

No. and Description of Safety Valves to

each boiler

Two Spring Loaded

Area of each valve

4.9

Smallest distance between boilers or uptakes and bunkers or woodwork

6"

Mean dia. of boilers

162"

Length

10'-8"

Material of shell plates

steel

Thickness 1/32"

Range of tensile strength

28-32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

Double

long. seams T.R.D.B.S.

Diameter of rivet holes in long. seams

1 1/32"

Pitch of rivets

8 1/16"

Lap of plates or width of butt straps

14 1/2"

Per centages of strength of longitudinal joint

rivets 88.4

plate 84.8

Working pressure of shell by rules

202 lb

Size of manhole in shell

16" x 12"

Size of compensating ring

7" x 1 1/32"

No. and Description of Furnaces in each boiler

3 plain

Material

Steel

Outside diameter

39"

Length of plain part

top 76"

bottom 65"

Thickness of plates

25/32"

Description of longitudinal joint

welded

No. of strengthening rings

none

Working pressure of furnace by the rules

203

Combustion chamber plates: Material

Steel

Thickness: Sides

3/4"

Back

23/32"

Top

3/4"

Pitch of stays to ditto: Sides

9" x 8 1/4"

Back

10" x 8 1/4"

Top

11" x 8 1/4"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

206

Material of stays

S

Diameter at smallest part

2.04

Area supported by each stay

91

Working pressure by rules

205

End plates in steam space

✓

Material

S

Thickness

15/16"

Pitch of stays

20" x 20"

How are stays secured

DN & W

Working pressure by rules

204

Material

S

Thickness

1"

Material of Front plates at bottom

S

Thickness

1"

Material of Lower back plate

S

Thickness

29/32"

Greatest pitch of stays

3 1/2" x 10"

Working pressure of plate by rules

202

Diameter of tubes

3 1/2"

Pitch of tubes

5" x 5"

Material of tube plates

S

Thickness: Front

1"

Back

29/32"

Pitch across wide water spaces

13 3/4"

Working pressures by rules

203 lb

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

11 3/4" x 1 3/4"

Length as per rule

Working pressure by rules

209

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

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

