

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

11 JUL 1928

Date of writing Report

19

When handed in at Local Office

9. 7.

19 28 Port of

Glasgow

No. in Survey held at  
Reg. Book.

Glasgow

Date, First Survey

18. 11. 27

Last Survey

5-7-1928

(Number of Visits 56)

Tons { Gross 5843  
Net 3695

Built at

Glasgow

By whom built

Glas Lonnell &amp; Co. Ltd.

Yard No. 412

When built 1928

Engines made at

Glasgow

By whom made

David Rowan &amp; Co. Ltd.

Engine No. 883

when made 1928

Boilers made at

Glasgow

By whom made

David Rowan &amp; Co. Ltd.

Boiler No. 883

when made 1928

Registered Horse Power

Owners

T &amp; J. Harrison

Port belonging to

Liverpool

Nom. Horse Power as per Rule

524

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

Trade for which Vessel is intended

General cargo

## ENGINES, &amp;c.—Description of Engines

Triple expansion

Revs. per minute 77

Dia. of Cylinders

27" 46" 77"

Length of Stroke

54"

No. of Cylinders

3

No. of Cranks

3

Crank shaft, dia. of journals

as per Rule 15.288"

as fitted 15 3/8"

Crank pin dia.

15 7/8"

Crank webs

Mid. length breadth 23"

Mid. length thickness 9 7/8"

shrink

Thickness parallel to axis 9 7/8"

Thickness around eye-hole 6 3/16"

Intermediate Shafts, diameter

as per Rule 14.56"

as fitted 14 5/8"

Thrust shaft, diameter at collars

as per Rule 15.288"

as fitted 15 5/8"

Tube Shafts, diameter

as per Rule

Screw Shaft, diameter

as per Rule 16.1"

as fitted 16 7/8"

Is the { tube } shaft fitted with a continuous liner { yes }

Bronze Liners, thickness in way of bushes

as per Rule .79"

as fitted 7/16"

Thickness between bushes

as per Rule .593"

as fitted 13/16"

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

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

Is an approved Oil Gland or other appliance fitted at the after

end of the tube shaft

yes

Length of Bearing in Stern Bush next to and supporting propeller

6' 2"

Propeller, dia.

18' 6"

Pitch

18' 6"

No. of Blades

4

Material

Brass

whether Moveable

yes

Total Developed Surface

110 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 3/4"

Stroke

24"

Can one be overhauled while the other is at work

yes

Feed Pumps

No. and size 2 @ 10 1/2" x 8" x 24"

How driven

Pumps connected to the

No. and size

General donkey 12" x 8" x 12" and

Main Bilge Line

How driven

steam

the bilge pump

Ballast Pumps, No. and size

1 @ 10 1/2" x 13" x 24" duplex

Lubricating Oil Pumps, including Spare Pump, No. and size

4

Are two independent means arranged for circulating water through the Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room

4 @ 3 1/2"

In Holds, &amp;c. No. 1 hold - 2 @ 3 1/2". No. 2 hold - 2 @ 3 1/2". No. 3 hold - 2 @ 3 1/2". Deep tanks - 2 @ 3 1/2". No. 5 hold - 2 @ 3 1/2".

No. 6 hold - 1 @ 3 1/2". Tunnel well 1 @ 3 1/2".

Main Water Circulating Pump Direct Bilge Suctions, No. and size

1 @ 10"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size

1 @ 5"

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

forward hold suctions

How are they protected

under timber boards

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 upper deck

## MAIN BOILERS, &amp;c.—(Letter for record (X))

Total Heating Surface of Boilers

8208 sq. ft.

Is Forced Draft fitted

no

No. and Description of Boilers

two double ended 228

Working Pressure

210

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

yes

IS A DONKEY BOILER FITTED?

yes

If so, is a report now forwarded?

yes

PLANS.

Are approved plans forwarded herewith for Shafting

no

Main Boilers

yes

Auxiliary Boilers

—

Donkey Boilers

yes

(If not state date of approval)

Superheaters

no. In ch. Rpt. herewith

General Pumping Arrangements

with ship repairs

Oil fuel Burning Piping Arrangements

—

SPARE GEAR.

State the articles supplied:— In accordance with the Rules and in addition:—

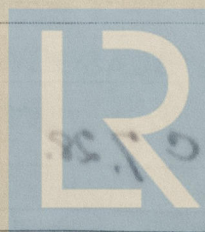
one screw shaft, one propeller boss, four propeller blades, one Thompson coupling, one air pump rod, one circulating pump, impeller and shaft; one slide valve rod, one eccentric sheave and strap.

The foregoing is a correct description,

For David Rowan &amp; Co. Ltd.

Arch. W. Grierson

Manufacturer.



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Lloyd's Register  
Foundation

005269-005279-0140



25184

1927 Nov 18-22 Jan 13-24 30 Feb 2-6-20 Mar 2-23-26-28-29-30 Apr 3-10-11-12-13-17-20-24-25-27  
During progress of work in shops - - -  
May 1-2-3-4-5-9-10-11-14-17-18-22-24-23-29-31 Jun 1-4-5-6-7-8-11-12-14-15-18-25-26-29 July 5  
During erection on board vessel - - -

Dates of Survey while building  
Total No. of visits 515-6  
Dates of Examination of principal parts - Cylinders 11-4-28 Slides 18-5-28 Covers 24-4-28  
Pistons 7-5-28 Piston Rods 9-5-28 Connecting rods 27-4-28  
Crank shaft 20-4-28 Thrust shaft 3-5-28 Intermediate shafts 12-4-28  
Tube shaft - Screw shaft 3-5-28 Propeller 9-5-28  
Stern tube 9-5-28 Engine and boiler seatings 5-6-28 Engines holding down bolts 18-6-28  
Completion of fitting sea connections 31-5-28  
Completion of pumping arrangements 29-6-28 Boilers fixed 25-6-28 Engines tried under steam 5-7-28  
Main boiler safety valves adjusted 26-6-28 Thickness of adjusting washers all 1/32

Crank shaft material J. Steel Identification Mark LLOYDS No 7850 20-4-28 J.D.B.  
Intermediate shafts, material J. Steel Identification Marks LLOYDS No 7850 12-4-28 L.C.D.  
Screw shafts, material J. Steel Identification Marks LLOYDS No 7850 3-5-28 J.L.M.  
Thrust shaft material J. Steel Identification Mark LLOYDS No 7850 3-5-28 J.L.M.  
Tube shaft, material - Identification Mark -  
Steam Pipes, material Iron Test pressure 630 Date of Test 15/8-6-28  
Is an installation fitted for burning oil fuel - 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 no If so, have the requirements of the Rules been complied with -  
Is this machinery duplicate of a previous case yes If so, state name of vessel "Observer" J.D.B.

General Remarks (State quality of workmanship, opinions as to class, &c.)  
The materials and workmanship are good.  
The machinery has been constructed under special Survey in accordance with the rules, satisfactorily fitted in the vessel, tried under steam and found good.  
It is eligible in my opinion for Classification and the Record + LMC 7,28

It is submitted that this vessel is eligible for RECORD + LMC 7,28 CL.  
12/7/28 J.D.B.

The amount of Entry Fee ... £ 6 : : When applied for, 10 JUL 1928  
Special ... £ 101 : 4 : :  
Donkey Boiler Fee ... £ : : : When received, 12.7.1928  
Travelling Expenses (if any) £ : : :  
Committee's Minute GLASGOW 10 JUL 1928  
Assigned + LMC 7,28.

Engineer Surveyor to Lloyd's Register of Shipping.  
Lloyd's Register Foundation  
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