

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

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No. in Survey held at SOUTHAMPTON Date, First Survey 19th DEC^r 49 Last Survey 24th APRIL 1950
Reg. Book. 02260 on the S.S. "AUTOCARRIER" (Number of Visits 4)

Built at GLASGOW By whom built D.W. HENDERSON & Co. L^{td} Yard No. - Tons Gross 985
Net 362
 When built 1931
 Engines made at GLASGOW By whom made D.W. HENDERSON & Co. L^{td} Engine No. - When made 1931
 Boilers made at GLASGOW By whom made D.W. HENDERSON & Co. L^{td} Boiler No. - When made 1931
 Registered Horse Power 280 Owners BRITISH TRANSPORT COMMISSION Port belonging to LONDON
 Nom. Horse Power as per Rule 238 MN. Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted YES
 Trade for which Vessel is intended -

ENGINES, &c.—Description of Engines 2 SETS TRIPLE EXPANSION DIRECT ACTION VERTICAL 4 CYL. REVS. PER MINUTE 176 (MAN)
 Dia. of Cylinders 15", 25", 29" x 21" Length of Stroke 21" No. of Cylinders 4 No. of Cranks 4
 Crank shaft, dia. of journals as per Rule APP. Crank pin dia. 7 7/16" Crank webs Mid. length breadth 4 1/4" Thickness parallel to axis 4 1/16"
 as fitted 7 7/16" Mid. length thickness 13 1/16" shrunk Thickness around eye-hole 3 1/2"
 Intermediate Shafts, diameter as per Rule APPROVED Thrust shaft, diameter at collars as per Rule APPROVED
 as fitted 7 1/16" - 7 3/4" - 9 1/2" as fitted 7 7/16"
 Tube Shafts, diameter as per Rule - Screw Shaft, diameter as per Rule 8 1/2" FOR 8 1/2" FOR Is the NO shaft fitted with a continuous liner YES
 as fitted - as fitted 7 1/2" ST. COUPLING Is the NO screw YES
 Bronze Liners, thickness in way of bushes as per Rule - Thickness between bushes as per Rule - Is the after end of the liner made watertight in the
 as fitted 9 1/16" as fitted - 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 YES Is an approved Oil Gland or other appliance fitted at the after end of the tube
 shaft - If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 2' 10"
 Propeller, dia. 8' 0" Pitch 10' 7 1/2" No. of Blades 3 Material MAN. RUBBER Moveable NO Total Developed Surface 22 sq. feet
 Feed Pumps worked from the Main Engines, No. - Diameter - Stroke - Can one be overhauled while the other is at work -
 Bilge Pumps worked from the Main Engines, No. - Diameter - Stroke - Can one be overhauled while the other is at work -
 Feed Pumps { No. and size 2 - 9 1/2" x 7" = 21" Pumps connected to the { No. and size 2 - 2 1/2 TONS/HOUR EACH
 How driven STEAM Main Bilge Line { How driven STEAM.
 Ballast Pumps, No. and size 2 - 2 1/2 TONS/HOUR EACH 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 3 - 3" IN E.R.; 3 - 3" IN B.R.
 In Pump Room - In Holds, &c. 1 - 3" IN CRANK LOCKER; 2 - 3" IN FORE HOLD;
2 - 3" IN AFT HOLD; 1 - 3" IN TUNNEL BILGE.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 2 - 4 1/2" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 2 - 4 1/2" x 1 - 3" IN E.R.; 1 - 3" IN B.R. 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 BELOW
 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 - 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 ER. BENT DY.

MAIN BOILERS, &c.—(Letter for record -) Total Heating Surface of Boilers 4516 29. FT
 Is Forced Draft fitted YES No. and Description of Boilers 2 Loco MULTITUBULAR. Working Pressure 200 LB. S^q
 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 - Main Boilers YES Auxiliary Boilers - Donkey Boilers -
 (If not state date of approval)
 Superheaters - General Pumping Arrangements YES 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 -

The foregoing is a correct description,

Manufacturer.



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 Slides Covers
 Pistons Piston Rods Connecting rods
 Crank shaft Thrust shaft Intermediate shafts
 Tube shaft Screw shaft Propeller
 Stern tube 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
 Crank shaft material Identification Mark Thrust shaft material Identification Mark
 Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark
 Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test
 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
 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 machinery of this vessel, which has not been constructed under special survey, has been completely opened up & examined & found or placed in good order. The materials & workmanship are good, & the machinery is in accordance with the Rules & approved plans. The vessel is eligible in my opinion to be classed with this Society & to have notation of LMC 4, 50 & B.S. 1, 50

The amount of Entry Fee ... £	:	:	When applied for,
Special ... £	:	:	19
Donkey Boiler Fee ... £	:	:	When received,
Travelling Expenses (if any) £	:	:	19

Robert H. Strehove
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned all minute on Rpt 19

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