

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 18 SEP 1925

Date of writing Report 7<sup>th</sup> Aug 1925 When handed in at Local Office 1<sup>st</sup> Sept. 1925 Port of WEST HARTLEPOOLNo. in Survey held at West Hartlepool Date, First Survey 21<sup>st</sup> January Last Survey 9<sup>th</sup> September 1925  
Reg. Book. on the S.S. "KIWITEA" (Number of Visits 71) Tons } Gross  
Net

Built at West Hartlepool By whom built Wm Gray & Co. Ltd. Yard No. 975 When built 1925  
Engines made at ditto By whom made Central Marine Engine Works Engine No. 975 when made 1925  
Boilers made at ditto By whom made Engine Works Boiler No. 975 when made 1925  
Registered Horse Power Owners Union S.S. Co. Ltd of New Zealand Port belonging to Wellington N.Z.  
Nom. Horse Power as per Rule 274 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes  
Trade for which Vessel is intended Ocean going

ENGINES, &c.—Description of Engines Triple expansion  
Dia. of Cylinders 20½-33½-55 Length of Stroke 39 No. of Cylinders 3 Revs. per minute 3  
Crank shaft, dia. of journals as per Rule 10.95 as fitted 11 3/4 Crank pin dia. 11 3/4 Crank webs Mid. length breadth 16 5/8 Mid. length thickness 6 5/8 Thickness parallel to axis 6 7/8 Thickness around eye-hole 4 1/16  
Intermediate Shafts, diameter as per Rule 10.43 as fitted none Thrust shaft, diameter at collars as per Rule 10.95 as fitted 11 3/4  
Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 11.615 as fitted 12 Is the shaft fitted with a continuous liner yes  
Bronze Liners, thickness in way of bushes as per Rule .665 as fitted 3/32 Thickness between bushes as per Rule .49 as fitted 7/16 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 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 Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft no Length of Bearing in Stern Bush next to and supporting propeller 4'-6" Total Developed Surface 63 sq. feet  
Propeller, dia. 14'-3" Pitch 12'-3" No. of Blades 4 Material Bronze whether Moveable no Can one be overhauled while the other is at work yes  
Feed Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 26" Can one be overhauled while the other is at work yes  
Bilge Pumps worked from the Main Engines, No. 2 Diameter 3½" Stroke 26" Can one be overhauled while the other is at work yes  
Feed Pumps No. and size 2 Main 5x26, 16 S. 7½x5x6 duplex Pumps connected to the Main Bilge Line No. and size 2 Main 3½x26, 1 Ball 9x10½x10 duplex How driven steam  
Ballast Pumps, No. and size 1 9x10½x10 duplex Lubricating Oil Pumps, including Spare Pump, No. and size 1  
Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary  
Bilge Pumps;—In Engine and Boiler Room 3 of 2½ In Holds, &c. no 1 2 of 2½ no 2 2 of 4

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 of 6 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 of 4 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 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 are carried through the bunkers none How are they protected  
What pipes pass through the deep tanks 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 none Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 5076 square feet  
Is Forced Draft fitted no No. and Description of Boilers 2 single ended Working Pressure 190 lbs  
IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes  
IS A DONKEY BOILER FITTED? no If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers  
(If not state date of approval)

Superheaters General Pumping Arrangements yes Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—2 bolts & nuts for Con. Rod top ends, 2 ditto bottom ends, 2 ditto main bearings, 1 set coupling ditto, 1 set feed & bilge pump valves, 1 set piston springs, 1 piston rod, 1 slide rod, 1 pair crank pin bearings, 1 main bearing, 1 crank web, 1 crank body part, 1 crank pin, 1 set packing rings for H.P. M.P. & L.P. pistons, 1 air pump rod, 1 propeller shaft, 1 propeller, 1 feed pump ram, 8 fibre valves for circulating pump, 8 rubber valves for ballast pump, 1 set piston rings for donkey feed pump, 24 Condenser tubes, 12 boiler tubes, Assorted bolts, nuts, and iron.

The foregoing is a correct description,

FOR THE CENTRAL MARINE ENGINE WORKS,

(W. Gray &amp; Co. Ltd.)

Manufacturer.

MANAGER DIRECTOR, C.M.E.W.



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Lloyd's Register  
Foundation

002260-002268-0177



1925  
 Jan. 21 Feb. 16. 18. 23. Mar. 4. 9. 13. 17. 19. 24. 26. 31. Apr. 1. 3. 7. 9. 15. 16. 17. 20. 21. 23. 24. 27. 28. 29. 30. May 1. 4. 5.  
 11. 13. 14. 21. 22. 25. 27. 28. 29. Jun. 3. 4. 5. 9. 10. 11. 18. 19. 19. 22. 22. 27. July. 1. 3. 7. 8. 16. 16. 22. 23. 28. 29. Aug. 1.  
 27. Sep. 2. 4. 8. 9.  
 Total No. of visits 71.

Dates of Examination of principal parts—Cylinders 13. 3. 25—8. 5. 25 Slides 5. 5. 25—8. 5. 25 Covers 1. 4. 25—8. 5. 25  
 Pistons 27. 4. 25—28. 5. 25 Piston Rods 1. 4. 25—22. 5. 25 Connecting rods 16. 2. 25—22. 5. 25  
 Crank shaft 9. 4. 25—11. 5. 25 Thrust shaft 31. 3. 25—11. 5. 25 Intermediate shafts —  
 Tube shaft — Screw shaft 20. 4. 25—18. 6. 25 Propeller 22. 6. 25  
 Stern tube 9. 4. 25—22. 6. 25 Engine and boiler seatings 27. 6. 25 Engines holding down bolts 23. 7. 25  
 Completion of pumping arrangements 23. 7. 25. Boilers fixed 23. 7. 25. Engines tried under steam 27. 8. 25  
 Main boiler safety valves adjusted 27. 8. 25. Thickness of adjusting washers P.P. 1 1/2" S 5/16" S.P. 5/16" S 1 1/2".  
 Crank shaft material Ingot steel Identification Mark 7656 Thrust shaft material Ingot steel Identification Mark 7655  
 Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark  
 Screw shaft, material Ingot steel Identification Mark 7582 Steam Pipes, material L.W. steel Test pressure 600 lbs Date of Test 6. 5. 25  
 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 yes If so, state name of vessel "Kartigi"

General Remarks (State quality of workmanship, opinions as to class, &c.)  
 A surface feed heater fitted, the coils & header of which were tested at 450lb and the body to 400lb.  
 This vessel's machinery has been built and installed under special survey. The materials and workmanship are good and efficient.  
 On completion it was tried under working conditions under full steam, with satisfactory results and is now eligible to have the notation L.M.C.9.

It is submitted that  
 this vessel is eligible for  
 THE RECORD + LMC 9.25. CL

W.D.  
 2/9/25.  
 J.R.R.

The amount of Entry Fee ... £ 4 : - :  
 Special ... £ 66 : 2 :  
 Donkey Boiler Fee ... £ — :  
 Travelling Expenses (if any) £ — :  
 When applied for, 17. 9. 19. 25.  
 When received, 22. 9. 19. 25.

R.D. Shilstone W.H. Roberts  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUES. 22 SEP 1925

Assigned

+ Lmb. 9.25 L

CERTIFICATE WRITTEN



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