

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office WED. JUL 23 1924

Date of writing Report 19 When handed in at Local Office 19 JUL 1924 Port of *Liverpool*

No. in Survey held at *Fleetwood* Date, First Survey *20th Feb.* Last Survey *14th July 1924*
 Reg. Book. on the *T. S. S. "WYRESDALE"* (Number of Visits *24*)

Built at *Fleetwood* By whom built *James Robertson & Son, Ltd* Yard No. *6* Tons *Gross 53.72*
Net 25.3

Engines made at *Fleetwood* By whom made *James Robertson & Son, Ltd* Engine No. *6* When built *1924*

Boilers made at *Stockton* By whom made *Piley Brothers, Ltd* Boiler No. when made *1924*

Registered Horse Power Owners *Fleetwood Urban District Council* Port belonging to *Fleetwood*

Nom. Horse Power as per Rule *18* Is Refrigerating Machinery fitted for cargo purposes *No.* Is Electric Light fitted *Yes*

ENGINES, &c.—Description of Engines

Dia. of Cylinders *4" x 14"* Length of Stroke *9"* Revs. per minute *170* No. of Cylinders *2* No. of Cranks *2*

Dia. of Crank shaft journals *3 1/8"* Dia. of Crank pin *3 1/8"* Crank webs *1 3/4"* Thickness parallel to axis *1 1/4"*

Diameter of Thrust shaft under collars *3 1/8"* Diameter of Tunnel shaft *None* Diameter of Screw shaft *3 3/8"* Is the Screw shaft fitted with a continuous liner the whole length of the stern tube *No liners* 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 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* Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated *Yes*

Pitch of Propeller *63"* No. of Blades *4* State whether Moveable *No* Length of Stern Bush *13 1/4"* Diameter of Propeller *48"*

No. of Feed Pumps fitted to the Main Engines *One each eng.* Diameter of ditto *1 1/4"* Stroke *4 3/4"* Can one be overhauled while the other is at work *Yes*

No. of Bilge Pumps fitted to the Main Engines *One each eng.* Diameter of ditto *1 1/4"* Stroke *4 3/4"* Can one be overhauled while the other is at work *Yes*

Total number and size of power driven Feed and Bilge Auxiliary Pumps *One*

No. and size of Pumps connected to the Main Bilge Line *One 4" x 2 1/2" x 4" duplex pump One 1 1/2" steam ejector*

No. and size of Ballast Pumps *None* No. and size of Lubricating Oil Pumps, including Spare Pump *None*

Are two independent means arranged for circulating water through the Oil Cooler *Yes* No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room *One 1 1/2" suction each engine, One 1 1/2" ejector and in Holds, &c. One 1 1/2" suction forward hold.*

No. and size of Main Water Circulating Pump Bilge Suctions *One 1 1/2"* No. and size of Donkey Pump Direct Suctions *None*

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 connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Locks*

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 *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 Screw Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *Yes* worked from *Yes*

MAIN BOILERS, &c.—(Letter for record *S*) Total Heating Surface of Boilers *365 sq. feet.*

Is Forced Draft fitted *No* No. and Description of Boilers *One single Luted.* Working Pressure *170 lbs.*

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

IS A DONKEY BOILER FITTED? *No* If so, is a report now forwarded? *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)

General Pumping Arrangements *Yes* Oil Fuel Burning Piping Arrangements *Yes*

SPARE GEAR. State the articles supplied:—

Four top end connecting rod bolts Two bottom end connecting rod bolts

Two main bearing bolts One set of coupling bolts One set of feed and bilge pump valves

A quantity of assorted bolts and nuts.

The foregoing is a correct description,

A. L. Robertson Manufacturer.



20th, 26th Feb. 26th March, 1st 8th 22nd & 28th April. 2nd 13th 16th 20th 22nd & 26th May.
 During progress of work in shops -- 2nd & 4th June.
 Dates of Survey while building During erection on board vessel -- 12th 16th 18th & 30th June. 15th & 17th July.
 Total No. of visits 24

Dates of Examination of principal parts - Cylinders 13th May 1924 Slides 4th June 1924
 Covers 4th June 1924 Pistons 4th June 1924 Rods 4th June 1924
 Connecting rods 22nd May 1924 Crank shaft 20th May 1924 Thrust shaft 20th May 1924
 Tunnel shafts 13th May 1924 Screw shaft 16th June 1924 Propeller 16th June 1924
 Stern tube 19th June 1924 Engine and boiler seatings 30th June 1924 Engines holding down bolts 15th July 1924
 Completion of pumping arrangements 15th July 1924 Boilers fixed 10th July 1924 Engines tried under steam
 Completion of fitting sea connections 18th June 1924 Stern tube 12th June 1924 Screw shaft and propeller 18th June 1924
 Main boiler safety valves adjusted Thickness of adjusting washers
 Material of Crank shaft Steel Identification Mark on Do. See London letter E dated 5th June 1924
 Material of Thrust shaft Steel Identification Mark on Do. " " " " " " " "
 Material of Tunnel shafts Identification Marks on Do.
 Material of Screw shafts Steel Identification Marks on Do. LLOYD'S N^o 1684-5 AS-16-6-24
 Material of Steam Pipes Copper Test pressure 340 lbs. Date of Test 14th July 1924
 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 carrying and burning oil fuel 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 built under special survey in accordance with the Rules and approved plans. The safety valves have been adjusted under steam and the engines tried under working conditions with satisfactory results.
 The workmanship and materials are of good quality and the machinery is in my opinion, eligible for classification with record + LMC-7-24.

It is submitted that this vessel is eligible for THE RECORD. + LMC 7. 24. OG.

J.W.D. 170th
 24/7/24

[Signature] Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 2 : 0 : 0 When applied for, 21 JUL 1924
 Special ... £ 15 : 0 : 0
 Donkey Boiler Fee ... £ : : :
 Travelling Expenses (if any) £ : 12 : 0 When received, 22 JUL 1924
 Committee's Minute LIVERPOOL

Assigned + L.M.C. 7.24. O.G.

CERTIFICATE WRITTEN 28/8/24



Certificate to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute(s).