

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 19 When handed in at Local Office 11 JULY 1928 Port of Sunderland

No. in Survey held at Sunderland Date, First Survey 24 Feb. 28 Last Survey 7 July 1928
 Reg. Book. on the Single Screw Steamer "AMBERTON" (Number of Visits 40) Gross 5377
 Tons Net 3245

Built at Sunderland By whom built Short Brothers Ltd Yard No. 431 When built 1928

Engines made at Sunderland By whom made Dickinson & Sons Ltd Engine No. 889 when made 1928

Boilers made at -do- By whom made -do- Boiler No. 889 when made 1928

Registered Horse Power Owners Rob Chapman & Son Port belonging to Newcastle

Nom. Horse Power as per Rule 380 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which Vessel is intended General cargo

ENGINES, &c.—Description of Engines Triple Expansion—Single Screw Revs. per minute 65

Dia. of Cylinders 22 1/2", 39", 68" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 13 3/4" Crank pin dia. 13 3/4" Crank webs Mid. length breadth 26 3/8" Thickness parallel to axis 8 5/8" Thickness around eye-hole 6 1/8" as fitted 13 3/4" Mid. length thickness 8 5/8" shrunk

Intermediate Shafts, diameter as per Rule 12 6/8" Thrust shaft, diameter at collars as per Rule 13 3/4" as fitted 13 3/4"

Tube Shafts, diameter as per Rule 14 1/2" Screw Shaft, diameter as per Rule 14 3/4" Is the tube shaft fitted with a continuous liner? Yes

Bronze Liners, thickness in way of bushes as per Rule 25 3/32" Thickness between bushes as per Rule 3 1/4" 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? Yes

Propeller, dia. 14 1/4" Pitch 16 1/4" No. of Blades 4 Material Bronze whether Movable No Total Developed Surface 100 sq. feet

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

Feed Pumps No. and size Two Weirs 4" x 9 1/2" x 2 1/2" Pumps connected to the Main Bilge Line No. and size One Ballast 9" x 11" x 10" How driven Steam

Ballast Pumps, No. and size One 9" x 11" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size

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 @ 3" dia. In Holds, &c. No. 1 Hold 2 @ 3" dia. No. 2 Hold 2 @ 3" dia. No. 3 Hold 2 @ 3" dia. No. 4 Hold 2 @ 3" dia. No. 5 Hold 2 @ 3" dia. No. 6 Hold 2 @ 3" dia. Tunnel Well 1 @ 2 1/4" dia.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 5" dia. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5" 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 lead 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 pass through the bunkers? None How are they protected? None

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 (S)) Total Heating Surface of Boilers 5460 sq. ft.

Is Forced Draft fitted? No No. and Description of Boilers Two Single Ended Marine Working Pressure 220 lbs

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 Main Boilers Yes Auxiliary Boilers Yes Donkey Boilers Yes

(If not state date of approval)

Superheaters Yes General Pumping Arrangements Yes (with Ship R/P) Oil fuel Burning Piping Arrangements Yes

SPARE GEAR. State the articles supplied:— C.I Propeller, Propeller Shaft, 6 coupling bolts & nuts, 2 Main Bearing bolts & nuts, 2 Top End bolts & nuts, 2 Bottom End bolts & nuts, 2 Feed Pump Valves, 2 Bilge Pump Valves & Seats, 100 Assorted Bolts & Nuts, 12 Gauge Glasses, 100 Condenser Ferrules, 1 cut of Bar Iron, 1 cut Steel Plate, 2 Feed Check Valves, 6 Cylinder Cover Studs, 6 Funck Ring bolts & nuts, 6 Condenser Tubes, 4 Ballast Donkey Valves, 2 Feed Donkey Valves, 6 Boiler Tubes, 1 Filter Basket, 24 Filter cartridges, 4 left, 4 Right & 4 Centre Baffle Plates

The foregoing is a correct description,
 for
 John Dickinson & Sons, Limited,
 Manufacturer.

[Signature]
 Director.



NOTE.—The records which do not apply should be deleted.

Dates of Survey while building
 During progress of work in shops -- 1928 Feb. 24, Mar. 2, 5, 8, 12, 28, Apr. 2, 3, 12, 17, 19, 30, May 1, 3, 8, 9, 18, 21, 23, 31, June 1, 4, 5, 6, 8, 9, 11, 12, 13, 15, 18, 19, 21, 22, 23, 26, July 2, 3, 6, 7
 During erection on board vessel ---
 Total No. of visits 40

Dates of Examination of principal parts—Cylinders 1-6-28, Slides 18-5-28, Covers 1-6-28.
 Pistons 12-4-28, Piston Rods 2-4-28, Connecting rods 5-3-28.
 Crank shaft 1-5-28, Thrust shaft 6-6-28, Intermediate shafts 11-6-28.
 Tube shaft ✓, Screw shaft W. 11-6-28, 2(S) 18-6-28, Propeller 12-6-28.
 Stern tube 4-6-28, Engine and boiler seatings 13-6-28, Engines holding down bolts 23-6-28.
 Completion of fitting sea connections 5-6-28.
 Completion of pumping arrangements 6-7-28, Boilers fixed 2-7-28, Engines tried under steam 26-6-28.
 Main boiler safety valves adjusted 26-6-28, Thickness of adjusting washers S.F. 11/32, S.A. 5/16, P.F. 5/16, P.A. 11/32, Superheater 5/16
 Crank shaft material Ingot Steel Identification Mark A.T.G. 1-5-28, Thrust shaft material Ingot Steel Identification Mark A.T.G. 6-6-28
 Intermediate shafts, material Ingot Steel Identification Marks A.T.G. 11-6-28, Tube shaft, material Identification Mark ---
 Screw shafts, material Ingot Steel Identification Marks A.T.G. 11-6-28, Steam Pipes, material Solid Drawn Steel Test pressure 660 LBS Date of Test 22-6-28
 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 vessels S/S "Brighton" & S/S "Riverton"

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, and satisfactorily fitted in the vessel, and is eligible in my opinion for classification, and the notation of **LMC 7, 28**.

It is submitted that this vessel is eligible for THE RECORD, + LMC 7-28 CL.

J.S.A.
 13/7/28
 A.P.R.

SUNDERLAND.

The amount of Entry Fee ... £ 5: :
 Special ... £ 82: :
 Donkey Boiler Fee ... £ 7: 18: :
 Travelling Expenses (if any) £ : :
 When applied for, 9 July 1928
 When received, 11 July 1928

A.T. Griffith,
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 17 JUL 1928

Assigned + J.A. 7:28 C.L.

