

REPORT ON MACHINERY.

No. 1819

Received at London Office

4.

of writing Report 24th Nov 1919 When handed in at Local Office 6th Dec 1919 Port of Barrow-in-Furness

Survey held at Barrow-in-Furness Date, First Survey 14th March 1918 Last Survey 21st Nov 1919
(Number of Visits 101)

on the Standard "A" Engines

Gross
Tons
Net

Built at Vancouver

By whom built J. Loughlan & Son (S/S 12/16) When built

made at Barrow-in-Furness By whom made Vickers Ltd - Eng. No 559. when made 1919.

made at By whom made

Port belonging to

ed Horse Power

Owners

Is Electric Light fitted

se Power as per Section 28

Is Refrigerating Machinery fitted for cargo purposes

ES, &c.—Description of Engines Triple Expansion, Surface Condensing No. of Cylinders 3 No. of Cranks 3

Cylinders 24"-44"-73" Length of Stroke 48" Revs. per minute Dia. of Screw shaft as per rule as fitted Material of screw shaft

Screw shaft fitted with a continuous liner the whole length of the stern tube Is the after end of the liner made water tight

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

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

are fitted, is the shaft lapped or protected between the liners Length of stern bush

as per rule Dia. of Crank shaft journals as per rule as fitted 14" Dia. of Crank pin 14 1/2" Size of Crank webs 28"x9" Dia. of thrust shaft under

as fitted Tunnel shaft as fitted Dia. of screw Pitch of Screw No. of Blades State whether moveable Total surface

Feed pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work Yes.

Bilge pumps 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work Yes.

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

In Holds, &c.

Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size

the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

connections with the sea direct on the skin of the ship Are they Valves or Cocks

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

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

pipes are carried through the bunkers How are they protected

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

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

Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

ERS, &c.—(Letter for record) Manufacturers of Steel

Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers

ing Pressure Tested by hydraulic pressure to Date of test No. of Certificate

each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to

oilier Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

est distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

ess Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

entages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

th of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

ing pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

erial of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

erial Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

kness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

eter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

h across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

ness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

orking pressure by rules Steam dome: description of joint to shell % of strength of joint

meter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

h of rivets Working pressure of shell by rules Crown plates Thickness How stayed

ERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

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

meter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

003788-005199-0025

© 2020

Lloyd's Register
Foundation

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two top-end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, six coupling bolts & nuts, one set of feed & bilge pump valves, assorted bolts & nuts & iron etc.

The foregoing is a correct description,
FOR VICKERS LIMITED,

John Barr

Manufacturer. *any*

Dates of Survey while building
During progress of work in shops -- 1918 Mar. 17th, Apr. 17th, May 2, 16, 21, 23, 25, 28, 31, June 1, 3, 4, 7, 11, 12, 13, 27, July 2, 3, 5, 16, 19, 26, Aug. 1, 13, 20, 22, 24, 26, 27, Sept. 5, 7, 9, 12, 13, 18, 24, 27, 30, Oct. 3, 4, 10, 14, 18, 21, 24, 25, 28, 29, 30, Nov. 1, 8, 9, 14, 18, 20, 21, 25, 27, 28, Dec. 4, 6, 11, 17, 20, 1919 Jan. 8, 14, 16, 21, 25, 29, Feb. 4, 5, 10, 13, 14, 17, 25, 26, Mar. 3, 6, 11, 14, 18, 20, 24, 25, 28, 31, Apr. 7, 8, 16, 28, Oct. 21, 27, Nov. 21.
During erection on board vessel ---
Total No. of visits 101

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 3-10-18 Slides 20-12-18 Covers 13-8-18 Pistons 7-9-18 Rods 17-12-18

Connecting rods 17-12-18 Crank shaft 1-11-18 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 Steel Identification Mark on Do. LLOYD'S N° 103 JH Material of Thrust shaft Identification Mark on Do.

Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.

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.)

This machinery, consisting of the main engines only, has been built under special survey & in accordance with the specification & approved plans. The materials & workmanship are sound & good. The machinery, as mentioned above, has been despatched to Vancouver B.C. to be installed in J. Goughlan & Sons s/s N° 16, & when fitted in an efficient manner, in conjunction with approved boilers, will be eligible in my opinion to receive the record of + L.M.C. with date.

The thrust, intermediate, & propeller shafts, the propeller & stern tube of this Engine N° have not been despatched with the main engines; the propeller was designed 17'-6" dia., 16'-6" pitch - 4 blades solid.

The amount of Entry Fee ... £ : : When applied for,

Special *M* ... £ 58-10-0 6th Dec 1919

Donkey Boiler Fee ... £ : : When received,

Travelling Expenses (if any) £ : : 6/4/20 *APR 7*

Committee's Minute

Assigned

John Houston

Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register
Foundation