

Rpt. 4.

No. 101638

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 11 NOV 1943
 Date of writing Report 19 NOV 1943 When handed in at Local Office 19 NOV 1943 Port of NEWCASTLE-ON-TYNE
 No. in Survey held at Wallsend on Tyne Date, First Survey 1-6-43 Last Survey 22-10-1943
 Reg. Book on the S/S Empire Canyon
 Built at Dundee By whom built Caledon S.S. & Eng. Co. Ltd Yard No. 408 When built
 Engines made at Wallsend By whom made N.E. Marine Eng. Co. Ltd Engine No. 3065 When made 1943
 Boilers made at By whom made Boiler No. When made
 Registered Horse Power Owners Ministry of War Transport Port belonging to
 Nom. Horse Power as per Rule 510? Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
 Trade for which vessel is intended

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 76
 Dia. of Cylinders 24 1/2 - 39 - 70 Length of Stroke 48 No. of Cylinders 3 No. of Cranks 3
 as per Rule 13.98 Crank shaft, dia. of journals 14 1/4 Crank pin dia. 14 3/4 Crank webs Mid. length breadth 22" Thickness parallel to axis 9"
 as fitted 14 1/4 Mid. length thickness 9" shrunk Thickness around eye-hole 6 7/8"
 as per Rule 13.32 Intermediate Shafts, diameter 13 3/8 Thrust shaft, diameter at collars 13.98
 as fitted 13 3/8 as fitted 14 1/4
 Tube Shafts, diameter as per Rule 14.84 Screw Shaft, diameter as fitted 15 1/4 Is the shaft fitted with a continuous liner yes
 as fitted 15 1/4 as per Rule 15.65 Thickness between bushes 15.65 Is the after end of the liner made watertight in the
 as per Rule 15.65 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
 at 140 If so, state type Length of Bearing in Stern Bush next to and supporting propeller 5'-1"
 Propeller, dia. 17-10 1/2 Pitch 15.6' No. of Blades 4 Material C.I. whether Moveable 140 Total Developed Surface 114 3/4 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 4 Stroke 27" Can one be overhauled while the other is at work yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4 Stroke 27" Can one be overhauled while the other is at work yes
 Feed Pumps No. and size Pumps connected to the Main Bilge Line No. and size How driven
 Ballast Pumps, No. and size 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
 In Pump Room In Holds, &c.

Main Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes
 Are the Bilge Suctions in the Machinery Space led from easily accessible manholes, placed above the level of the working floor, with straight tail pipes to the bilges
 Are all 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 spokehold 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
 What Pipes pass through the bunkers 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
 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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Later for record) Total Heating Surface of Boilers
 Which Boilers are fitted with Forced Draft Which Boilers are fitted with Superheaters
 No. and Description of Boilers Working Pressure

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

Can the donkey boiler be used for domestic purposes only?

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

Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes (main engines)
 State the principal additional spare gear supplied

The foregoing is a correct description.

John Neill

DIRECTOR

Manufacturer.



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Lloyd's Register

014276-014286-0200

1943 JUNE 1. JULY 2A AUG. 5. 6. 9. 19. 26. OCT. 4. 18. 22. — 10 Visits.

Dates of Survey while building

During progress of work in shops - - -

During erection on board vessel - - -

Total No. of visits.

Dates of Examination of principal parts—Cylinders 9.8.43 Slides 4.10.43 Covers 9.8.43

Pistons 4.10.43 Piston Rods 4.10.43 Connecting rods 4.10.43

Crank shaft 20.7.43 Thrust shaft 19.8.43 Intermediate shafts 5.8.43

Tube shaft ✓ Screw shaft 21.10.43 Propeller 22.10.43

Stern tube 18.10.43 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 8145 8171 ERB. ✓

Crank shaft material Steel Identification Mark 20.7.43 Thrust shaft material Steel Identification Mark 5.8.43

Intermediate shafts, material Steel Identification Marks 5.8.43 Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material Steel Identification Mark ✓ Steam Pipes, material ✓ Test pressure ✓ Date of Test ✓

Is an installation fitted for burning oil fuel. 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. If so, state name of vessel.

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery has been constructed under Special Survey in accordance with the Requirements of the Rules, the Approved Plan & the Specification. The materials & workmanship are good.

The machinery has been forwarded to Dundee where it will be fitted in Caledon S/B & Eng Co Ltd Ship No 408.

See Dundee Machinery report No. 9403 & Bk report No. 9065.

The amount of Entry Fee ... £ 6 : 0 : 0 When applied for, 1.9 NOV 1943

2/5 Special + 25% ... £ 50 : 5 : 0

Donkey Boiler Fee ... £ : : : When received, 19.

Travelling Expenses (if any) £ : : :

Committee's Minute

Assigned

R. L. Moffatt
Engineer Surveyor to Lloyd's Register of Shipping.



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Foundation