

Rpt. 4.

No. 82224

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report

19

When handed in at Local Office

7.1. 1928 Port of

NEWCASTLE-ON-TYNE

No. in Survey held at SOUTH SHIELDS

Date, First Survey 27 April

Last Survey 2 Jan 1928

Reg. Book.

(Number of Visits 39)

on the S.S. "KIRNWOOD"

Gross 3741

Tons Net 2272

When built 1928-1

Built at SOUTH SHIELDS By whom built John Readhead & Sons Ltd.

Yard No. 487

Engines made at SOUTH SHIELDS By whom made John Readhead & Sons Ltd. Engine No. 487 when made 1928

Boilers made at SOUTH SHIELDS By whom made John Readhead & Sons Ltd. Boiler No. 487 when made 1928

Registered Horse Power Owners Joseph Constantine Steamship Line Ltd Port belonging to MIDDLES BROUGH

Nom. Horse Power as per Rule 334 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 Surface-Condensing* Revs. per minute 65

Dia. of Cylinders $22\frac{1}{2}$ 37 6 1/2 Length of Stroke 45 No. of Cylinders three No. of Cranks three

Crank shaft, dia. of journals as per Rule 12.458 Crank pin dia. 12 1/2 Mid. length breadth 17 Thickness parallel to axis 8 3/8

as fitted 12 1/2 Crank webs Mid. length thickness 8 3/8 shrunk Thickness around eye-hole 5 1/2

Intermediate Shafts, diameter as per Rule 11.865 Thrust shaft, diameter at collars as per Rule 12.458

as fitted 12 as fitted 12 1/2

Tube Shafts, diameter as per Rule — Screw Shaft, diameter as per Rule 13.219 Is the *tube* shaft fitted with a continuous liner { yes

as fitted — as fitted 13 1/4 as per Rule 5.27 as fitted 3/4 Is the after end of the liner made watertight in the

Bronze Liners, thickness in way of bushes as per Rule 702 Thickness between bushes as per Rule 5.27 Is the after end of the liner made watertight in the

as fitted 3/4 as fitted 3/4

propeller boss *Rubber ring fitted* If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

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 shaft no Length of Bearing in Stern Bush next to and supporting propeller 4-7

Propeller, dia. 16-3 Pitch 16-3 No. of Blades four Material *Cast Iron* whether Moveable *Solid* Total Developed Surface 81 sq. feet

Feed Pumps worked from the Main Engines, No. two Diameter 3 1/2 Stroke 24 Can one be overhauled while the other is at work yes

Bilge Pumps worked from the Main Engines, No. two Diameter 4 3/8 Stroke 24 Can one be overhauled while the other is at work yes

Feed Pumps { No. and size 1 direct-acting 8x6x18 Pumps connected to the { No. and size Ballast pump

{ How driven steam Main Bilge Line { How driven Steam

Ballast Pumps, No. and size one duplex 9x11x10 Lubricating Oil Pumps, including Spare Pump, No. and size

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 three 2 3/4

In Holds, &c. No 1 two 3 No 2 two 3 1/4 No 3 two 2 3/4 No 4 two 2 3/4 Tunnel well, one 2 1/2

Main Water Circulating Pump Direct Bilge Suctions, No. and size one 6 Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size one 4 1/2 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 both

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

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 worked from upper platform

MAIN BOILERS, &c.—(Letter for record *R*) Total Heating Surface of Boilers 4564 sq. ft.

Is Forced Draft fitted yes No. and Description of Boilers Two *S.E. Multitubular* Working Pressure 200 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes

IS A DONKEY BOILER FITTED? yes If so, is a report now forwarded? yes

PLANS. Are approved plans forwarded herewith for Shafting no Main Boilers yes Auxiliary Boilers — Donkey Boilers yes

(If not state date of approval)

Superheaters General Pumping Arrangements yes Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—Two Connecting Rod top end bolts, nuts: Two Connecting Rod bottom end bolts

Two Main bearing bolts: One Set Coupling bolts: One Set Feed & Bilge pump Valves: Bolts & Nuts assorted:

One Cast iron propeller: One Tail Shaft: Two Main & Two Auxiliary Check Valves: Three sets of Air pump Valves: Two Safety Valve

Springs.

The foregoing is a correct description,
for JOHN READHEAD & SONS, LIMITED.

W. P. Henry, Eng. Manager.

Manufacturer.



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Lloyd's Register
FOW 514-0144

1927
Apr. 27. May 10. 24. 31. June 8. 17. 28. 29. July 8. 28 Aug. 10. 11. 24. 31. Sept. 9.
13. 15. Oct. 3. 4. 5. 10. 13. 14. 18. 21. 26. Nov. 1. 2. 4. 7. 8. 11. 17. 22. 23. 30. Dec. 2. 28.
1928
Jan. 2.
Total No. of visits 39.

Dates of Examination of principal parts—Cylinders 27/4/27-10/5/27-31/5/27 Slides 10/8/27-3/10/27 Covers 10/8/27 3/10/27
Pistons 8/6/27 10/8/27 3/10/27 Piston Rods 8/7/27 31/8/27 Connecting rods 10/5/27 8/7/27 31/8/27
Crank shaft 16/7/27 10/8/27 Thrust shaft 31/8/27 15/9/27 Intermediate shafts 31/8/27 15/9/27-3/10/27
Tube shaft — Screw shaft 29/6/27 15/9/27 14/10/27 Propeller 3/10/27-18/10/27
Stern tube 3/10/27 14/10/27 21/10/27 Engine and boiler seatings 14/10/27 Engines holding down bolts 17/11/27
Completion of pumping arrangements 30/11/27 Boilers fixed 1/11/27 Engines tried under steam 11/11/27
Main boiler safety valves adjusted 11/11/27 Thickness of adjusting washers Stan. Bo. Port 1 3/32 : Port Bo. Port 5/16
Crank shaft material S.M.I. Steel Identification Mark 8501 : Thrust shaft material S.M.I. Steel Identification Mark 8490
Intermediate shafts, material S.M.I. Steel Identification Marks 8486-8488-8489 Tube shaft, material — Identification Mark —
Screw shaft, material S.M.I. Steel Identification Mark 8485-8487 Steam Pipes, material Steel Test pressure 600 lbs Date of Test 21/11/27-7/12/27
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 S.S. Hazelwood.

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 the requirements of the rules and the approved plans.

The Materials and the Workmanship are good.

The Machinery was securely fitted on board and tested under steam and in my opinion the Vessel is eligible for record of + L.M.C. 1-28

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 1-28. FD. CL.

JWD
10/1/28

The amount of Entry Fee ... £ 5 : 0 :
Special ... £ 75 : 2 :
Donkey Boiler Fee ... £ 8 : 2 :
Travelling Expenses (if any) £ — : — :
When applied for, 7 JAN 1928
When received, 11 JAN 1928

W. Morrison
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 13 JAN 1928

Assigned

+ LMC 1-28

FD. CL.

CERTIFICATE WRITTEN.



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Foundation