

Rpt. 4.

No. 86700

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

21 JAN 1931

Received at London Office

21 JAN 1931

Port of Newcastle-on-Tyne

Date of writing Report

19

When handed in at Local Office

No. in Survey held at
Reg. Book.

South Shields

Date, First Survey Apr 16

Last Survey Jan 12 1931

(Number of Visits 26)

91336 on the

S. S. LORCA.

Tons { Gross 4874.5
Net 3007

Built at S. Shields By whom built Messrs John Readhead & Sons Ltd Yard No. 504 When built 1931

Engines made at S. Shields By whom made John Readhead & Sons Engine No. 504 When made 1931

Boilers made at S. Shields By whom made " " " " Boiler No. 504 When made 1931

Registered Horse Power Owners Long Strick (Steamers) Ltd Port belonging to London

Nom. Horse Power as per Rule 427 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which Vessel is intended

ENGINES, &c.—Description of Engines *Triple Expansion Surface Condensing* Revs. per minute

Dia. of Cylinders *25-42-69* Length of Stroke *48* No. of Cylinders *3* No. of Cranks *3*

Crank shaft, dia. of journals as per Rule *13.671* Crank pin dia. *13 3/4* Crank webs Mid. length breadth *19* Thickness parallel to axis *8 3/4*

Intermediate Shafts, diameter as per Rule *13.02* Thrust shaft, diameter at collars as per Rule *13.671*

Tube Shafts, diameter as fitted *13 3/4* Screw Shaft, diameter as fitted *15* Is the *tube* shaft fitted with a continuous liner? *Yes*

Bronze Liners, thickness in way of bushes as per Rule *1/4* Thickness between bushes as fitted *3/4* Is the after end of the liner made watertight in the propeller boss *Yes*

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner *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* Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft *No* If so, state type *Yes*

Length of Bearing in Stern Bush next to and supporting propeller *5-0*

Propeller, dia. *17-4 1/2* Pitch *17-4 1/2* No. of Blades *4* Material *Bronze* whether Movable *No* Total Developed Surface *94* sq. feet

Feed Pumps worked from the Main Engines, No. *2* Diameter *4 1/2* Stroke *24* Can one be overhauled while the other is at work *Yes*

Bilge Pumps worked from the Main Engines, No. *2* Diameter *4 1/2* Stroke *24* Can one be overhauled while the other is at work *Yes*

Feed Pumps { No. and size *one - 8 1/2 - 6 - 18* Pumps connected to the { No. and size *one Ballast Pump 10 1/2 - 12 1/2 - 21 D.A.*
How driven *Steam driven* Main Bilge Line How driven *Steam*

Ballast Pumps, No. and size *one 10 1/2 - 12 1/2 - 21 D.A.* Lubricating Oil Pumps, including Spare Pump, No. and size *Yes*

Are two independent means arranged for circulating water through the Oil Cooler *Yes* Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room *3 - 2 3/4 dia*

In Pump Room *Yes* In Holds, &c. *N° 1 hold 2 - 3 dia. N° 2 hold 2 - 3 1/2 dia. N° 3 hold 2 - 3 dia. N° 4 hold 2 - 3 dia. Tunnel well one 2 1/2 dia.*

Main Water Circulating Pump Direct Bilge Suctions, No. and size *one - 7 dia* Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size *one - 4 1/2 dia*

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes *Yes*

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges *Yes*

Are all Sea Connections fitted direct on the skin of the ship *Yes* Are they fitted with 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 Overboard Discharges above or below the deep water line *Both*

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 pass through the bunkers *None* How are they protected *Yes*

What pipes pass through the deep tanks *None* Have they been tested as per Rule *Yes*

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

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another *Yes* Is the Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *Yes* worked from *Top platform*

MAIN BOILERS, &c.—(Letter for record *r*) Total Heating Surface of Boilers *5754 sq*

Is Forced Draft fitted *Yes* No. and Description of Boilers *2 - S.E.M.* Working Pressure *200 lbs*

