

REPORT ON MACHINERY.

No. 82024

Date of writing Report

19

When handed in at Local Office

17 MAR 1921

Port of

Received at London Office

FRI. 18 MAR. 1921

in Survey held at Saltney & Connah's Quay.

Date, First Survey

July 28th/19

Last Survey

March 16th 1921

g. Book.

on the

Screw Steamer Kinnaird Head.(Number of Visits 2)Master R. Brooks

Built at

Connah's Quay

By whom built

J. Broughton & Co. Ltd.

Tons

Gross 415.41Net 160.28

When built

1921Engines made at Saltney, Shuter

By whom made

J. Broughton & Co. Ltd.

when made

1921Milers made at Birkenhead

By whom made

Barnwell Laird & Co. Ltd.

when made

1921

Registered Horse Power

Owners

General Steam Navigation Co. Ltd.

Port belonging to

Leith.

m. Horse Power as per Section 28

77

Is Refrigerating Machinery fitted for cargo purposes

no.

Is Electric Light fitted

no.

GINES, &c.—Description of Engines

Compound

No. of Cylinders

No. of Cranks

a. of Cylinders

17. 36"

Length of Stroke

24"

Revs. per minute

105

Dia. of Screw shaft

as per rule 7 1/2"

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 on length 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

fitted.

If two

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

Length of stern bush

8'-2"

Dia. of Tunnel shaft

as per rule 6.85"

Dia. of Crank shaft journals

as per rule 7.2"

Dia. of Crank pin

7 1/2"

Size of Crank webs

13 1/2"

Dia. of thrust shaft under

Milers

7 1/2"

Dia. of screw

8'-6"

Pitch of Screw

10'-9"

No. of Blades

4

State whether moveable

no

Total surface

24 sq.

o. of Feed pumps

2

Diameter of ditto

2 1/2"

Stroke

12"

Can one be overhauled while the other is at work

yes.

o. of Bilge pumps

1

Diameter of ditto

2 1/2"

Stroke

12"

Can one be overhauled while the other is at work

yes.

o. of Donkey Engines

two.

Sizes of Pumps

6.8"5 1/2"5"

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

Engine Room

two - 2"In Holds, &c. 3-2" & 1-3" A.P. 2-1-3"

o. of Bilge Injections

1

sizes

3"

Connected to condenser, or to circulating pump

Cir. p.

Is a separate Donkey Suction fitted in Engine room & size

1-3"

Are 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

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

yes.

Are they Valves or Cocks

both.

Are 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.

Are 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.

What pipes are carried through the bunkers

Bilges & F.P. suction pipes.

How are they protected

Wood casings.

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

yes.

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

yes.

Is the Screw Shaft Tunnel watertight

none.

Is it fitted with a watertight door

-

worked from

MILERS, &c.—(Letter for record)

Manufacturers of Steel

Total Heating Surface of Boilers

1490 sq.

Is Forced Draft fitted

no

No. and Description of Boilers

1 S.E. Multitubular.

Working Pressure

135 lbs.

Tested by hydraulic pressure to

260 lbs.

Date of test

9.4.20.

No. of Certificate

2119.

Can each boiler be worked separately

yes.

Area of fire grate in each boiler

48 sq.

No. and Description of Safety Valves to

each boiler

2 Direct Spring

Area of each valve

7.07"

Pressure to which they are adjusted

135 lbs.

Are they fitted with easing gear

yes.

Smallest distance between boilers or uptakes and bunkers or woodwork

2'-0"

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

ong. 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

bottom

Thickness of plates

crown

bottom

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

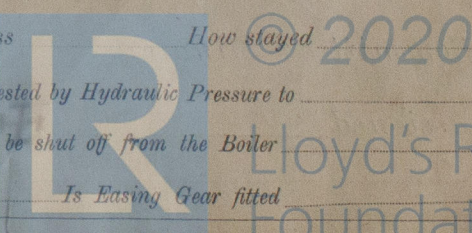
Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

W494-0096



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

Two main bearing bolts & nuts, 2 top & 3 bottom end bolts & nuts set coupling bolts & nuts, one bottom end brace, one top end brace, sets of bilge & feed pump valves, check valves, 8 boiler tubes, 6 condensed tubes, ferrules, assorted studs, bolts & rods, &c.

The foregoing is a correct description,

FOR AND ON BEHALF OF J. ORRINGTON & CO. LTD.

DIRECTOR.

Manufacturer.

Dates of Survey while building

During progress of work in shops - -
During erection on board vessel - - -
Total No. of visits

1919 July 28, Aug 27, Nov 4, 18, Dec 22, 1920 Jan 5, Mar 11, 12, Apr 19, May 26, June 8, 25, July 12, 30, Sept 7, 20, Oct 19, 27, Nov 8, 12, 24, Jan 12, 13, Feb 7, Mar 11, 14, 16.

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 27-8-19, 4/11/19, Slides 27-8-19, 4/11/19, Covers 27-8-19, 4/11/19, Pistons 27/8/19, 4/11/19, Rods 27/8/19, 4/11/19

Connecting rods 7/9/20, Crank shaft 15-11-16, Thrust shaft 11/3/21, Tunnel shafts none, Screw shaft 11/3/20, Propeller 24/11/20

Stern tube 12/11/20, Steam pipes tested 15/2/21, Engine and boiler seatings 13/10/20, 24/11/20, Engines holding down bolts 7-2-21

Completion of pumping arrangements 14/3/21, Boilers fixed 7/2/21, Engines tried under steam 14/3/21

Completion of fitting sea connections 24/11/20, Stern tube 24/11/20, Screw shaft and propeller 24/11/20

Main boiler safety valves adjusted 11/3/20, Thickness of adjusting washers P-21, S-5

Material of Crank shaft steel, Identification Mark on Do. LLOYD'S 1393, Material of Thrust shaft steel, Identification Mark on Do. LLOYD'S 1393

Material of Tunnel shafts - Identification Marks on Do. LLOYD'S 1393, Material of Screw shafts steel, Identification Marks on Do. LLOYD'S 1393

Material of Steam Pipes copper, Test pressure 300 lbs.

Is an installation fitted for burning oil fuel no, Is the flash point of the oil to be used over 150°F. no.

Have the requirements of Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case yes, If so, state name of vessel Weasdale Liverpool Rpts

General Remarks (State quality of workmanship, opinions as to class, &c.) This machinery has been constructed in accordance with the Rules & approved plans, the materials & workmanship are good. (Boiler- Liverpool Rpt. No. 81927) On completion it was successfully fitted on board and tried at sea with satisfactory results.

In our opinion this machinery is eligible to be classed with this Society & to have record of Club 3.21.

It is submitted that this vessel is eligible for THE RECORD. + LMC. 3.21 CL

Recd 21/3/21 JRR

The amount of Entry Fee ... £ 2 : - :
Special 3/5 ... £ 11 : 11 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ 4 : 2/6 :

When applied for, 17 MAR 1921

When received, 31.3.19

A. J. Barnett, S. Townend, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute LIVERPOOL 17 MAR 1921

Assigned When fee is paid

CERTIFICATE WRITTEN 8/3/21

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