

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 10 When handed in at Local Office 10 NOV 1942 Port of Sunderland 18 NOV 1942
 No. in Survey held at Sunderland Date, First Survey 11 June Last Survey 9 Nov 1942
 Reg. Book. on the "MIDDLESEX TRADER" (Number of Visits 38)
 Built at Sunderland By whom built J. L. Thompson & Co. Ld. Yard No. 621 Tons Gross 7241 Net 4291
 Engines made at Sunderland By whom made G. Clark (1938) Ld. Engine No. 1269 When built 1942
 Boilers made at Sunderland By whom made G. Clark (1938) Ld. Boiler No. 1269 When made 1942
 Registered Horse Power Owners Traders Navigation Co. Ld. Port belonging to London.
 Nom. Horse Power as per Rule 513 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.
 Trade for which Vessel is intended

ENGINES, &c.—Description of Engines

Triple Expansion
 Dia. of Cylinders 24 1/2" - 39" - 40" Length of Stroke 48" No. of Cylinders 3. Revs. per minute 3.22
 Crank shaft, dia. of journals as per Rule 13.99 as fitted 14 1/4" Crank pin dia. 14 3/4" No. of Cranks 3. Thickness parallel to axis 9". Thickness around eye-hole 6 3/8".
 Intermediate Shafts, diameter as per Rule 13.33 as fitted 13 5/8" Thrust shaft, diameter at collars as per Rule 14 1/4" as fitted 14 1/4".
 Tube Shafts, diameter as per Rule 14.84 as fitted 15 1/4" Is the tube screw shaft fitted with a continuous liner? Yes.
 Bronze Liners, thickness in way of bushes as per Rule 25/32 as fitted 25/32 Thickness between bushes as per Rule 3/4 as fitted 3/4 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 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 aft? No. If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 5'-1" whether Moveable No. Total Developed Surface 117 sq. feet
 Propeller, dia. 18'-0" Pitch 15'-0" No. of Blades 4 Material C.I. Can one be overhauled while the other is at work? Yes.
 Feed Pumps worked from the Main Engines, No. Two Diameter 4" Stroke 24" Can one be overhauled while the other is at work? Yes.
 Bilge Pumps worked from the Main Engines, No. Two 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 1 @ 8" x 6" x 15" Ballast pump. How driven Steam.
 Ballast Pumps, No. and size 1 @ 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 2 @ 3" on Side + 1 @ 3" St. Side E. Room 1 @ 2" on Thrust room + 1 @ 2" on Thrust well.
 In Pump Room No. 5. 1 @ 4" aft. In Holds, &c. No. 1, 2, 3, x lumber, + No. 4 Hold 3" p/s. well.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 9" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5" 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? Ball.
 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? Below.
 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? In Hold bilge Suction How are they protected? Head casing.
 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? Yes. Is it fitted with a watertight door? No. Bilge. worked from -

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 5554 sq (main) + 1486 sq (aux.) = 7040 total
 Which Boilers are fitted with Forced Draft All. Which Boilers are fitted with Superheaters none.
 No. and Description of Boilers 2 S.B. + 1 aux. (F.D.) Working pressure 220 lb/sq.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes.
 IS A DONKEY BOILER FITTED? Yes. If so, is a report now forwarded? Yes.
 Can the donkey boiler be used for domestic purposes only

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.
 Has the spare gear required by the Rules been supplied? Yes.
 State the principal additional spare gear supplied

The foregoing is a correct description.

GEORGE CLARK (1938) LTD.

Archd. J. Berry.
DIRECTOR & GENERAL MANAGER.

Manufacturer.



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Lloyd's Register
Foundation

013139-013150-0243

1942 June 11, 12, 25, 30, July 3, 7, 10, 13, 17, 24, 26, 27, 28, 30, 31, Aug. 4, 6, 7, 18, 19, 20, 21, 24, 25, 26, 27, 28, 31, Sep. 1, 2, 14, 15, 16, 17, 28, Oct. 14, Nov. 3, 9

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - -

Total No. of visits 38

Dates of Examination of principal parts—Cylinders 21/8/42. HP. 4 LP 24/4/42 M.P. 31/4/42 Slides 28/8/42. Covers 12/6/42

Pistons 21/8/42. Piston Rods 4/8/42 Connecting rods 28/8/42

Crank shaft 20/4/42 Thrust shaft 25/6/42. Intermediate shafts 3/9/42.

Tube shaft - Screw shaft 31/8/42. Propeller 28/8/42.

Stern tube 31/8/42 Engine and boiler seatings 14/9/42. Engines holding down bolts 14/9/42.

Completion of fitting sea connections 24/8/42.

Completion of pumping arrangements 9/11/42 Boilers fixed 14/9/42. Engines tried under steam 16/10/42.

Main boiler safety valves adjusted 16/10/42. Thickness of adjusting washers P.C. Bh. 5.5/16. Aux. Bh. 5.3/8. St. Bh. 5.7/16.

Crank shaft material Ingot Steel Identification Mark N° 8490/12/3/4/5/16 W.H.F. 20/4/42 Thrust shaft material Ingot Steel Identification Mark N° 8488 W.H.F. 25/6/42

Intermediate shafts, material Ingot Steel Identification Marks 31/9/42 Tube shaft, material - Identification Mark -

Screw shaft, material Ingot Steel Identification Mark 31/8/42. Steam Pipes, material S.D. Steel Test pressure 660 lb. Date of Test 28/9/42.

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 the use of oil as fuel been complied with -

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No. If so, have the requirements of the Rules been complied with -

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with Not decided.

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 built under Special Survey in accordance with the approved Plans & the rules of the Society. The materials & workmanship are good. It has been securely fitted on board the vessel & tried under working conditions alongside Quay with satisfactory results & is eligible in my opinion to have notation 20 L.M.C. 11.42, T.S (CL) 2 SB, 1 Aux. (FD) 220 lb/o.

The amount of Entry Fee ... £ 6 : - : When applied for, 13 NOV 1942

Special £ 88 : 15 : When received, 19

Donkey Boiler Fee £ : : Travelling Expenses (if any) £ : :

Committee's Minute

Assigned

W. H. K. R. R.

Engineer Surveyor to Lloyd's Register of Shipping.

FRI 27 NOV 1942



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