

RECEIVED

No. 24395

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 10 MAY 1951

Writing Report 28th APRIL 1951 When handed in at Local Office 3rd MAY 1951 Port of GREENOCK

Survey held at GREENOCK Date, First Survey 20th FEBRUARY 1948 Last Survey 6th APRIL 1951
(Number of Visits 4)

on the S.S. JAG RANI

at VIZAGAPATAM By whom built SCINDIA STR. NAV. CO. LD. Yard No. UC 108 When built

Engines made at GREENOCK By whom made JOHN G. KINCAID & CO. LTD. Engine No. 794 When made 1951

Boilers made at do By whom made do Boiler No. 794 When made 1951

Registered Horse Power Owners SCINDIA STR. NAV. CO. LD. Port belonging to

Horse Power as per Rule 524 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

for which vessel is intended OPEN SEA SERVICE

Engines Description of Engines Inverted Triple expansion Revs. per minute 68.5

Cylinders 24 1/2 - 41 - 70 Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3

shaft, dia. of journals as per Rule 13.9" Crank pin dia. 14.25" Mid. length breadth 1-8 1/2" Thickness parallel to axis 8 3/4"

as fitted 14.25" Crank webs Mid. length thickness 8 3/4" shrunk Thickness around eye-hole 6 3/8"

Intermediate Shafts, diameter as per Rule 13.33" Thrust shaft, diameter at collars as per Rule 13.9"

as fitted 13.625" as fitted 14.25"

Shafts, diameter as per Rule 14.809" Screw Shaft, diameter as per Rule 16.375" Is the shaft fitted with a continuous liner Yes

as fitted Liners, thickness in way of bushes as per Rule .752" Thickness between bushes as per Rule .563" Is the after end of the liner made watertight in the

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

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

liners are fitted, is the shaft lapped or protected between the liners One liner Is an approved Oil Gland or other appliance fitted at the after end of the tube

No If so, state type Length of Bearing in Stern Bush next to and supporting propeller 5'2"

Propeller, dia. 17'9" Pitch 17'8" No. of Blades 4 Material Bronze whether Moveable Yes Total Developed Surface 91 sq. feet

Pumps worked from the Main Engines, No. 2 Diameter 4 1/2" Stroke 24" Can one be overhauled while the other is at work Yes

Pumps worked from the Main Engines, No. 2 Diameter 4 1/2" Stroke 24" Can one be overhauled while the other is at work Yes

No. and size Three 7-9 1/2" Pumps connected to the Main Bilge Line No. and size Two 24" x 4 1/2" One 200 lms/hr 9 One 100 lms/hr

How driven Steam Main engine Steam

Pumps, No. and size One 200 lms/hr Lubricating Oil Pumps, including Spare Pump, No. and size

Independent means arranged for circulating water through the Oil Cooler Suctions, connected both to Main Bilge Pumps and Auxiliary

Pumps: In Engine and Boiler Room In Holds, &c.

Water Circulating Pump Direct Bilge Suctions, No. and size 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

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

Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

Pipes pass through the bunkers How are they protected

Pipes pass through the deep tanks Have they been tested as per Rule

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers 7563

Boilers are fitted with Forced Draft All Which Boilers are fitted with Superheaters None

Description of Boilers Three cylindrical SE Working Pressure 220 lb

REPORT ON MAIN BOILERS NOW FORWARDED? Yes

DONKEY BOILER FITTED? No If so, is a report now forwarded? Yes

Can a donkey boiler be used for other than domestic purposes 16-9-47 6-8-47

Are approved plans forwarded herewith for Shafting 31-10-47 Main Boilers 7-10-47 Auxiliary Boilers Donkey Boilers

General Pumping Arrangements 9/9/48 Oil fuel Burning Piping Arrangements

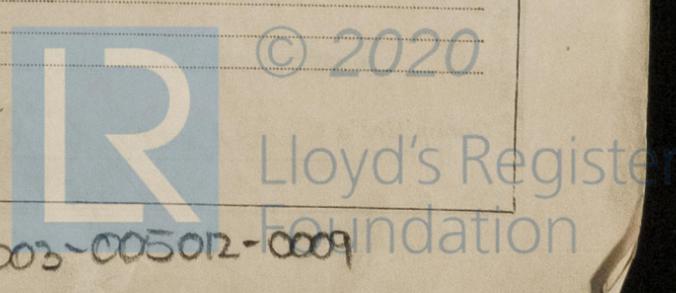
SPARE GEAR.

Is spare gear required by the Rules been supplied Yes

Is the principal additional spare gear supplied

JOHN G. KINCAID & COY. LIMITED. The foregoing is a correct description.

Chief Draughtsman. Manufacturer.



005003-005012-0009

4. 24395.

Dates of Survey while building
 During progress of work in shops -- (1948) FEB. 20. (1949) FEB. 8. 11. APRIL 28. JUNE 14. 16. 20. JULY 25. AUG. 29. SEPT. 1. 13. 26. (1950) JAN. 11. FEB. 6. JULY 28. AUG. 2. 6.
 (1951) NOV. 10. 17. 23. 27. DEC. 11. (1951) JAN. 11. 18. 22. 24. 26. FEB. 6. 23. 26. 27. MAR. 1. 6. 8. 13. 14. 15. 20. 22. 23. 27. 28. 29. APRIL 2. 6.
 During erection on board vessel ---
 Total No. of visits 44

Dates of Examination of principal parts—Cylinders 22-1-51 Slides 29-3-51 Covers 22-1-51
 Pistons 29-3-51 Piston Rods 29-3-51 Connecting rods 29-3-51
 Crank shaft 29-3-51 Thrust shaft 29-3-51 Intermediate shafts 23-3-51
 Tube shaft ✓ Screw shaft 29-3-51 Propeller 29-3-51
 Stern tube 23-3-51 Engine and boiler seatings ✓ Engines holding down bolts ✓
 Completion of fitting sea connections ✓
 Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam ✓
 Main boiler safety valves adjusted ✓ Thickness of adjusting washers ✓
 Crank shaft material S Identification Mark 18178 CHH 29/3/51 Thrust shaft material S Identification Mark 1795 CHH
 Intermediate shafts, material S Identification Marks 18178 CHH 29/3/51 Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material S Identification Mark 18178 CHH 29/3/51 Steam Pipes, material S05 Test pressure Date of Test
 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. 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. Yes If so, state name of vessel Greenock FE of N° 24232

General Remarks (State quality of workmanship, opinions as to class, &c.)
 This engine has been constructed under Special Survey in accordance with the Rules and approved plans. The materials & workmanship are sound & good.
 The engine & boilers complete with steam pipes (flanges loose) all valves, cocks & pumps have been shipped to VIZACAPATAM to be unrolled in the vessel.
 This machinery will be eligible in my opinion to be Classed in the Society's Record book with Record + LMC with date & Notation Screw shaft CL. 3SBs 225 when the installation is completed.
 Certificates common to this engine and 795/6 to follow will be forwarded on completion of the Contract

Certificate to be sent to _____

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

4/5 of \$179-16	16.8.		
The amount of Entry Fee ...	£ 143 - 6 - 6	When applied for,	3RD MAY 1951
Special ...	£ :	When received,	19
Donkey Boiler Fee ...	£ :		
Travelling Expenses (if any) ...	£ :		

Check J. Hunter
 Engineer Surveyor to Lloyd's Register of Shipping

Date GLASGOW 19 MAY 1951
 FRI. 18 JUL 1952

Committee's Minute deferred for Completion

See F.E. mchys rpt. Cal.

