

REPORT ON MACHINERY.

No. 44620

Received at London Office

6 MAY 1925

Date of writing Report 25th Apr. 1925 When handed in at Local Office 25/4/25

Port of Glasgow

No. in Survey held at Glasgow

Date, First Survey 26.2.23

Last Survey 24.4.1925

Reg. Book.

(Number of Vials 78)

on the Screw Steamer "FULLERTON ROSE"

Tons { Gross 1594

Net 943

When built 1925

Master

Built at Paisley

By whom built J. Fullerton & Co.

Engines made at Glasgow

By whom made Ross & Duncan

when made 1925

Boilers made at Paisley

By whom made Bow, MacLachlan & Co. Ltd.

when made 1925

Registered Horse Power -

Owners R. Haydon & Co.

Port belonging to Liverpool

Nom. Horse Power as per Section 28 226

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 19-31-50 Length of Stroke 36

Revs. per minute 91

Dia. of Screw shaft

as per rule 10.7

Material of screw shaft S

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 44

Dia. of Tunnel shaft

as per rule 9.6

Dia. of Crank shaft journals

as per rule 10.0

Dia. of Crank pin 10 3/8

Size of Crank web 44x65

Dia. of thrust shaft under

collars 10 1/4

Dia. of screw 13-0

Pitch of Screw 13-9

No. of Blades 4

State whether moveable No

Total surface 59.5

No. of Feed pumps 2

Diameter of ditto 3 1/4

Stroke 18

Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2

Diameter of ditto 3 1/4

Stroke 18

Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2

Sizes of Pumps 8x5x8, 9x10x10

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

In Engine Room 3-2 1/2 Bore

In Holds, &c. No 1 Hold 2-2 1/4 Bore

No. of Bilge Injections 1 sizes 4 1/2

Connected to condenser, or to circulating pump C.P. Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2

Are all the bilge suction pipes fitted with roses Yes

Are the roses in Engine room always accessible Yes

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 None

How are they protected

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

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

Total Heating Surface of Boilers 4366

Is Forced Draft fitted No

No. and Description of Boilers Two, Cyl. Single End.

Working Pressure 180 lb

Tested by hydraulic pressure to 320 lb

Date of test 24.2.25

No. of Certificate 16739.16741

Can each boiler be worked separately Yes

Area of fire grate in each boiler 67.5

No. and Description of Safety Valves to

each boiler Two Spring Loaded

Area of each valve 9.82

Pressure to which they are adjusted 185 lb

Are they fitted with easing gear Yes

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

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler 3 cf.

Material

Outside diameter

Length of plain part

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

If not, state whether, and when, one will be sent

Is a Report also sent on the Hull of the ship

Im. L. T.

W560-0089

IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— *As per Rules, also. The following items*
1 firewater, 1 out air pump valves, 1 out valves for feed Sy. pump, 6 boiler tubes, 2 Condenser
tubes, 2 feed check valves, 1 safety valve spring

The foregoing is a correct description,

Ross Duncan

Manufacturer.

Dates of Survey while building
During progress of work in shops -- *1923. Feb 26. Mar 7. 14. 21. 26. Apr 5. 9. 16. 23. 26. 30. May 7. 14. 15. June 12. 25. July 2. 25. Aug 13. Sept 7. 19. Oct 9. 15. 17. Nov 27.*
During erection on board vessel -- *1924. Feb 24. June 23. July 9. 14. 31. Aug 4. 11. 14. 15. 18. 21. 26. 29. Oct 2. 10. 15. 22. 25. Oct 1. 6. 11. 20. 24. 29.*
Total No. of visits *78*

Is the approved plan of main boiler forwarded herewith *44480.*

" " " donkey " " " ☒

Dates of Examination of principal parts—Cylinders *15. 8. 24* Slides *14. 8. 24* Covers *1. 10. 24* Pistons *11. 8. 24* Rods *21. 8. 24*

Connecting rods *31. 7. 24* Crank shaft *23. 6. 24* Thrust shaft *29. 10. 24* Tunnel shafts ☒ Screw shaft *27. 1. 25* Propeller *23. 1. 25*

Stern tube *23. 1. 25* Steam pipes tested *4. 4. 25* Engine and boiler seatings *24. 3. 25* Engines holding down bolts *7. 4. 25*

Completion of pumping arrangements *17. 4. 25* Boilers fixed *7. 4. 25* Engines tried under steam *24. 4. 25*

Completion of fitting sea connections *17. 2. 25* Stern tube *17. 2. 25* Screw shaft and propeller *17. 2. 25*

Main boiler safety valves adjusted *17. 4. 25* Thickness of adjusting washers *P 11/32" S 3/16" P 5/16" S 19/64"*

Material of Crank shaft *S.* Identification Mark on Do. *117 JSC* Material of Thrust shaft *S.* Identification Mark on Do. *960 A.T.T.*

Material of Tunnel shafts ☒ Identification Marks on Do. ☒ Material of Screw shafts *S.* Identification Marks on Do. *959 A.T.T.*

Material of Steam Pipes *Copper.* Test pressure *360 lb. sq. in.*

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 *Engines only.* If so, state name of vessel *S/S. LOUIE ROSE*

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

These engines have been constructed under special survey in accordance with the Society's Rules. The materials and workmanship employed in their manufacture are sound and good. Together with the boilers they have been fitted on board the Vessel in a satisfactory manner and found satisfactory under steam.

The Vessel is satisfactory in my opinion for record + L.M.C. 4. 25.

The amount of Entry Fee ... £ *4 : 0*
3/5 Special ... £ *33 : 18*
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, *5757 19. 25*
When received, *18. 25*

Committee's Minute *GLASGOW 5-MAY 1925*

Assigned *+ L.M.C. 4. 25.*

W. Lane & J. D. Boyle
Engineer Surveyor to Lloyd's Register of Shipping.



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CERTIFICATE WRITTEN
28/5/25