

Rpt. 4.

REPORT ON MACHINERY

No. 10638

Received at London Office

THU. JUL. 22 1920

Date of writing Report 19th July 1920 When handed in at Local Office 20th July 1920 Port of Southampton
No. in Survey held at Southampton Date, First Survey 13th August 1919 Last Survey 19th July 1920
Reg. Book. on the (Number of Visits 14)

Master Built at South Shields By whom built Messrs. Charles Remondet & Co. No. 195 Tons Gross
Engines made at Southampton By whom made Messrs. Day, Summers & Co. Ltd. when made 1920
Boilers made at By whom made No. 365 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 Triple Expansion, Surface Condensing No. of Cylinders 3 No. of Cranks 3
Dia. of Cylinders 13¹/₄" - 22" - 37" Length of Stroke 27" Revs. per minute Dia. of Screw shaft as per rule 7.92" Material of screw shaft W.I.
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
in the 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
liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 2'-8"
Dia. of Tunnel shaft as per rule 6.89" Dia. of Crank shaft journals as per rule 7.23" 7.24" Dia. of Crank pin 7¹/₄" Size of Crank webs 5" Dia. of thrust shaft under
collars 7¹/₄" Dia. of screw 10'-0" Pitch of Screw 10'-6" No. of Blades 4 State whether moveable No Total surface 34 sq. ft.
No. of Feed pumps 2 Diameter of ditto 2³/₄" Stroke 12" Can one be overhauled while the other is at work yes
No. of Bilge pumps 2 Diameter of ditto 2³/₄" Stroke 12" Can one be overhauled while the other is at work yes
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 plate 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
bottom 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

IS A DONKEY BOILER FITTED?

If so, report now forwarded?

SPARE GEAR. State the articles supplied:— 2 Connecting-rod bolts & nuts, 2 Piston-rod bolts & nuts, 2 Main Bearing bolts & nuts, 1 set of Feed pump valves, 1 set of Bilge pump valves,

Completed in Nov. rpt No. 74885

The foregoing is a correct description,

For DAY, SUMMERS & Co., Ltd.
Campbell & L. Day

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1919. August 13^d, 29^d, Sept. 10^d, 18^d, 25^d, Oct. 3^d, 17^d, Dec. 23^d, 1920. Jan. 22^d, Mar. 18^d
During erection on board vessel - - April 12^d, May 14^d, June 12^d, July 19^d
Total No. of visits 14

Is the approved plan of main boiler forwarded herewith No

" " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders 3-9-19 Slides 18-9-19 Covers 18-9-19 Pistons 18-9-19 Rods 13-8-19

Connecting rods 13-8-19 Crank shaft 17-10-19 Thrust shaft 12-6-20 Tunnel shafts ✓ Screw shaft 12-6-20 Propeller 19-7-20

Stern tube 12-6-20 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 W.I. Identification Mark on Do. 365 LLOYDS 12-6-20 A.M.B. Material of Thrust shaft W.I. Identification Mark on Do.

Material of Tunnel shafts ✓ Identification Marks on Do. L Material of Screw shafts W.I. 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 No If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Engines have been built under special survey.
The materials and workmanship are sound and good.
The Engines have been sent to South Shields.

Rpt. 5a.

Date of writing Report

No. in Survey Reg. Book.

on the

Master

Engines made at

Boilers made at

Registered Horse

MULTITUBULAR

(Letter for record)

Boilers 2 in

No. of Certificate

safety valves to ea

Are they fitted with

Smallest distance b

Material of shell p

Descrip. of riveting

Lap of plates or u

rules 181

boiler 2 plain

Description of longi

plates: Material A

Top 9 3/4 x 8" If sto

smallest part 2-0

Pitch of stays 19 1/2

Area supported by

Lower back plate

Pitch of tubes 4 1/2 x

water spaces 14

girder at centre 8

Working pressure b

Diameter

Pitch of rivets

UPERHEATE

Date of Test

Diameter of Safety Va

80

NO 6

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

Special ... £ 8 : 0 : 25^d Mar. 1920

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

Travelling Expenses (if any) £ : : 27^d Mar. 1920

Committee's Minute

Assigned

TUE. 15 NOV. 1921

TUE. FEB. 28 1922

For J. Marshall & Self
H. A. Boyle
Engineer Surveyor to Lloyd's Register of Shipping.

Survey Fee ...
Travelling Expens

Committee's M
Assigned

Lloyd's Register
Foundation