

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

JUL 23 1940

Date of writing Report *22.7.40* When handed in at Local Office *22.7.40* Port of *GLASGOW*
 No. in Survey held at *Glasgow* Date, First Survey *1939 Aug. 9th* Last Survey *10th July 1940*
 Reg. Book. on the *S/S "DALESMAN"* (Number of Visits *81*) Tons { Gross *6343.44*
 Built at *Pt. Glasgow* By whom built *Lithgows' Ltd.* Yard No. *927* When built *1940*
 Engines made at *Glasgow* By whom made *David Rowan & Co. Ltd.* Engine No. *1038* when made *1940*
 Boilers made at *-do-* By whom made *-do-* Boiler No. *1038* when made *1940*
 Registered Horse Power *-* Owners *T & J. Hanson* Port belonging to *Liverpool*
 Nom. Horse Power as per Rule *867 including 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 with exhaust turbo. 9 DB gear* Revs. per minute *82*
 Dia. of Cylinders *29"-47"-81"* Length of Stroke *54"* No. of Cylinders *3* No. of Cranks *3*
 Crank shaft, dia. of journals as per Rule *16.117"* Crank pin dia. *16 1/4"* Crank webs Mid. length breadth *26"* Thickness parallel to axis *10 3/4"*
 as fitted *16 1/4"* Mid. length thickness *10 3/4"* Thickness around eye-hole *7 3/4"*
 Intermediate Shafts, diameter as per Rule *15.62"* Thrust shaft, diameter at collars as per Rule *16.117"*
 as fitted *15 3/4"* as fitted *16.732"* (*425 mm*)
 Tube Shafts, diameter as per Rule *17.161"* Screw Shaft, diameter as per Rule *17 1/4"* Is the *thread* screw shaft fitted with a continuous liner *Yes*
 as fitted *17 1/4"* as fitted *17 1/4"*
 Bronze Liners, thickness in way of bushes as per Rule *.825"* Thickness between bushes as per Rule *.618"* Is the after end of the liner made watertight in the propeller boss *Yes*
 as fitted *7/8"* as fitted *9/4"*
 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 *Yes*
 shaft *No* If so, state type *-* Length of Bearing in Stern Bush next to and supporting propeller *6'-0"*
 Propeller, dia. *18'-6"* Pitch *20'-0"* No. of Blades *4* Material *BRONZE* whether Moveable *Yes* Total Developed Surface *125* 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 *5 1/2"* Stroke *24"* Can one be overhauled while the other is at work *Yes*
 Feed Pumps { No. and size *2 @ 12" x 9" x 24"* Pumps connected to the { No. and size *1 @ 12" x 9" x 24"* *1 @ 9 1/2" x 10" x 18"*
 How driven *Steam* Main Bilge Line { How driven *Steam*
 Ballast Pumps, No. and size *1 @ 10 1/2" x 13" x 24"* Lubricating Oil Pumps, including Spare Pump, No. and size *ME. 1 @ 5 1/2" - 7 1/2" x 24"*
2 @ 11 1/2" x 10 1/2" x 18" *Steam*
 Are two independent means arranged for circulating water through the Oil Cooler *Yes* Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room *2 @ 3 1/2" in E.R. 2 @ 3" in B.R.*
 In Holds, &c. *N^{os} 1, 2, 3 & 5 Holds 2 @ 3 1/2". Deep tank 2 @ 3 1/2" Thrust room 2 @ 2" N^o 6 Hold well 1 @ 3"*
 Tunnel well *1 @ 3"*

Main Water Circulating Pump Direct Bilge Suctions, No. and size *1 @ 14"* Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size *1 @ 5"* 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 pass through the bunkers *forward hold suction* How are they protected *under linter boards*
 What pipes pass through the deep tanks *none* 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 *top platform*

MAIN BOILERS, &c.—(Letter for record *r*) Total Heating Surface of Boilers *13205* \square
 Is Forced Draft fitted *no* No. and Description of Boilers *2 DB + 1 SE* Working Pressure *215 lb.*
 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 *Yes* Auxiliary Boilers *-* Donkey Boilers *-*
 (If not state date of approval)
 Superheaters *Yes* General Pumping Arrangements *-* Oil fuel Burning Piping Arrangements *-*
 SPARE GEAR. State the articles supplied:— *List attached.*

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

Manufacturer.



007653-007658-0016

NOTE.—The words which do not apply should be deleted.

(1939) Aug. 9 Sept. 6, 12, 15, 19, Oct. 2, 24, Nov. 9, 15, 16, 22, 27, 28, 29 Dec. 5
 During progress of work in shops -- 12, 13, 26, (1940) Jan. 4, 12, 19, 23, 25, 31 Feb. 1, 7, 9, 13, 15, 21, 22, 27
 Dates of Survey while building During erection on board vessel --- Mar. 11, 15, 18, 19, 20, 21, 25, 27, Apr. 1, 3, 5, 8, 9, 11, 15, 16, 17, 22, 24, 26, 30
 May 13, 16, 17, 20, 21, 22, 23, 27, 28, 29, 30, 31 June 3, 4, 5, 6, 7, 10, 11, 17, 21, 22, 24, 25, 26, July 1, 2, 10
 Total No. of visits 81

Dates of Examination of principal parts—Cylinders 19-1-40 Slides 3-4-40 Covers 19-1-40
 Pistons 15-3-40 Piston Rods 15-3-40 Connecting rods 4-1-40
 Crank shaft 1-2-40 Thrust shaft 2-10-39 Intermediate shafts 3-4-40
 Tube shaft — Screw shaft 20-3-40 Propeller 19-3-40
 Stern tube 19-3-40 Engine and boiler seatings 25-3-40 Engines holding down bolts 10-6-40
 Completion of fitting sea connections 25-3-40
 Completion of pumping arrangements 10-7-40 Boilers fixed 10-6-40 Engines tried under steam 10-7-40
 Main boiler safety valves adjusted 8-7-40 Thickness of adjusting washers S.E. 3/8" 5/16" P.D.E. 3/8" S.D.E. 1/2" 5/16"
 Crank shaft material S.M. steel Identification Mark 8784 J.C. Thrust shaft material S.M. steel Identification Mark 8784 A1B
 Intermediate shafts, material S.M. steel Identification Marks 8784 A1B Tube shaft, material — Identification Mark —
 Screw shaft, material S.M. steel Identification Mark 8784 A1B Steam Pipes, material Steel Test pressure 645 lb. Date of Test Aug & June
 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 — If so, have the requirements of the Rules been complied with —
 Is this machinery duplicate of a previous case Yes If so, state name of vessel "BARRISTER" G.S. Rpt. 61269

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery has been built under special survey in accordance with the Rules and approved plans, and the materials and workmanship are good. It has been properly installed in the vessel and tested under working conditions at full load with satisfactory results and, in my opinion, is eligible to be classed in the Register Book with record + LMC 7-40 and notation CL and "LP turbine with DR gearing and hydraulic coupling".

For particulars of LP turbine, see G.S. Rpt. No. 6262 attached

G.S.
 22/7/40

Glasgow

(NHP for Main Engines only = 731)
 The amount of Entry Fee ... £ 6 : - :
 Special ... £ 111 : 11 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 23 JUL 1940
 When received, 24th July 1940

J. B. Brown
 Engineer Surveyor to Lloyd's Register of Shipping.

Glasgow
 Committee's Minute 23 JUL 1940 J.R.H.

Assigned + LMC 7.40
 LP Turbine with DR Gearing & hydraulic coupling

