

# REPORT ON MACHINERY.

No. 15864.

Received at London Office

9-11-20 Port of Leith

WED. NOV. 17 1920

Writing Report

When handed in at Local Office

Date, First Survey 28-6-19

Last Survey 5-11-1920

Survey held at

Leith

Book.

on the

of Lantick

er

Built at Leith

By whom built Hawthornes & Co. Ltd.

Tons } Gross

Net

When built 1920

es made at

Leith

By whom made Hawthornes & Co. Ltd.

when made 1920

rs made at

Greenock

By whom made Kincaid & Co. Ltd.

when made 1920

stered Horse Power

Owners Geo. Gibson & Co. Ltd.

Port belonging to

Horse Power as per Section 28

296

Is Refrigerating Machinery fitted for cargo purposes no

Is Electric Light fitted yes

INES, &c.—Description of Engines

Triple Inverted

No. of Cylinders 3

No. of Cranks 3

of Cylinders

28 38 62

Length of Stroke 42 Revs. per minute

Dia. of Screw shaft as per rule 12.46

Material of screw shaft S

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

propeller boss yes 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

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

Length of stern bush 52 3/4

Dia. of Tunnel shaft as per rule 11.48

Dia. of Crank shaft journals as per rule 12.06

Dia. of Crank pin 12 1/4

Size of Crank webs 22 1/2 x 8

Dia. of thrust shaft under

of shafts 12 1/4

Dia. of screw 14-6

Pitch of Screw 17-0

No. of Blades 4

State whether moceable no

Total surface 6600

of Feed pumps 2

Diameter of ditto 4

Stroke 24

Can one be overhauled while the other is at work yes

of Bilge pumps 2

Diameter of ditto 4

Stroke 24

Can one be overhauled while the other is at work yes

of Donkey Engines 2

Sizes of Pumps 10 x 11 x 10

7 x 4 1/2 x 8

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

Engine Room 2mo 2 bilge

In Holds, &c. No. 1-2-3 holds - 2 @ 2" funnel 1-2 1/2

of Bilge Injections 1 sizes 6 1/2

Connected to condenser, or to circulating pump pumps

Is a separate Donkey Suction fitted in Engine room & size yes - 2 1/2

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 none

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

Are they Valves or Cocks Both

Are the Discharge Pipes above or below the deep water line above

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

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

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

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

How are they protected none

How are they protected none

all pipes are carried through the bunkers none

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

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

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

the Screw Shaft Tunnel watertight yes

Is it fitted with a watertight door yes worked from upper deck

MANUFACTURERS, &c.—(Letter for record)

Manufacturers of Steel

al Heating Surface of Boilers 4904

Is Forced Draft fitted no

No. and Description of Boilers

orking Pressure 180 lbs.

Tested by hydraulic pressure to

Date of test

each boiler be worked separately

Area of fire grate in each boiler 64.7

No. and Description of Safety Valves to

boiler 2 - direct spring

Area of each valve 5.94

Pressure to which they are adjusted 185 lbs Are they fitted with easing gear yes

allest distance between boilers or uptakes and bunkers or woodwork no side bunkers

Mean dia. of boilers

Length

ckness

Range of tensile strength

Are the shell plates welded or flanged

1. seams

Diameter of rivet holes in long. seams

Pitch of rivets

centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

of compensating ring

No. and Description of Furnaces in each boiler

Material

ngth of plain part

top

Description of longitudinal joint

orking pressure of furnace by the rules

bottom

No. of strengthening rings

ch of stays to ditto: Sides

Back

Top

aterial of stays

Area at smallest part

Area supported by each stay

aterial

Thickness

Pitch of stays

ea at smallest part

Area supported by each stay

Working pressure by rules

ickness

Material of Lower back plate

Thickness

iameter of tubes

Pitch of tubes

Material of tube plates

ch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

ickness of girder at centre

Length as per rule

Distance apart

orking pressure by rules

Steam dome: description of joint to shell

% of strength of joint

iameter

Thickness of shell plates

Material

ch of rivets

Working pressure of shell by rules

Crown plates

UPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

te of Test

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

Is Easing Gear fitted

Diameter of Safety Valve

Pressure to which each is adjusted

Pressure to which each is adjusted

IS A DONKEY BOILER FITTED?

70 11-9

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two connecting rod top and bottom ends and main bearing bolts and nuts, 2 eccentric strap bolts & nuts, 2 main and auxiliary checks, 1 set of Kueghorn valves, 1 set circulating pump valves, 12 joints pump studs and nuts; one coupling bolts & nuts, 12 condenser tubes & ferrules; 1 set of feed & bilge pump valves; 4 gaskets and studs for circulating pump; 12 plain boiler tubes; 2 safety valve springs, assorted bolts and nuts, and iron of various sizes.

The foregoing is a correct description,

HAWTHORN & CO., LIMITED

D. Sutherland  
ENGINEER

Manufacturer.

Dates of Survey while building: During progress of work in shops -- 1919. June 28, July 26, Aug. 1, Sept. 29, Oct. 24, 28, Nov. 6, 13, 27, Dec. 22, Jan. 28, 29, 30, 31, April 10, 14, 30, May 11, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, June 1, 15, 14, July 13, 16, 27, Aug. 30, Sept. 11, 21, 27, Oct. 12, 19, Nov. 2, 5. Total No. of visits 35.

Is the approved plan of main boiler forwarded herewith?

Dates of Examination of principal parts—Cylinders 1-6-20 Slides 28-6-20 Covers 30-4-20 Pistons 28-6-20 Rods 28-6-20

Connecting rods 28-6-20 Crank shaft 22-12-19 Thrust shaft 1-6-20 Tunnel shafts 1-6-20 Screw shaft 30-4-20 Propeller 1-6-20

Stern tube 1-6-20 Steam pipes tested at 96. Engine and boiler seatings 14-6-20 Engines holding down bolts 12-10-20

Completion of pumping arrangements 5-11-20 Boilers fixed 27-9-20 Engines tried under steam 12-10-20

Completion of fitting sea connections 14-6-20 Stern tube 14-6-20 Screw shaft and propeller 14-6-20

Main boiler safety valves adjusted 5-11-20 Thickness of adjusting washers Port boiler P 1/2 full 5 3/4 full 5 1/2 full 5 1/4 full 5 1/8 full 5 1/16 full

Material of Crank shaft L5 Identification Mark on Do. 5114 Material of Thrust shaft S Identification Mark on Do. 5114

Material of Tunnel shafts S Identification Marks on Do. LLOYD 5114 CM Material of Screw shafts S Identification Marks on Do. LLOYD 5114 CM

Material of Steam Pipes Solid drawn steel Test pressure 540 lb.

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.)

This machinery has been built under special survey, and the materials and workmanship are good. It has now been efficiently fitted on board the vessel, and is eligible in our opinion for record of + LMC 11-20, spec light.

It is submitted that this vessel is eligible for THE RECORD. + LMC. 11.20

Retl. 24/11/20. J.R.S.

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

Table with columns for fee type (Entry Fee, Special, Donkey Boiler Fee, Travelling Expenses) and amount (£ 2, £ 34-16, £ 22-13-0, £). Includes 'When applied for' and 'When received' dates.

C. Marshall & J.R. Williams  
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI. NOV. 26 1920  
Assigned + LMC 11.20



CERTIFICATE WRITTEN