

No. 102876

Rpt. 4.

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

29 MAY 1945

Date of writing Report 19 When handed in at Local Office 26.5.45 Port of NEWCASTLE-ON-TYNE

No. in Survey held at South Shields Date, First Survey (1944) May 25 Last Survey April 30 1945
(Number of Visits 11)

Reg. Book 91964 on the S.S. SHAHRISTAN Tons (Gross 7309.41 Net 5138.71)

Built at South Shields By whom built J. Readhead & Sons Ltd Yard No. 544 When built 1945

Engines made at South Shields By whom made J. Readhead & Sons Ltd Engine No. 544 When made 1945

Boilers made at South Shields By whom made J. Readhead & Sons Ltd Boiler No. 544 When made 1945

Registered Horse Power 510 Owners Strick Line (1922) Ltd Port belonging to London

Nom. Horse Power as per Rule 510 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 Revs. per minute 76
Dia. of Cylinders 24 1/2 x 37 x 70 Length of Stroke 48 No. of Cylinders 3 No. of Cranks 3
Crank shaft, dia. of journals 14 1/4 as per Rule 14 Crank pin dia. 14 1/4 Crank webs 2-4 1/2 Mid. length breadth 2-4 1/2 Thickness parallel to axis 9-9 1/2
Intermediate Shafts, diameter 13.33 as per Rule 14 Thrust shaft, diameter at collars 14 1/4 as fitted 14 1/4
Tube Shafts, diameter 13 5/8 as fitted 13 5/8 Screw Shaft, diameter 14.95 as per Rule 14.95 as fitted 15 1/4 Is the tube shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes .765 as per Rule .765 Thickness between bushes .812 as fitted .812 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 Yes

Propeller, dia. 18-3 Pitch 15.46 No. of Blades 4 Material C.I. whether Moveable No Length of Bearing in Stern Bush next to and supporting propeller 5-1
Feed Pumps worked from the Main Engines, No. 2 Diameter 4 1/2 Stroke 26 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 26 Can one be overhauled while the other is at work Yes

Feed Pumps { No. and size (2) 7 x 9 1/2 x 21 (1) 7 x 9 1/2 x 21 Pumps connected to the Main Bilge Line { No. and size (1) 10 1/2 x 13 x 24 (1) 7 x 9 1/2 x 21 How driven Steam How driven Steam
Ballast Pumps, No. and size (1) 10 1/2 x 13 x 24 Lubricating Oil Pumps, including Spare Pump, No. and size 1
Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Yes

Bilge Pumps:—In Engine and Boiler Room 3-3 dia In Pump Room 1-1 dia In Holds, &c. N 1 hold 2-3 dia N 2 hold 2-3 dia N 3 hold 2-3 dia
Deep tank 2-2 1/2 dia Boiler room 1-2 1/2 dia Tunnel well 1-2 1/2 dia N 5, 6 holds 2-3 dia

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 9 dia Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 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-borers, 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 2 on side W.B.T. 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 Bilge How are they protected Wood casing
What pipes pass through the deep tanks Bilge 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 No worked from Yes

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 7248 sq
Which Boilers are fitted with Forced Draft 3 Main Which Boilers are fitted with Superheaters 3 Main
No. and Description of Boilers 3 Main S.E.M. Working Pressure 220 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? Yes

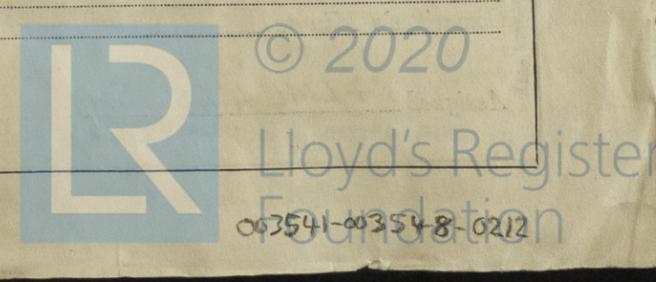
Can the donkey boiler be used for domestic purposes only Yes
PLANS. Are approved plans forwarded herewith for Shafting 20-10-43 Main Boilers 11-7-44 Auxiliary Boilers Yes Donkey Boilers Yes
(If not state date of approval)

Superheaters 14-6-44 General Pumping Arrangements 6-1-45 Oil fuel Burning Piping Arrangements 6-1-45

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

6-1-45
01 001

The foregoing is a correct description.
FOR JOHN READHEAD & SONS, LTD.
J.M. Coatsworth Manufacturer.
Director.



