

REPORT ON MACHINERY.

No. 16634

Received at London Office THU. APR. 16. 1914

Date of writing Report

19

When handed in at Local Office

9/4/1913 Port of Greenock

No. in Survey held at

Greenock

Date, First Survey 31st July, 1913 Last Survey 6th April, 1914

Reg. Book.

on the SCREW STEAMER "CASSIS."

(Number of Visits 58)

Gross 4792
Net 3006

Master

Scott

Built at Greenock

By whom built

Greenock Engineering Co. Ltd.

When built 1914.

Engines made at

Greenock

By whom made

John G. Kincaid & Co. Ltd.

when made

1914.

Boilers made at

Greenock

By whom made

John G. Kincaid & Co. Ltd.

when made

1914.

Registered Horse Power

Owners

Anglo-Saxon Petroleum Co. Ltd. Port belonging to London

Com. Horse Power as per Section 28

420.

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

Yes.

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

Three

No. of Cranks

Three

Dia. of Cylinders

24"-42"-68"

Length of Stroke

45"

Revs. per minute

47

Dia. of Screw shaft

as per rule 12.25

Material of screw shaft

Steel

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

Is the propeller boss

Yes.

If the liner is in more than one length are the joints burned the length of 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

5' 0"

Dia. of Tunnel shaft

as per rule 12.2

Dia. of Crank shaft journals

as per rule 12.9

Dia. of Crank pin

13.8"

Size of Crank webs

25" x 8"

Dia. of thrust shaft under

collars

13.8"

Dia. of screw

14' 0"

Pitch of Screw

15' 3"

No. of Blades

4

State whether moveable

No.

No. of Feed pumps

2

Diameter of ditto

3 1/2"

Stroke

24"

Can one be overhauled while the other is at work

Yes.

Hall's Deep Pump

No. of Bilge pumps

2

Diameter of ditto

4 1/4"

Stroke

24"

Can one be overhauled while the other is at work

Yes.

7 1/2" x 4" x 21"

No. of Donkey Engines

Two

Sizes of Pumps

8" x 6" x 12"

6" x 6" x 10"

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

In Engine Room

Three - 3 1/2" dia.

In Holds, &c.

Two Hold 2 1/2" dia. to Deep tank top.

No. of Bilge Injections

1 sizes 8"

Connected to condenser, or to circulating pump

C.P.

Is a separate Donkey Suction fitted in Engine room & size

Yes. 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

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

None.

How are they protected

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

25/2/13

of Stern Tube

25/2/13

Screw shaft and Propeller

24/2/13

Is the Screw Shaft Tunnel watertight

None

Is it fitted with a watertight door

Yes.

worked from

BOILERS, &c.—(Letter for record S.)

Manufacturers of Steel, Clydebank Steel Co. & Co. Ltd.

Total Heating Surface of Boilers

6098

Is Forced Draft fitted

Yes.

No. and Description of Boilers 2 Cylinders Multi Single

Working Pressure

180 lb

Tested by hydraulic pressure to

360 lb

Date of test

16/12/13

No. of Certificate

1156.

Can each boiler be worked separately

Yes.

Area of fire grate in each boiler

63 sq. ft.

No. and Description of Safety Valves to

each boiler 2 Area Spring

Area of each valve

9.62"

Pressure to which they are adjusted

185 lb

Are they fitted with easing gear

Yes.

Smallest distance between boilers or uptakes and bunkers or woodwork

6' 6"

Mean dia. of boilers

16' 0"

Length

12' 0"

Material of shell plates

Steel

Thickness

1 1/2"

Range of tensile strength

28 to 32 tons

Are the shell plates welded or flanged

No.

Descrip. of riveting: cir. seams Lap Double

Long. seams 2 1/2" Dia. straps

Diameter of rivet holes in long. seams

1 3/8"

Pitch of rivets

9 1/2" 4 1/2"

Lap of plates or width of butt straps

20 1/4"

Per centages of strength of longitudinal joint

90.3

Working pressure of shell by rules

181 lb

Size of manhole in shell

16" x 12"

Size of compensating ring

14" dia.

No. and Description of Furnaces in each boiler

3 Deighton's

Material

Steel

Outside diameter 50 1/2"

Length of plain part

top 8' 1"

Thickness of plates

bottom 3 1/2"

Description of longitudinal joint

weld

No. of strengthening rings

None

Working pressure of furnace by the rules

188 lb

Combustion chamber plates: Material

Steel

Thickness: Sides

16"

Back 16"

Top 16"

Pitch of stays to ditto: Sides

1/2" x 8 1/2"

Back

8 1/2" x 7 1/2"

Top

8" x 7 1/2"

If stays are fitted with nuts or riveted heads

Material of stays

Steel

Diameter at smallest part

1 1/2"

Area supported by each stay

63"

Working pressure by rules

185 lb

Material of stays

Steel

Material

Steel

Thickness

1 1/8"

Pitch of stays

23" x 23"

How are stays secured

Double nuts

Working pressure by rules

199 lb

Diameter at smallest part

2 1/2"

Area supported by each stay

529"

Working pressure by rules

199 lb

Material of Front plates at bottom

Steel

Thickness

1"

Material of Lower back plate

Steel

Thickness

3 1/2"

Greatest pitch of stays

14"

Working pressure of plate by rules

184 lb

Mean pitch of stays

8' 6"

Diameter of tubes

2 1/2"

Pitch of tubes

3 1/4" x 3 1/4"

Material of tube plates

Steel

Thickness: Front

1"

Back

4"

