

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

23 MAR 1925

Date of writing Report 10 When handed in at Local Office 20/3/1925 Port of NEWCASTLE-ON-TYNE

No. in Survey held at SOUTH SHIELDS Date, First Survey 17/24 Last Survey 18/31 1925
Reg. Book. on the S.S.S. ABEILLE N° 21. (Number of Visits 33)

Built at S. SHIELDS By whom built J. P. RENNOLDSON & SONS Yard No. 325 Tons { Gross
Engines made at S. SHIELDS By whom made J. P. RENNOLDSON & SONS Engine No. 855 when made 1925. Net
Boilers made at NEWCASTLE By whom made HAWTHORN LESLIE & CO. Boiler No. 8828 when made 1925.

Registered Horse Power Owners Cie de Remorquage de Sauvage Les Abeilles Port belonging to Harve
Nom. Horse Power as per Rule 152 ✓ Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no
Trade for which Vessel is intended

ENGINES, &c.—Description of Engines Triple expansion, condensing ✓ Revs. per minute 109

Dia. of Cylinders 16½", 27", 44" Length of Stroke 30" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 8.52 ✓ Crank pin dia. 8¾" ✓ Crank webs Mid. length breadth 12¾" ✓ Thickness parallel to axis 5¾" ✓
as fitted 8¾" ✓ Mid. length thickness 5¾" ✓ shrunk Thickness around eye-hole 3¾" ✓

Intermediate Shafts, diameter as per Rule 8.11 ✓ Thrust shaft, diameter at collars as per Rule 8.52" ✓
as fitted 8¾" ✓ as fitted 8¾" ✓

Tube Shafts, diameter as per Rule — Screw Shaft, diameter as per Rule 9.4 ✓ Is the { tube } shaft fitted with a continuous liner { no liner }
as fitted — as fitted 9¾" ✓ as fitted — as fitted —

Bronze Liners, thickness in way of bushes as per Rule — Thickness between bushes as per Rule — Is the after end of the liner made watertight in the
as fitted — as fitted — propeller boss — 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 —

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 no ✓ Length of Bearing in Stern Bush next to and supporting propeller 3'-6" ✓

Propeller, dia. 10'-6" Pitch 13'-9" No. of Blades 4 Material C.I. whether Moveable not Total Developed Surface 35.14 sq. feet

Feed Pumps worked from the Main Engines, No. 2 ✓ Diameter 3" ✓ Stroke 16" ✓ Can one be overhauled while the other is at work yes ✓

Bilge Pumps worked from the Main Engines, No. 2 ✓ Diameter 3" ✓ Stroke 16" ✓ Can one be overhauled while the other is at work yes ✓

Feed { No. and size one 5' x 3½" x 6" ✓ Pumps connected to the { No. and size one 6' x 7½" x 6" ✓
Pumps { How driven Steam ✓ Main Bilge Line { How driven Steam ✓

Ballast Pumps, No. and size one 6' x 7½" x 6" ✓ Lubricating Oil Pumps, including Spare Pump, No. and size none ✓

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 one 2¼" diam ✓

In Holds, &c. In peak one 2" diam ✓ aft peak one 2" diam ✓
In hold one 2" diam ✓

Main Water Circulating Pump Direct Bilge Suctions, No. and size one 5" diam Independent Power Pump Direct Suctions to the Engine Room Bilges,
No. and size one 2¼" diam ✓ 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 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 main steam, written steam, ✓ How are they protected steel casing ✓
m & D feed, 3rd steam to tank, ✓
aux steam, steering, eng. exhaust.

What pipes pass through the deep tanks — Have they been tested as per Rule —

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 none ✓ Is it fitted with a watertight door — worked from —

MAIN BOILERS, &c.—(Letter for record (S) ✓ Total Heating Surface of Boilers 2843 sq. ft. ✓

Is Forced Draft fitted No. ✓ No. and Description of Boilers 1-SE Horizontal ✓ Working Pressure 180 lbs/sq. in. ✓

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

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

PLANS. Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers
(If not state date of approval)

Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—

1 Tailshaft with nut & key ✓ 1 set of feed pump valves ✓ 30 condenser tubes ✓
1 C.I. stern bush ✓ 1 set of bilge pump valves ✓ 60 condenser journals ✓
2 Connecting rod bolts & nuts ✓ 2 Donkey feed pump valves ✓ 10 plain boiler tubes ✓
2 Piston rod bolts & nuts ✓ 1 Boiler pressure gauge ✓ 2 stay tubes ✓
2 Main bearing bolts & nuts ✓ ½ cwt assorted iron ✓
1 set of coupling bolts & nuts ✓ 36 assorted bolts & nuts ✓
6 Piston bolts ✓
1 Spare propeller ✓

The foregoing is a correct description.

J. P. RENNOLDSON & SONS LTD.

Charles Ross.

Manufacturer.

DIRECTOR

Lloyd's Register
Foundation

002302 002313 004

1924
 July 1. 28. 31. Aug. 13. 19. 25. Sep. 1. Oct. 1. 15. 29. Nov. 6. 27. Dec. 2. 11. 12. 17. 18. 29. Jan. 6. 13. 25.
 1925
 Feb. 2. 11. 19. 25. Mar. 2. 3. 12. 16. 17. 18.
 Total No. of visits **33.**

Dates of Examination of principal parts—Cylinders **15/10/24.** Slides **15/10/24.** Covers **15/10/24.**
 Pistons **15/10/24.** Piston Rods **15/10/24.** Connecting rods **17/10/24.**
 Crank shaft **17/10/24.** Thrust shaft **17/10/24.** Intermediate shafts **17/10/24.**
 Tube shaft **—** Screw shaft **12/11/24. + 17/12/24.** Propeller **23/1/25**
 Stern tube **6/1/25 23/1/25** Engine and boiler seatings **11/12/25.** Engines holding down bolts **11/2/25.**
 Completion of pumping arrangements **16/3/25** Boilers fixed **2/2/25** Engines tried under steam **16/3/25**
 Main boiler safety valves adjusted **16/3/25** Thickness of adjusting washers **5/16" both.**
 Crank shaft material **S.I.** Identification Mark **6885N** Thrust shaft material **Forged steel** Identification Mark **1095**
 Intermediate shafts, material **S.I.** Identification Marks **1095** Tube shaft, material **—** Identification Mark **J.D. 13.1.25**
 Screw shaft, material **S.I.** Identification Mark **6957** Steam Pipes, material **Copper** Test pressure **360 lb/sq. in.** Date of Test **30/1/25**
 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, the materials and workmanship are of good quality, it has been securely fitted on board and satisfactorily tried under full working conditions and it is eligible, in my opinion, for Record + LMC 3.25 in the Register Books.*

L. R. Horne.

It is submitted that
 this vessel is eligible for
THE RECORD + LMC 3.25.

Ans. J.W.D.
24/3/25

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

The amount of Entry Fee ... £ **3 :**
 Special ... £ **19 :**
 Donkey Boiler Fee ... £ :
 Travelling Expenses (if any) £ :
 When applied for. **21 MAR 1925**
 When received. **24/3/25**

Committee's Minute **TUES. 24 MAR 1925**
 Assigned **+ Lmc 3.25**

Engineer Surveyor to Lloyd's Register of Shipping.