

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 16 MAY 1934

Date of writing Report 19 When handed in at Local Office 8. 5. 1934 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 11. 5. 33 Last Survey 5. 5. 1934
 Reg. Book. on the new steel s/s "ARGOW" (Number of Visits 71)
 Tons { Gross 4118
 Net 2479
 Built at Port Glasgow By whom built Lithgow & Co. Yard No. 366 When built 1934
 Engines made at Glasgow By whom made David Rowan & Co. Ltd. Engine No. 963 When made 1934
 Boilers made at Glasgow By whom made David Rowan & Co. Ltd. Boiler No. 963 When made 1934
 Registered Horse Power Owners Argow Shipping Co. Ltd. Port belonging to London
 Nom. Horse Power as per Rule 352 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 Revs. per minute 78
 Dia. of Cylinders 2 1/4" 37" 62" Length of Stroke 42" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 12.20" 12.27" Crank pin dia. 12 3/8" Crank webs Mid. length breadth 19" Thickness parallel to axis 7 1/2" shrunk
 as fitted 12 1/4" Crank webs Mid. length thickness 7 1/16" Thickness around eye-hole 5 1/16"
 Intermediate Shafts, diameter as per Rule 11.62" Thrust shaft, diameter at collars as per Rule 12.20" (Michell)
 as fitted 11 3/4" as fitted 12 1/4"
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 13.05" Is the { tube } shaft fitted with a continuous liner { yes
 as fitted Is the { screw }
 Bronze Liners, thickness in way of bushes as per Rule .7" Thickness between bushes as per Rule .52" Is the after end of the liner made watertight in the
 as fitted 3/4" as fitted 1/16" 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 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 If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 4.5"
 Propeller, dia. 17.3" Pitch 18.3" No. of Blades 4 Material Bronze whether Moveable no Total Developed Surface 107 sq. feet
 Feed Pumps worked from the Main Engines, No. none Diameter - Stroke - Can one be overhauled while the other is at work -
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 3/4" Stroke 22" Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size 2 @ 6" - 8 1/2" x 18" Pumps connected to the { No. and size Ballast pump
 How driven steam Main Bilge Line How driven steam
 Ballast Pumps, No. and size 1 @ 9" - 12 x 12 Duplex 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 4 @ 2 1/2" & 1 @ 2 1/2" in dry tank.
 In Pump Room In Holds, &c. N°1 hold - 2 @ 2 3/4". N°2 hold - 2 @ 3/4". N°3 hold - 2 @ 2 3/4"
 N°4 hold - 2 @ 2 3/4". Tunnel well - 1 @ 2 1/2". all fitted at Gyle.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 6" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1 @ 4 1/2" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Gyle
 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 Gyle
 What Pipes pass through the bunkers fore and aft suction How are they protected under timber boards
 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 bridge deck.

MAIN BOILERS, &c.—(Letter for record (S)) Total Heating Surface of Boilers 5102 sq ft
 Is Forced Draft fitted yes only No. and Description of Boilers 2 SB & 1 auxy Working Pressure 220 lbs
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? -
 Is the donkey boiler intended to be used for domestic purposes only -
 PLANS. Are approved plans forwarded herewith for Shafting no Main Boilers yes Auxiliary Boilers yes Donkey Boilers -
 Superheaters - General Pumping Arrangements no Oil fuel Burning Piping Arrangements -

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes
 State the principal additional spare gear supplied one propeller

The foregoing is a correct description,
 For David Rowan & Co. Ltd.
 Arch. W. Greenow

Manufacturer.

012888 - 012897 - 0245



Dates of Survey while building
 During progress of work in shops --- 1933 May: 11 15 29 June: 2 9 21 29 July: 5 11 Aug: 2 8 11 18 22 24 Sep: 18 30
 Oct: 5 9 11 20 23 24 30 Nov: 1 2 6 9 10 17 Dec: 1 6 11 12 15 18 19 25 (1934) Jan: 9 10 19 31 Feb: 1 7 8 9 12 14 19 22 23 26 27 28 Mar: 1 2 8 9 13 14 26 28 30
 During erection on board vessel --- Apr: 4 10 11 12 16 17 May: 3 5
 Total No. of visits 71

Dates of Examination of principal parts—Cylinders 15-12-33 Slides 8-2-34 Covers 19-12-33
 Pistons 10-1-34 Piston Rods 26-2-34 Connecting rods 20-9-33
 Crank shaft 10-11-33 Thrust shaft 10-11-33 Intermediate shafts 23-10-33
 Tube shaft ✓ Screw shaft 22-2-34 Propeller 9-2-34
 Stern tube 9-11-33 Engine and boiler seatings guk Engines holding down bolts 4-4-34
 Completion of fitting sea connections guk
 Completion of pumping arrangements 30-3-34 Boilers fixed 12-4-34 Engines tried under steam 5-5-34
 Main boiler safety valves adjusted 17-4-34 Thickness of adjusting washers Port 1/2" bolts (any) 1/2" 5% stable 1/2" 5%
 Crank shaft material J. Steel Identification Mark LLOYD N°4595 L.C.D. 10-11-33 Thrust shaft material J. Steel Identification Mark LLOYD N°4595 L.C.D. 10-11-33
 Intermediate shafts, material J. Steel Identification Marks LLOYD N°4595 L.C.D. 20-10-33 Tube shaft, material - Identification Mark -
 Screw shaft, material J. Steel Identification Mark LLOYD N°4595 L.C.D. 22-2-34 Steam Pipes, material Steel Test pressure 66 lbs Date of Test 10-4-33
 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 no 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 no If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The materials and workmanship are good.
 The machinery has been constructed under Special Survey and is eligible in my opinion for Classification and the Record + LMC 5, 34.

7/5/34

The amount of Entry Fee ... £ 5 : :
 Special ... £ 77 : 16 : :
 Donkey Boiler Fee ... £ : : :
 Travelling Expenses (if any) £ : : :
 When applied for, 9. 5. 1934.
 When received, 12. 5. 1934.

S. Dennis
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW** 15 MAY 1934
 Assigned + L.M.C. 5, 34

GLASGOW

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

