

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 19 Aug 1947 When handed in at Local Office 1 Aug 1947 Port of Sunderland
 No. in Survey held at "LAGOSIAN" Date, First Survey 19 Aug 46 Last Survey 28 31 July 1947
 Reg. Book (Number of Visits 61)
 on the
 Built at Sunderland By whom built Shipbuilding Co. (Hean Brand) Yard No. 11 Tons { Gross 5106.5
 Engines made at Bolton By whom made Dick Hargrave & Co. Engine No. E 156. Net 2908.34
 Boilers made at Sunderland By whom made G. Clark (1938) Ltd. Boiler No. 1361. When built 1944
 Registered Horse Power MN. 620 Owners United Africa Co. Ltd. When made
 Nom. Horse Power as per Rule 620 Is Refrigerating Machinery fitted for cargo purposes No. Port belonging to Liverpool
 Trade for which vessel is intended NHP 525 Is Electric Light fitted Yes.

Engines, &c.—Description of Engines (Please see Manchester Rpt. No. 11269)
 Dia. of Cylinders 23 1/2 - 34 1/2 - 68 Length of Stroke 48 No. of Cylinders Revs. per minute
 Crank shaft, dia. of journals as per Rule 13 3/4 Crank pin dia. - No. of Cranks
 Intermediate Shafts, diameter as fitted 13" Mid. length breadth - Thickness parallel to axis -
 Tube Shafts, diameter as fitted - Crank webs Mid. length thickness - shrunk Thickness around eye-hole -
 Thrust shaft, diameter at collars as per Rule 13 3/4 as fitted
 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 3/4 Thickness between bushes as fitted 1/16 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. One length.
 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
 Propeller, dia. 14' 10 1/2 Pitch 10' 27" 1/4 No. of Blades 4 Material Bronze Length of Bearing in Stern Bush next to and supporting propeller 4' 11" whether Moveable No. Total Developed Surface 114 sq. feet
 Feed Pumps worked from the Main Engines, No. - Diameter - Stroke - Can one be overhauled while the other is at work.
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 24" Can one be overhauled while the other is at work. Yes.
 Feed Pumps { No. and size 2 @ 4" x 9 1/2" x 21" Pumps connected to the Main Bilge Line { No. and size 2 @ 8" x 5 1/2" x 8" + Ballast Pump.
 How driven Steam How driven Steam
 Ballast Pumps, No. and size 1 @ 4" x 12" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size -
 Are two independent means arranged for circulating water through the Oil Cooler -
 Bilge Pumps: - In Engine and Boiler Room 3 @ 3 1/4" E.R. 2 @ 3" in Bld. Room Suctions, connected both to Main Bilge Pumps and Auxiliary in Pump Room Tunnel well 2 1/2"
 N° 4. 2 1/2" φ 15. N° 5. 3" φ 15. N° 6. 2 1/2" φ 15. In Holds, &c. N° 1. 3" φ 15. N° 2. 3" φ 15. N° 3. 3" φ 15.
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 5" Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges.
 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 fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates. Yes.
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel. Yes.
 That Pipes pass through the bunks. None Are the Blow Off Cocks fitted with a spigot and brass covering plate. Yes.
 That pipes pass through the deep tanks. In hold bilge suction How are they protected. -
 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.

IN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers Main 5914 sq. ft. Aux. 1914 sq. ft. Superheaters 2100 sq. ft.
 Which Boilers are fitted with Forced Draft All.
 Which Boilers are fitted with Superheaters Yes.
 Working Pressure 220 lbs.
 A REPORT ON MAIN BOILERS NOW FORWARDED? British Corporation Certificate.
 A DONKEY BOILER FITTED? Yes. If so, is a report now forwarded? British Corp. Cert.
 Are approved plans forwarded herewith for Shafting. Main Boilers Yes Auxiliary Boilers Yes Donkey Boilers -
 (If not state date of approval)
 General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements Yes.
 SPARE GEAR.
 Is the spare gear required by the Rules been supplied. Yes.
 Is the principal additional spare gear supplied.

The foregoing is a correct description.

GEORGE CLARK (1938) LTD.

