

Rpt. 4.

REPORT ON MACHINERY

No. 82966
SAT. 12 NOV. 1921

Date of writing Report

19

When handed in at Local Office

27 OCT 1921

Port of

Received at London Office

LIVERPOOL

No. in Survey held at
Reg. Book.

Queensferry near Chester.

Date, First Survey

22nd Mar/21

Last Survey

October 26th 1921

on the

Screw Steamer "Coniston".

(Number of Visits)

15

Master

Built at

Queensferry

By whom built

J. J. Abdela + Mitchell Ltd.

Tons

Gross 461

Net 186

When built

1921

Engines made at

Brimscombe.

By whom made

J. J. Abdela + Mitchell Ltd.

when made

1921

Boilers made at

Birkenhead

By whom made

Cammell Laird + Co Ltd.

when made

1921

Registered Horse Power

78

Owners

J. G. Frew + Co

Port belonging to

Glasgow

Nom. Horse Power as per Section 28

78

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

ENGINES, &c.

Description of Engines

Triple expansion.

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

12", 20", 34"

Length of Stroke

23"

Revs. per minute

115

Dia. of Screw shaft

as per rule

Material of

screw shaft

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

yes

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

yes

If two

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

yes

Length of stern bush

Dia. of Tunnel shaft

as per rule

Dia. of Crank shaft journals

as per rule

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

collars

Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

No. of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines

One

Sizes of Pumps

5" 3 1/2"

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

In Engine Room

2-2" + 1-2" direct from engine

In Holds, &c.

2-2" F.P. 1-2 1/2" A.P. 1-2 1/2"

No. of Bilge Injections

1 size

3"

Connected to condenser, or to circulating pump

Circ.

Is a separate Donkey Suction fitted in Engine room & size

1-2 1/2"

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

F.P. Tank + hold bilge

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

yes

worked from

OILERS, &c.

(Letter for record)

8

Manufacturers of Steel

See Liverpool Report No. 81929.

Total Heating Surface of Boilers

1143

Is Forced Draft fitted

no

No. and Description of Boilers

One S & E Multitubular

Working Pressure

180 lbs.

Tested by hydraulic pressure to

360 lbs.

Date of test

10/9/20

No. of Certificate

2139

Can each boiler be worked separately

yes

Area of fire grate in each boiler

49 sq

No. and Description of Safety Valves to

each boiler

2 Direct spring

Area of each valve

4.9 sq

Pressure to which they are adjusted

180 lbs

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

24"

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

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

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

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Lloyd's Register
Foundation

W493-0151

IS A DONKEY BOILER FITTED? *No.*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— *Two top + 2 bottom end bolts + nuts, 2 main head bolts + nuts, set of coupling bolts + nuts. Set of feed, bilge + circulating pump valves. 3 Condenser tubes, 12 ferrules. 3 escape valve springs. assortment of studs, bolts + nuts. iron etc. 1 set of firebars.*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } *1921. Mar. 22. Apr. 8. May 20. June 3. 16. 28. July 6. 29. Aug. 12. 17. Sep. 2. 12. 20. 22. Oct. 2.*
{ During erection on board vessel - - - }
Total No. of visits *15*

Is the approved plan of main boiler forwarded herewith ☒

" " " donkey " " " ☒

Dates of Examination of principal parts—Cylinders — Slides — Covers — Pistons — Rods —
Connecting rods — Crank shaft — Thrust shaft — Tunnel shafts *(Sheffield 20/12/20)* Screw shafts *(Sheffield 20/12/20)* Propeller *22/3/21*
Stern tube *22/3/21* Steam pipes tested *12/9/21* Engine and boiler seatings *22/3/21* Engines holding down bolts *2/9/21*
Completion of pumping arrangements *20/9/21* Boilers fixed *12/9/21* Engines tried under steam *20/9/21*
Completion of fitting sea connections *22/3/21* Stern tube *22/3/21. 8/4/21* Screw shaft and propeller *8/4/21*
Main boiler safety valves adjusted *20/9/21* Thickness of adjusting washers *P 5" S 11" 32*

Material of Crank shaft — Identification Mark on Do. — 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 *Solid drawn Copper.* Test pressure *360 lbs.*

Is an installation fitted for burning oil fuel *No.* 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 securely fitted on board + satisfactorily tried under steam + is eligible for classification with second \boxplus L.M.C. 10.21. — See Bristol Rpt. 10730 Liverpool Rpt. 81929. + Secretary's letter E. 29/5/20

It is submitted that this vessel is eligible for THE RECORD.

L.M.C. - 10.21. C.L.

16/11/21.
Ans.

Certificate (if required) to be sent to

The amount of Entry Fee ... £
Fitting on board 1/5 of Fee £ *4 : 5*
Special
Donkey Boiler Fee ... £
Travelling Expenses (if any) £ *1 : 16/2*

When applied for, *26th Oct. 1921*

When received, *19. 11. 21*

A. J. Barnett.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute LIVERPOOL.

11 NOV 1921

Assigned

L.M.C. 10.21.

CERTIFICATE WRITTEN 22.11.21
17th

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FRI. 21 NOV 1921

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