

# REPORT ON MACHINERY.

No. 28030

Received at London Office

TUE. OCT. 27. 1914

Date of writing Report

When written at Local Office

26-10-14 Port of Hull

in Survey held at  
eg. Book.

Hull

Date, First Survey

15-1-14

Last Survey

24-10-14

19

33 on the

steel screw steamer

Sea Searcher

(Number of Vests 3)

Gross 263

Net 103

aster

Built at

Lelby

By whom built

Cochrane & Sons Ltd

When built

1914

Engines made at

Hull

By whom made

Arnos & Smith Ltd (No 2500)

when made

1914-10

Boilers made at

Hull

By whom made

Arnos & Smith Ltd

when made

1914-10

Registered Horse Power

Owners

Humber & Co Ltd

Port belonging to

Hull

Im. Horse Power as per Section 28

78

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

no

GINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

Three

No. of Cranks

3

Dia. of Cylinders

12 1/2 - 21 1/2 - 35 1/4

Length of Stroke

24

Revs. per minute

Dia. of Screw shaft

as per rule 7 1/2

Material of

Gun

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

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

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

Length of stern bush

34

Dia. of Tunnel shaft

as per rule 6 6/4

Dia. of Crank shaft journals

as per rule 6 9/16

Dia. of Crank pin

7 1/4

Size of Crank webs

14 3/4 x 4 3/4

Dia. of thrust shaft under

lars

Dia. of screw

9-0

Pitch of Screw

11-0

No. of Blades

4

State whether moveable

no

Total surface

29.5

No. of Feed pumps

one

Diameter of ditto

2 3/4

Stroke

12

Can one be overhauled while the other is at work

No. of Bilge pumps

one

Diameter of ditto

2 3/4

Stroke

12

Can one be overhauled while the other is at work

No. of Donkey Engines

one

Sizes of Pumps

6 1/4 x 4 3/4 x 6" dup

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

Engine Room

Two

2" dia

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

No. of Bilge Injections

one

size 3"

Connected to condenser, or to circulating pump

pump

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

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

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

23-7-14

of Stern Tube

23-7-14

Screw shaft and Propeller

23-7-14

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

BOILERS, &c.—(Letter for record

S)

Manufacturers of Steel

Phoenix & Co. & Holder & Co. & Co.

Total Heating Surface of Boilers

1320

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

21-9-14

No. of Certificate

3023

Can each boiler be worked separately

yes

Area of fire grate in each boiler

45

No. and Description of Safety Valves to

each boiler

Two spring loaded

Area of each valve

4.9

Pressure to which they are adjusted

205

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

7"

Mean dia. of boilers

153"

Length

10-6"

Material of shell plates

steel

Thickness

1/8"

Range of tensile strength

29-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

double

ong. seams

J.R.D.B.

Diameter of rivet holes in long. seams

1/32"

Pitch of rivets

7 3/4"

Gap of plates or width of butt straps

16 3/4"

Per centages of strength of longitudinal joint

plate 85

Working pressure of shell by rules

209

Size of manhole in shell

16" x 12"

Size of compensating ring

9" x 1 1/8"

No. and Description of Furnaces in each boiler

3 plain

Material

S

Outside diameter

37 3/8"

Length of plain part

top 80"

bottom 22"

Thickness of plates

top 3 13/16"

bottom 3 13/16"

Description of longitudinal joint

welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

223

Combustion chamber plates: Material

S

Thickness: Sides

1 1/8"

Back

2 3/32"

Top

1 1/8"

Bottom

Pitch of stays to ditto: Sides

9 1/2" x 8 1/2"

Back

9" x 9"

Top

9" x 8 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

202

Material of stays

S

Diameter at smallest part

2.07"

Area supported by each stay

8.1"

Working pressure by rules

230

End plates in steam space

Material

S

Thickness

1/32"

Pitch of stays

16 1/2" x 17"

How are stays secured

by nuts

Working pressure by rules

201

Material of stays

S

Diameter at smallest part

6.1"

Area supported by each stay

2.80"

Working pressure by rules

226

Material of Front plates at bottom

S

Thickness

1"

Material of Lower back plate

