

REPORT ON MACHINERY.

No. 88865.

WED.

Received at London Office

Date of writing Report

19

When handed in at Local Office

24/6/

19

Port of

Glasgow

No. in Survey held at

Paisley

Date, First Survey 8/4/18.

Last Survey 12/6/

1919.

Reg. Book.

4 Sup. on the

S.S. "MOYALLON"

(Number of Visits 34)

Master

Built at Paisley

By whom built

John Fullerton & Co (412)

When built 1919.

Engines made at

Paisley

By whom made

Campbell & Calderwood (958)

when made 1919

Boilers made at

Renfrew.

By whom made

Wm. Simons & Co (624)

when made 1919

Registered Horse Power

Owners

John Kelly Ltd

Port belonging to

Belfast

Com. Horse Power as per Section 28

82

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

No.

GINES, &c.—Description of Engines

Compound

No. of Cylinders

two

No. of Cranks

two

Dia. of Cylinders

18"-38"

Length of Stroke

24"

Revs. per minute

100

Dia. of Screw shaft

8.13"

Material of

Steel

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

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

No

If two

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

Length of stern bush

2'-9 1/2"

Dia. of Tunnel shaft

as per rule

4.52"

Dia. of Crank shaft journals

as per rule

4.89"

Dia. of Crank pin

8 1/4"

Size of Crank webs

5 1/2" x 5 1/2"

Dia. of thrust shaft under

s

8 1/8"

Dia. of screw

9-6"

Pitch of Screw

12'-6"

No. of Blades

4

State whether moveable

No.

Total surface

35 1/2 sq ft

of Feed pumps

one

Diameter of ditto

2 1/8"

Stroke

13 1/2"

Can one be overhauled while the other is at work

of Bilge pumps

one

Diameter of ditto

2 1/8"

Stroke

13 1/2"

Can one be overhauled while the other is at work

of Donkey Engines

two

SIZES OF PUMPS

Ballast 6" x 6" x 6"

General 5" x 3 1/2" x 6"

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

Engine Room

2 at 2" dia.

In Holds, &c. For'd Hold 2 at 2 1/4" dia.

of Bilge Injections

one

size

4 1/2"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

one 2" dia

e 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

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

Yes

Are they Valves or Cocks

Both.

e 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

above

e 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

hat pipes are carried through the bunkers

Forward Suction

How are they protected

Wood Casing.

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

Yes

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

Yes

tes of examination of completion of fitting of Sea Connections

14. 4. 19.

of Stern Tube

14. 4. 19.

Screw shaft and Propeller

14. 4. 19

the Screw Shaft Tunnel watertight

none

Is it fitted with a watertight door

—

worked from

—

LERS, &c.—(Letter for record 5.)

Manufacturers of Steel

The Steel Company of Scotland & D. Colville & Sons

d Heating Surface of Boilers

1486 sq ft

Is Forced Draft fitted

No.

No. and Description of Boilers

one Single ended

Working Pressure

130 lbs/sq in

Tested by hydraulic pressure to

260 lbs/sq in

Date of test

19.12.18

No. of Certificate

14566

each boiler be worked separately

Area of fire grate in each boiler

49.45 sq ft

No. and Description of Safety Valves to

boiler Pair Spring loaded

Area of each valve

4.06 sq in

Pressure to which they are adjusted

135 lbs/sq in

Are they fitted with easing gear

Yes

Least distance between boilers or uptakes and bunkers or woodwork

5'-0"

Mean dia. of boilers

13'-0"

Length

10'-0"

Material of shell plates

Steel

Thickness

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

Percentages 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

Working 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

Material of stays

Diameter 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

Diameter 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

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

Working pressure by rules

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

ately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

fitted with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

Lloyd's Register

No. 706-0007

Foundation

VERTICAL DONKEY BOILER—Manufacturers of Steel

No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure _____ tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of Safe _____

Valves _____ No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ Date of adjustment _____

If fitted with casing gear _____ If steam from main boilers can enter the donkey boiler E Dia. of donkey boiler _____ Length _____

Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____ Rivets _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Plates _____

Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____

Diameter of furnace Top _____ Bottom N Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Radius of do. _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— 2 crosshead bearing bolts & nuts, 2 crank pin bearing bolts & nuts, 2 main bearing bolts & nuts, 1 set of feed & bilge pump valves, 6 coupling bolts, assorted bolts & nuts, a quantity of assorted iron & other spares as per specification.

