

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

16 MAR 1924

Date of writing Report 9. 3. 1924 When handed in at Local Office 12. 3. 1924 Port of Greenock

No. in Survey held at Port Glasgow Date, First Survey 22nd December 1923 Last Survey 9th March 1924
Reg. Book.

on the TWIN SCREW HOPPER DREDGER "PIEL"

(Number of Visits 46)

Built at Port Glasgow. By whom built Ferguson Bros (Port Glasgow) Ltd. Yard No. 280 Tons { Gross 1231
Net 1178

When built 1924.

Engines made at " By whom made " Engine No. 280 when made 1924.

Boilers made at Jarrow By whom made Palmers Ltd. Boiler No. when made

Registered Horse Power Owners London Midland & Scottish Railway. Port belonging to London

Nom. Horse Power as per Rule 141. Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes

ENGINES, &c. — Description of Engines

Triple expansion.

Dia. of Cylinders 12 x 19 x 32. Length of Stroke 24. Revs. per minute 140 No. of Cylinders 6 No. of Cranks 6

Dia. of Crank shaft journals as per rule 6.45 as fitted 6.2 Dia. of Crank pin 6.2 Crank webs Mid. length breadth 12.74 shrunk Thickness parallel to axis 4.98

Diameter of Thrust shaft under collars as per rule 6.45 as fitted 8. Diameter of Tunnel shaft as per rule as fitted Diameter of Screw shaft as per rule 6.81 7.96 Is the Screw shaft

fitted with a continuous liner the whole length of the stern tube No. 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 If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with plastic material insoluble in water and non-corrosive

If two liners are fitted, is the shaft lapped or protected between the liners. NONE. Is an approved appliance fitted at the after end of the shaft to permit

of it being efficiently lubricated YES. Length of Stern Bush 2' 9" Diameter of Propeller 8' 0"

Pitch of Propellers 9' 9" No. of Blades 3 State whether Moveable NO Total Surface 26 square feet.

No. of Feed Pumps fitted to the Main Engines NONE Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Bilge Pumps fitted to the Main Engines NONE Diameter of ditto Stroke Can one be overhauled while the other is at work

Total number and size of power driven Feed and Bilge Auxiliary Pumps 2 WEIRS FEED 6" x 8 1/2" x 13. 1 FEED & BILGE 6" x 4 1/4" x 6.

No. and size of Pumps connected to the Main Bilge Line 1- 6" x 6" x 6. 1- 5 1/4" x 5" x 5.

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 No. and size of suction connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps; — In Engine and Boiler Room 3- 2 1/2" and in Holds, &c. 1- 2 1/2" AFT PEAK.

3- 2 1/4" EACH SIDE FORWARD.

No. and size of Main Water Circulating Pump Bilge Suctions 1- 6" No. and size of Donkey Pump Direct Suctions

to the Engine Room Bilges 1- 3 1/4" 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 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 HOLD SUCTIONS & STEAM & EXHAUST TO WINCHES. How are they protected STEEL SHEATING.

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 NONE. Is it fitted with a watertight door worked from

MAIN BOILERS, &c. — (Letter for record S.) Total Heating Surface of Boilers 3500

Is Forced Draft fitted NO. No. and Description of Boilers 2. S. B. Working Pressure 180 LBS.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? YES (NEWCASTLE REPORT No 80433).

IS A DONKEY BOILER FITTED? NO. If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting YES Main Boilers YES Auxiliary Boilers NONE Donkey Boilers NONE.

(If not state date of approval) General Pumping Arrangements YES Oil fuel Burning Piping Arrangements NONE.

SPARE GEAR. State the articles supplied:—

2 PROPELLERS. 2 TOP END BOLTS & NUTS. 2 BOTTOM END BOLTS & NUTS. 2 MAIN BEARING BOLTS.

& NUTS. 6 COUPLING BOLTS & NUTS. 1 SET OF BILGE & FEED PUMP VALVES. 1 SET OF AIR PUMP VALVES.

ASSORTED BOLTS & NUTS. IRON OF VARIOUS SIZES.

The foregoing is a correct description,
FERGUSON BROTHERS (Port-Glasgow) LTD.

A. J. Ferguson

DIRECTOR.

Manufacturer.



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Lloyd's Register
Foundation

009610 - 009620 - 0013

(1925) Dec 22 (1926) Feb 18 16 23 26 Mar 11 16 24 Apr 19 26 29 May 3 24 28 June 8 11 15 18 21 24 July 14 28 30 Aug 3 6 20
During progress of work in shops - - -
26 Sept 3 4 15 16 21 28 Oct 13 19 Nov 15 14 Dec 14 (1924) Jan 14 Feb 10 Mar 2 4 9
Dates of Survey while building
During erection on board vessel - - -
Total No. of visits 46

Dates of Examination of principal parts - Cylinders	18-6-26	Slides	24-6-26
Covers	18-6-26	Pistons	24-6-26
Connecting rods	21-6-26	Crank shaft	3-8-26
Tunnel shafts	NONE	Screw shaft	19-10-26
Stern tube	28-4-26	Engines holding down bolts	17-11-26
Completion of pumping arrangements	2-3-24	Boilers fixed	21-9-26
Completion of fitting sea connections	22-9-26	Stern tube	6-8-26
Main boiler safety valves adjusted	2-3-27	Thrust shaft	26-8-26
Material of Crank shaft	MILD STEEL	Propeller	19-10-26
Material of Thrust shaft	"	Engines tried under steam	4-3-24
Material of Tunnel shafts	NONE	Screw shaft and propeller	15-11-24
Material of Screw shafts	MILD STEEL	Thickness of adjusting washers	P $\frac{1}{32}$ S $\frac{1}{32}$ P $\frac{1}{32}$ S $\frac{1}{32}$
Material of Steam Pipes	SOLID DRAWN COPPER	Identification Mark on Do.	LLOYDS 1294 JD 3-8-26
Is an installation fitted for burning oil fuel	No	Identification Mark on Do.	LLOYDS 1544 JD 19-10-26
Have the requirements of the Rules for carrying and burning oil fuel been complied with	✓	Identification Marks on Do.	✓
Is this machinery duplicate of a previous case	YES	Identification Marks on Do.	LLOYDS 1544 JD 19-10-26
		Test pressure	450 LBS
		Date of Test	16-9-26
		Is the flash point of the oil to be used over 150°F.	✓

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery has been built under special survey, in accordance with the Rules and approved plans.

The materials and workmanship are good.

The engines and boilers have been securely fitted on board the vessel, and tried under full power with satisfactory results.

The machinery of this vessel, is eligible, in my opinion, to be classed in the Register Book, with record of survey + LMC 3-24

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 3.27. O.G.

18/3/27
J. Avey
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee	£ 3 : 0 : 0	When applied for,
Special $\frac{3}{4}$	£ 25 : 13 : 0	11. 3. 1924
Donkey Boiler Fee	£ :	When received,
Travelling Expenses (if any)	£ :	31. 3. 1924

Committee's Minute GLASGOW 15 MAR 1927

Assigned + LMC 3, 27



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