

Rpt. 4.

REPORT ON MACHINERY.

No. 41254

WED. 3 AUG. 1921

Date of writing Report 28/7/1921

When handed in at Local Office

27-7-21

Port of

Received at London Office

No. in Survey held at
Reg. Book.

Glasgow

Date, First Survey

2-7-20

Last Survey

27-7-21

1921

(Number of Visits 14)

Master

Built at

By whom built

Tons

Gross

Net

When built

Engines made at

Glasgow

By whom made

Tayfield & Co. Ltd. 607

when made

Boilers made at

By whom made

when made

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ENGINES, &c.—Description of Engines

Dia. of Cylinders 24-1/2-1/2

Length of Stroke 54

No. of Cylinders 3

No. of Cranks 3

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

Dia. of Screw shaft as per rule 13 3/4

Material of screw shaft S

in the propeller boss

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

Is the after end of the liner made water tight

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

If the liner does not fit tightly at the part

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

Dia. of Tunnel shaft as per rule 13 9/32

Dia. of Crank shaft journals as per rule 14 6/16

as fitted 14 3/4

Dia. of Crank pin 14 3/4

Length of stern bush 9 7/8

collars

Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

No. of Feed pumps 2

Diameter of ditto 5"

Stroke 20"

Can one be overhauled while the other is at work

No. of Bilge pumps 2

Diameter of ditto 5"

Stroke 20"

Can one be overhauled while the other is at work

No. of Donkey Engines

Sizes of Pumps

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

In Engine Room

In Holds, &c.

No. of Bilge Injections

sizes

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

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

Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the Discharge Pipes above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

Are the Blow Off Cocks fitted with a spigot and brass covering plate

What pipes are carried through the bunkers

How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

BOILERS, &c.—(Letter for record)

Manufacturers of Steel

Total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

Thickness of plates

crown

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

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

Pitch across wide water spaces

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

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

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

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

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Lloyd's Register
Foundation

W439-0112

Report

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - - 1920. July 2. Nov. 1. 2. 11. 16. 25. Dec 2. 1921 Jan 24. Feb 25. 28. Mar 21.
 { During erection on board vessel - - - Apr 25. May 27.
 Total No. of visits 14.

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods
 Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller
 Stern tube 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 S Identification Mark on Do. 4700 Material of Thrust shaft S Identification Mark on Do. 4700
 Material of Tunnel shafts S Identification Marks on Do. 4700 Material of Screw shafts S Identification Marks on Do. 4700
 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 If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) These engines were intended to be built by Messrs The Fairfield Shipbuilding & Engineering Co. Ltd. but the order for the same has now been cancelled. Castings & forgings have been supplied as per attached list some of which have been partly machined & the same have been forwarded to Messrs W. Doreford & Sons Ltd. Sunderland & the Fairfield Co. do not know if these engines will be completed by Messrs Doreford or under survey. The workmanship & material as far as seen are of good quality.

The amount of Entry Fee ... £ : : When applied for, 1.8.21.
 Special ... £ 10 : :
 Donkey Boiler Fee ... £ : : When received, 16.8.21.
 Travelling Expenses (if any) £ : :

GLASGOW

Committee's Minute 2-AUG 1921

Assigned Transmit to London

FRI. 25 AUG. 1922

W. Gordon-Musclini

Engineer Surveyor to Lloyd's Register of Shipping.



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Date of writing
 No. in Reg. Book. 78434 on
 Tonnage { Gross
 { Net
 Registered Horse Power
 No. of Main Boilers
 No. of Donkey Boilers
 Steam Pressure in Main Boilers
 in Donkey Boilers

Last Report
 Particulars

(Periodical Surveys, cause of Repairs, account of Damages besides being dated and initials)

In damage cases declined?

Did the Surveyor pers

Do.

If this was not done,

And what parts of the

Also what special mea

Surveyor to assure h

Did the Surveyor exam

Did the Surveyor exam

Did the Surveyor exam

Did the Surveyor exam

Did the Surveyor exam

Has screw shaft now

Has shaft now been c

the shaft now fitted

ate the distance betw

the Survey is not com

Vessel pe

Propeller

exam

General Observ

(State clearly what alt

any alteration

140 lb., F.D., &c.

een in

Fee (per Section 28)

Damage or Repair Fee

(per Section 28.)

ing Expenses (if charg

Committee's Min

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