IS A REPORT ON MAIN BOILERS NOW FORWARDED? *Yes*

IS A DONKEY BOILER FITTED? *Yes* If so, is a report now forwarded? *Yes*

Is the donkey boiler intended to be used for domestic purposes only *Yes*

PLANS. Are approved plans forwarded herewith for Shafting *Yes* Main Boilers *Yes* Auxiliary Boilers *Yes* Donkey Boilers *Yes*

(If not state date of approval)

Superheaters *Yes* General Pumping Arrangements *Yes* Oil fuel Burning Piping Arrangements *Yes*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes*

State the principal additional spare gear supplied *1 - Excelsior shaft. 2 Piston rod top end bolts. 2 Connecting rod bottom end bolts. 2 Main bearing bolts. 1 Set shaft coupling bolts. 1 Set feed pump valves Bilge, air - but pump valves. 1 Boiler check valve. 1 Spring for feed bilge pump valves. C.T. propeller. 1 Propeller shaft. 6 Piston bolts. 24 Main boiler tubes. 24 Condenser tubes. 48 feeders. 100 Fire bars. 1 Set side bars baffle plates. 2 Safety valve springs. 6 Valve stoppers. Spare bucket rod for each donkey pump. Decanted bolts nuts.*

FOR JOHN READHEAD & SONS, LTD.

The foregoing is a correct description,

CHAIRMAN & MANAGING DIRECTOR

Manufacturer.



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Dates of Survey while building
During progress of work in shops -- Apr 16-29 May 15 June 13-20 July 14-25 Aug 3-19-20-26 Sep 3-8
23-26 Oct 3-10-19-26 Nov 25
During erection on board vessel --- Sep 19-26-29-Oct 10-Nov 14-Jan 12-21.
Total No. of visits 26

Dates of Examination of principal parts--Cylinders 25-7-30 Slides 20-8-30 Covers 20-9-30
Pistons 20-9-30 Piston Rods 23-9-30 Connecting rods 23-9-30
Crank shaft 14-7-30 Thrust shaft 3-9-30 Intermediate shafts 3-9-30
Tube shaft ✓ Screw shaft 25-11-30 Propeller 25-11-30
Stern tube 19-9-30 Engine and boiler seatings 10-10-30 Engines holding down bolts 2-10-30
Completion of fitting sea connections 19-9-30
Completion of pumping arrangements 19-10-30 Boilers fixed 29-9-30 Engines tried under steam 10-10-30
Main-boiler safety valves adjusted 10-10-30 Thickness of adjusting washers P 5/16 S 3/8
Crank shaft material S.M. Steel Identification Mark D.D.W. Thrust shaft material S.M. Steel Identification Mark R.W.F.
Intermediate shafts, material S.M. Steel Identification Marks 3667 3636 Tube shaft, material ✓ Identification Mark ✓
Screw shaft, material S.M. Steel Identification Mark E.K. Steam Pipes, material Steel Test pressure 600 lbs Date of Test 26-9-30
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 the Rules for the use of oil as fuel been complied with ✓
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ✓ If so, have the requirements of the Rules been complied with ✓
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have 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 machinery of this vessel has been constructed under special survey in accordance with rule requirements & approved plans. The materials & workmanship are good. The machinery was satisfactorily tested on mooring sea trials and in our opinion is eligible for classification with records of +L.M.C.I., 31 - T.S.C.L.I., 31.

The amount of Entry Fee ... £ 5 : 0 :
Special ... £ 83 : 1 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 20-1-31
When received, 10-2-31

Committee's Minute

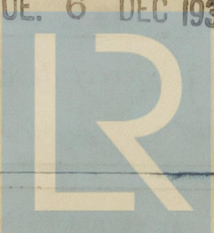
Assigned

TUE. 3 FEB 1931

+ Lmb. 1.31 J.D. L.

CERTIFICATE WRITTEN.

TUE. 6 DEC 1932



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Lloyd's Register Foundation

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