

Rpt. 4.

REPORT ON MACHINERY

No. 16930

Date of writing Report

17 May

1926

When handed in at Local Office

19

Port of

Leith

Received at London Office

23 July

18 MAY 1926

No. in Survey held at

Leith

Date, First Survey 12 Jan 1926

Last Survey

17 May

1926

Reg. Book.

on the

Steel S.S. Clydeforth

(Number of Visits 17)

Master

Built at Graysmouth

By whom built Graysmouth Dockyard Co

Tons } Gross 64
Net 30
When built 1926

Engines made at

Leith

By whom made

Cran & Sonville Ltd (No 248) when made 1926

Boilers made at

Aman

By whom made

Cochran & Co (No 10024) when made 1926

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

15

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

no

ENGINES, &c.—Description of Engines

Compound

No. of Cylinders 2

No. of Cranks 2

Dia. of Cylinders

9", 18"

Length of Stroke 12" Revs. per minute

Dia. of Screw shaft

as per rule 3.91

Material of screw shaft

as fitted 4" steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube : 2 lines Is the after end of the liner made water tight in the propeller boss If the liner is in more than one length are the joints burned 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

Dia. of Tunnel shaft

as per rule 3.43

Dia. of Crank shaft journals

as per rule 3.6

Dia. of Crank pin

as fitted 3 3/4"

Length of stern bush

16 1/2"

Collars

3 3/4"

Dia. of screw

4-0" Pitch of Screw

5-0"

No. of Blades 4

State whether moceable

no

Total surface

5.5 sq ft

No. of Feed pumps

1

Diameter of ditto

1 1/2" Stroke 6"

Can one be overhauled while the other is at work

No. of Bilge pumps

1

Diameter of ditto

1 1/2" Stroke 6"

Can one be overhauled while the other is at work

No. of Donkey Engines

1

Sizes of Pumps

3 1/2" x 2 1/2" x 5"

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

In Engine Room

two

In Holds, &c.

one

No. of Bilge Injections

1 size 2"

Connected to (condenser, or) to circulating pump.

Is a separate Donkey Suction fitted in Engine room & size

no

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

yes

Are all connections with the sea direct on the skin of the ship

yes

Are they Valves or Cocks

yes

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

yes

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

yes

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

Is the Screw Shaft Tunnel watertight

no

Is it fitted with a watertight door

worked from

BOILERS, &c.—(Letter for record)

Manufacturers of Steel

Total Heating Surface of Boilers

300 sq ft

Is Forced Draft fitted

No. and Description of Boilers

1 Cochran

Working Pressure

130 lb

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

no

Area of fire grate in each boiler

16.75

No. and Description of Safety Valves to

each boiler

Area of each valve

Pressure to which they are adjusted

130

Smallest distance between boilers or uptakes and bunkers or woodwork

3-2

Mean dia. of boilers

5-6

Length

12-3

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

Lap of plates or width of butt straps

Working pressure of shell by rules

Size of manhole in shell

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

Thickness of plates

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Thickness of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

End plates in steam space:

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of stays

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Working pressures by rules

Girders to Chamber tops: Material

Depth and

Thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

Working pressure by rules

Steam dome: description of joint to shell

% of strength of joint

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER.

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

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

Pressure to which each is adjusted

Is Easing Gear fitted

no

Is Easing Gear fitted

no



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

JOHN CRAN & SOMERVILLE LTD.

J. Duncan Cran.

Manufacturer.

Dates of Survey while building: During progress of work in shops - - - Jan 12, 20, 21, 28, 30, Feb 16, 20, 25, Mar 10, 15, 17, 25, Apr 7, 14, May 3, 6, 17. Total No. of visits

Is the approved plan of main boiler forwarded herewith? No. " " " donkey " " "

Dates of Examination of principal parts - Cylinders 20.2.26 Slides 10.3.26 Covers 10.5.26 Pistons 7.4.26 Rods 7.4.26 Connecting rods 7.4.26 Crank shaft 25.3.26 Thrust shaft 3.5.26 Tunnel shafts ✓ Screw shaft 3.5.26 Propeller 3.5.26 Stern tube 14.4.26 Steam pipes tested Engine and boiler seatings Engines holding down bolts Completion of pumping arrangements Boilers fixed Engines tried under steam Completion of fitting sea connections Stern tube Screw shaft and propeller Main boiler safety valves adjusted Thickness of adjusting washers Material of Crank shaft Steel Identification Mark on Do. 1341 Material of Thrust shaft Steel Identification Mark on Do. 1381 Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Steel Identification Marks on Do. 1380 Material of Steam Pipes Test pressure

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 machinery has been built under special survey; the material and workmanship being good.

It is being dispatched to Starbrough for fitting aboard. It is submitted that this vessel is eligible to a record of + L.M.C. (with date), when machinery has been securely fitted on board, and satisfactorily tried under steam.

Certificate (if required) to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee ... £ 2 : - : When applied for, Special Due Lark ... £ 7 - 4 : 19, Donkey Boiler Fee ... £ 13 - 12 : 19, Travelling Expenses (if any) £ : : When received

A. T. Thomas Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 22 JUN 1926

Assigned See Gls. Rpt No. 445760

