

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 18 FEB 1930
NEWCASTLE-ON-TYNE

Date of writing Report 19 When handed in at Local Office 12/2/30 Port of
No. in Survey held at 81-Beleis + Hebburn Date, First Survey 20 Aug 129 Last Survey 127 Feb 1930
Reg. Book. on the Simple screw reciprocating engine for the S.S. WAINUI. Tons } Gross
Built at Hebburn By whom built R. W. Hawthorn Leslie & Co. Ltd. Yard No. 569. When built 1930.
Engines made at 81-Beleis By whom made ~ do - Engine No. 3462. when made 1930.
Boilers made at ~ do - By whom made ~ do - Boiler No. 3462. when made 1930.
Registered Horse Power Owners The Union S. S. Co. of New Zealand Port belonging to
Nom. Horse Power as per Rule 289.6 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes
Trade for which Vessel is intended Boasting in New Zealand

ENGINES, &c.—Description of Engines Triple expansion
Dia. of Cylinders 18 1/2 x 31 x 53 Length of Stroke 36 No. of Cylinders 3 Revs. per minute 92.
Crank shaft, dia. of journals as per Rule 10.218" Crank pin dia. 10.5" Crank webs Mid. length breadth 19.625" Thickness parallel to axis 6.845"
as fitted 10.5" Mid. length thickness shrunk Thickness around eye-hole 4 1/16
Intermediate Shafts, diameter as per Rule 9.43" Thrust shaft, diameter at collars as per Rule 10.218"
as fitted 10.5" Is the { screw } shaft fitted with a continuous liner { yes
Tube Shafts, diameter as per Rule 10.855" as fitted 11.5" Is the { screw } shaft fitted with a continuous liner { yes
Screw Shaft, diameter as per Rule 21/32" as fitted 23/32" Thickness between bushes as per Rule 9/16" Is the after end of the liner made watertight in the
Bronze Liners, thickness in way of bushes as fitted 23/32" 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
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 Length of Bearing in Stern Bush next to and supporting propeller 3-10"
Propeller, dia. 13-6" Pitch 13-6" No. of Blades 4 Material whether Movable No Total Developed Surface 60 sq. feet
Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/4" Stroke 18" Can one be overhauled while the other is at work yes
Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 1/4" Stroke 18" Can one be overhauled while the other is at work yes
Feed Pumps { No. and size 2 Weirs 8 1/2 x 6 x 18" Pumps connected to the { No. and size One Ballast pumps 9x16x10"
How driven Steam Main Bilge Line How driven Steam
Ballast Pumps, No. and size 1-9x10x10" Lubricating Oil Pumps, including Spare Pump, No. and size No
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 2-2 1/2" in Boiler room + 2-2 1/2" in Engine Room.
In Holds, &c. Forward 2-3" aft 2-2 1/2" + 1-3" Tunnel well 1-3"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 6" dia. Independent Power Pump Direct Suctions to the Engine Room Bilges,
No. and size 1-3 1/2" 15" Ballast pump 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 pass through the bunkers yes 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 engine room
MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers Two boilers 4572 sq. ft.
Is Forced Draft fitted yes No. and Description of Boilers Two cylindrical Working Pressure 200 lbs. sq. in.
IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes. 258
IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? -

PLANS. Are approved plans forwarded herewith for Shafting yes Main Boilers yes Auxiliary Boilers - Donkey Boilers -
(If not state date of approval)
Superheaters - General Pumping Arrangements yes Oil fuel Burning Piping Arrangements yes
SPARE GEAR. State the articles supplied:—
As per attached report.

The foregoing is a correct description.



Manufacturer.



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Lloyd's Register
Foundation

002418-002426-0225

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1929
During progress of work in shops -- Aug. 20. Oct. 2, 11, 22, 25, 28, 29. Nov. 4, 11, 19, 21, 22, 27. Dec. 4, 11, 20, 24. 1930 Jan 7.
8, 9, 13, 14, 18, 20, 21, 22, 23, 28, 29, 31. Feb. 4, 5, 12.
Dates of Survey while building
During erection on board vessel --
Total No. of visits 33.

Dates of Examination of principal parts--Cylinders 4. 12. 29 Slides 4. 12. 29. Covers 4. 12. 29
Pistons 4. 12. 29 Piston Rods 4. 12. 29 Connecting rods 4. 12. 29
Crank shaft 20. 12. 29 Thrust shaft 20. 12. 29 Intermediate shafts 20. 12. 29
Tube shaft - Screw shaft 20. 12. 29 Propeller 14. 1. 30.
Stern tube 14. 1. 30 Engine and boiler seatings 20. 1. 30 Engines holding down bolts 23. 1. 30.
Completion of fitting sea connections 14. 1. 30.
Completion of pumping arrangements 12. 1. 30 Boilers fixed 23. 1. 30 Engines tried under steam 12. 1. 30.
Main boiler safety valves adjusted 12. 1. 30 Thickness of adjusting washers Port 9/32 - 5/16, star 1/4 - 3/16
Crank shaft material Steel Identification Mark 46555/6674 Thrust shaft material Steel Identification Mark 46555/6674
Intermediate shafts, material Steel Identification Mark 46555/6674 Tube shaft, material - Identification Mark 46555/6674
Screw shaft, material Steel Identification Mark 46555/6674 Steam Pipes, material Steel Test pressure 600 lbs Date of Test 23. 1. 30
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 carrying and burning oil fuel been complied with Yes
Is this machinery duplicate of a previous case No If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c. The Machinery has been built under special survey in accordance with the approved plans & the Rules of the Society & has been securely fitted on board the vessel, tried under working conditions & found satisfactory. The workmanship & materials are of good quality throughout.
The Machinery of this vessel is eligible, in my opinion is have notation + L.M.C. 2-30

It is submitted that this vessel is eligible for THE REGULAR + L.M.C. 2-30. F.D. 2-30. Fitted for oil fuel 2-30. F.P. above 150°F.

J.H. 18/2/30.
CERTIFICATE WRITTEN 19.2.30

The amount of Entry Fee ... £ 4 : -
Special ... £ : -
Donkey Boiler Fee ... £ 68.10 : -
Travelling Expenses (if any) £ : -
When applied for, 17 FEB 1930
When received, 21/2/30

Thos. A. Seymour
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 21 FEB 1930
Assigned + L.M.C. 2.30
Fitted for oil fuel 2.30 C.L.
F.P. above 150°F.