A. J. Schaeffer, Manager
RESIDENT MANAGER

© 2021

Lloyd's Register
Foundation

010705 - 010711 - 0086

During progress of work in shops - 1946 Aug 19, 26 Dec 3, 23.
 Dates of Survey while building - 1947 Jan 22, 23, 24, 27, 30 Feb 4, 6, 11, 13, 24, 27, Mar 4, 7, 10, 11, 12, 24, 26, 27, 31 Apr 2, 3, 15, 17, 18, 28, 29, 30 May 6, 7, 8, 12, 15, 19, 20, 21, 22, 23, 28, 29 June 3, 5, 9, 11, 12, 13, 16, 17, 18, 23, 24, 30 July 2, 15, 17, 29, 31
 During erection on board vessel -
 Total No. of visits 61

Dates of Examination of principal parts - Cylinders - Slides - Covers -
 Pistons - Piston Rods - Connecting rods -
 Crank shaft - Thrust shaft 17/4/47 Intermediate shafts 17/4/47 6/5/47
 Tube shaft - Screw shaft 17/4/47 Propeller 17/4/47 11/6/47
 Stern tube 28/3/47 Engine and boiler seatings 11/6/47 Engines holding down bolts 11/6/47
 Completion of fitting sea connections 15/4/47 Boilers fixed 11/6/47 Engines tried under steam R 3/8" S 3/8" 5/16" R 3/8" S 3/8" 5/16"
 Completion of pumping arrangements 14/4/47 + 18/7/47 Thickness of adjusting washers P. Bl. 3.7/16" S. Bl. 3.7/16" 5/16" 5/16"
 Main boiler safety valves adjusted 15/7/47 Identification Mark See below Thrust shaft material S.D. Steel Identification Mark See below
 Crank shaft material S.D. Steel Identification Mark See below Tube shaft material S.D. Steel Identification Mark See below
 Intermediate shafts, material S.D. Steel Identification Mark See below Steam Pipes, material S.D. Steel Test pressure 660 lbs Date of Test 29/5/47, 3/6/47
 Screw shaft, material S.D. Steel Identification Mark See below Is the flash point of the oil to be used over 150° F. Yes.
 Is an installation fitted for burning oil fuel Yes.
 Have the requirements of the Rules for the use of oil as fuel been complied with Yes.
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo Vegetable oil in deep tank If so, have the requirements of the Rules been complied with Yes.
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with Not desired.
 Is this machinery duplicate of a previous case. If so, state name of vessel.
 General Remarks (State quality of workmanship, opinions as to class, &c.)

This machinery has been securely fitted on board the vessel & tried under working conditions with satisfactory results. The requirements of the Specification have been fulfilled.
 It is eligible in my opinion to have notation
 L.M.C. 4.44, T.S (C.L), 2 SB (Spt), 1 Aux. 220 lbs., fitted for oil fuel (F.P. above 150°) 4.44.

Note: Full lengths of intermediate shafting, Thrust Shaft & Screw Shaft have delivered to Messrs Black & Co as "free issue".
 Identification marks are as follows:
 Intermediate shafting: 20698 B.1. S. 1984 N.K. } 13/12/43. one length
 21580 A.1. S. 3240 N.K. }
 21455 B. S. 2913 N.K. }
 21583 A.1. S. 3243 N.K. }
 21239 C.1 S. 3434 N.K. }
 Thrust Shaft: L.R. 21223 A.1. S. 2531 J.S.C. 5/4/43.
 Tail Shaft: L.R. 21621 A. S. 3484 J.S.C. 5/4/43.

Certificate to be sent to SUNDERLAND.

The amount of Entry Fee ... £ 21 : 4 :
 1/5 Special Specification ... £ 5 : 6 :
 Donkey Boiler Fee (25%) ... £ : :
 Travelling Expenses (if any) ... £ : :
 When applied for, AUG 11 1947
 When received, 19

J. H. Law.
 Engineer Surveyor to Lloyd's Register of Shipping

Date 26 SEP 1947
 Committee's Minute LMC 7.47
 FITTED FOR OIL FUEL 7.47 FLASH POINT ABOVE 160°F. F.D. C.L. 2 SB 220lb (Spt) 1 Aux SB 220lb F.D.