During progress of work in shops - - (1944) May 25, June 29, July 31, Aug 8, 29, Sept. 6, 13, 19, 25, Oct. 4, 5, 9, 13, 20, 25, 27, Nov. 1, 2, 6, 7, 9, 10, 11, 14, 16, 17, 20, 21, 23, 27, 28, 29, 30 Dec. 1, 4, 6, 8, 13, 14, 15, 18, 20, 22, 27, 28, 29 (1945) Jan. 3, 4, 5, 8, 9, 10, 12, 16, 17, 19, 23, 24, 25, 26, 30, 31 Feb. 2, 5, 6, 7, 12, 13, 14, 15, 16, 19, 20, 21, 22, 26, 27, 28, 29, 30, 31 Mar. 1, 5, 6, 7, 9, 12, 14, 15, 16, 21, 22, 23, 26, 28, 30 April 3, 4, 10, 11, 12, 17, 18, 19, 20, 21, 23, 26, 30

Dates of Survey while building During erection on board vessel - - -
 Total No. of visits 111

Dates of Examination of principal parts—Cylinders 27-2-45 Slides 20-2-45 Covers 27-2-45
 Pistons 26-2-45 Piston Rods 27-2-45 Connecting rods 27-2-45
 Crank shaft 16-1-45 Thrust shaft 21-4-45 Intermediate shafts 21-4-45
 Tube shaft ✓ Screw shaft 16-2-45 Propeller 16-2-45
 Stern tube 15-2-45 Engine and boiler seatings 21-3-45 Engines holding down bolts 10-4-45
 Completion of fitting sea connections 26-2-45 Engines tried under steam 21-28-30 4-45
 Completion of pumping arrangements 21-4-45 Boilers fixed 21-3-45 Thickness of adjusting washers P/P-1/32" C/P-3/8" S/P-3/8"
 Main boiler safety valves adjusted 21-4-45
 Crank shaft material S.W. Steel Identification Mark 8892 L.R.J.H. Thrust shaft material S.W. Steel Identification Mark 9194 L.R.J.
 Intermediate shafts, material S.W. Steel Identification Marks 9195 9198 9196 9199 9197 9200 Tube shaft, material ✓ Identification Mark 20-8-44
 Screw shaft, material S.W. Steel Identification Mark 9201 Steam Pipes, material S.W. Steel Test pressure 660 lb Date of Test 12-19-21/24
 Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150° F. 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 ✓ 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 ✓
 Is this machinery duplicate of a previous case No If so, state name of vessel C Blue Type

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The machinery of this vessel has been constructed under special survey in accordance with rule requirements & approved plans. Materials and workmanship are good. The machinery was satisfactorily tested on mooring & river trials in my opinion is eligible for classification with records of + L.M.C.4, F.D.C.L. 3 S.B. (S/F) Fitted for oil fuel 4, 45 F.P. above 150° F.

The amount of Entry Fee ... £ 6 : 0 : When applied for, 28 MAY 1945
 Special £ 100 : 10 :
 Donkey Boiler Fee £ ✓ : ✓ : When received,
 Travelling Expenses (if any) £ ✓ : ✓ : 19

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

Committee's Minute FRI. 22 JUN 1945
 Assigned + LMC 4.45 Spt.
 FITTED FOR OIL FUEL 4.45 FLASH POINT ABOVE 150° F. F.D. C.L.