The foregoing is a correct description,

Manufacturer.

Campbell & Co. Ltd.

Dates of Survey while building: During progress of work in shops — 1918 Apr 28, May 10-21, June 7-13, July 10-29, Sept 20, Oct 1-10-30, Nov 4-25-29, Dec 12-16.
During erection on board vessel — 1919 Jan 10-15-20-23-29, Feb 14-21, Mar 13-18-31, Apr 14-17-22-30, May 14-19, June 5-12.
Total No. of visits 34

Is the approved plan of main boiler forwarded herewith Yes.

Dates of Examination of principal parts—Cylinders 10.10.18 Slides 25.11.18 Covers 10.10.18 Pistons 12.12.18 Rods 12.12.18
Connecting rods 12.12.18 Crank shaft 21.2.19 Thrust shaft 21.2.19 Tunnel shafts — Screw shaft 21.2.19 Propeller 16.12.19
Stern tube 16.12.18 Steam pipes tested see below Engine and boiler seatings 14.4.19 Engines holding down bolts 14.5.19
Completion of pumping arrangements 12.6.19 Boilers fixed 5.6.19 Engines tried under steam 12.6.19
Main boiler safety valves adjusted 5.6.19 Thickness of adjusting washers Port Valve $\frac{1}{32}$ " St. Valve $\frac{1}{16}$ "
Material of Crank shaft Steel Identification Mark on Do. No. 958 21.2.19 FAF Material of Thrust shaft Steel Identification Mark on Do. No. 958 21.2.19 FAF
Material of Tunnel shafts — Identification Marks on Do. — Material of Screw shafts Steel Identification Marks on Do. No. 958 21.2.19 FAF
Material of Steam Pipes Lap welded wrought iron Test pressure 540 lbs

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

The machinery has been built under special survey in accordance with the Rules & approved plans, the materials and workmanship are good. It has been securely fitted into the vessel & with satisfactory results has been tested under steam. It is, in my opinion, suitable for Classification with record $\frac{1}{2}$ LMC 6.19.

Note. Through an oversight on the part of the builders the main steam pipes were not tested by us at the makers works, and this was only discovered after they were fitted in place and ready for steam. A certificate of test by the pipe maker (The Scottish Tube Co. Ltd.) is attached, and it is submitted this may be accepted under the circumstances.

It is submitted that this vessel is eligible for THE RECORD + LMC 6.19.

The amount of Entry Fee .. £ 1 : : When applied for, 23.6.19.
Special .. £ 12 : 6 : :
Donkey Boiler Fee .. £ : : :
Travelling Expenses (if any) £ : : : 29.6.19

Committee's Minute GLASGOW 24 JUN. 1919

Assigned + LMC 6.19

MACHINERY CERTIFICATE
ENTERED 27.7.19

Engineer Surveyor to Lloyd's Register of British & Foreign Ships



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Lloyd's Register Foundation

WEB-FR

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BRACKET
Web Fr

BULKHEAD

W.T.BULL

COLLIS
PARTITION
LONGITUDINAL

Are the outside

Are the inside

STRUT

FLAT PLATE
(If Bar Keel, or
GARBOARD ORState actual
thickness in
wa., of Double
Bottom.M.D. Sheer
G.D.K. — "N
O
P
Q
R
S
T
U
V
WTHICKNESS OF SHEER
CLEAR OF LONG
DO. OF STRUT
DELEG. of Flat Plate
" Sheer
Length and thickness
DECK SIDES
SHORT BRIDGE
FORECASTLE SIDEMAIN
Upper Deck
Stringer Plate
Quadrant
Second Deck
Stringer PlateFRAMES, extended
REVERSED FRAMES

LOWER MASTS...

Bowsprit

Topmasts, Yards

Rigging, Material

Sails.

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the spaces for Committee's Minute.)

No. 6

This requires

provide to

While the Com

good that nei

report or cer

or for any

23 APR.

Secretar

GILBERT