

REPORT ON OIL ENGINE MACHINERY.

No. 26536

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Date of writing Report 3 March 1951 When handed in at Local Office 24-3-51 Port of ANTWERP
 in Survey held at ANTWERP Date, First Survey 26-10-51 Last Survey 14-12-1950
 g. Book. Number of Visits _____
 Single on the Twin Triple Quadruple Screw vessel m/s "KAMINA" ex "ROYAL HAROLD" Tons Gross 442.4 Net 227.4
 Built at Hoboken By whom built J. M. Cockaill Yard No. 682 When built 1940
 Engines made at Dessain By whom made de Engine No. 6202 When made 1940
 Key Boilers made at Roostel By whom made Reptunneft Boiler No. _____ When made 1941
 Brake Horse Power 3800 Owners Belgian Navy Port belonging to _____
 N. Power as per Rule 426 826 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Y
 Trade for which vessel is intended Unrestricted (Troopship)

ENGINES, &c. — Type of Engines Burmeister & Wain 7-62 V 115 2 or 4 stroke cycle 2 Single or double acting single
 Maximum pressure in cylinders 49 lb/cm² Diameter of cylinders 24 7/16 Length of stroke 45 1/4 No. of cylinders 7 No. of cranks 7
 Mean Indicated Pressure 6.8 lb/cm² Ahead Firing Order in Cylinders 1-7-2-5-4-3-6 Span of bearings, adjacent to the crank, measured
 from inner edge to inner edge 792 Is there a bearing between each crank Y Revolutions per minute 130
 Flywheel dia. 2.147 Weight 5450 kg Moment of inertia of flywheel (lbs. in² or Kg. cm²) 6.260 Means of ignition Comp. Kind of fuel used coal oil
 Crankshaft, dia. of journals 4.25 as per Rule _____ as fitted 4.25 Crank pin dia. 4.5 as per Rule _____ as fitted 4.5 Crank webs Mid. length breadth 1.20 Thickness parallel to axis 2.70
 (All built) Mid. length thickness 2.30 shrunk Thickness around eye-hole 2.62

Propeller Shaft, diameter as per Rule _____ as fitted _____ Intermediate Shafts, diameter as per Rule _____ as fitted 2.20 Thrust Shaft, diameter at collars as fitted _____ as per Rule 4.00 with 1.15 central boss
 Tube Shaft, diameter as per Rule _____ as fitted _____ Screw Shaft, diameter as per Rule _____ as fitted 2.69 Is the (tube) screw shaft fitted with a continuous liner Y
 Liner Liners, thickness in way of bushes as per Rule _____ as fitted 18.5 Thickness between bushes as per Rule _____ as fitted 1.65 Is the after end of the liner made watertight in the
 propeller boss Y 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 tube shaft _____ If so, state type _____ Length of bearing in Stern Bush next to and supporting propeller 14.85

Propeller, dia. 4.50 Pitch 2.830 No. of blades four Material brass whether moveable no Total developed surface 42.2 sq. feet
 Moment of inertia of propeller (lbs. in² or Kg. cm²) _____ Kind of damper, if fitted _____
 Method of reversing Engines cam shaft Is a governor or other arrangement fitted to prevent racing of the engine when declutched Y Means of
 lubrication forced Thickness of cylinder liners 4.2 Are the cylinders fitted with safety valves Y Are the exhaust pipes and silencers water cooled
 lagged with non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned
 back to the engine _____ Cooling Water Pumps, No. two Is the sea suction provided with an efficient strainer which can be cleared within the vessel Y
one attached M.E. 150 T/h. each. two independent 150 m³/h. each.
 Bilge Pumps worked from the Main Engines, No. two Diameter _____ Stroke _____ Can one be overhauled while the other is at work _____

Bilge Pumps connected to the Main Bilge Line { No. and size two 30 m³/h. from 300 m³/h.
 How driven electric motor
 Is the cooling water led to the bilges no If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
 arrangements _____
 Oil Pumps, No. and size _____ Power Driven Lubricating Oil Pumps, including spare pump, No. and size one independent 160 m³/h.
two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both main bilge pumps and auxiliary
 pumps, No. and size:—In machinery spaces 70 m³/h x 1 In pump room 70 m³/h x 2 - 200 m³/h x 1

Oil Suctions, &c. two 70 m³/h x 1; three 70 m³/h x 1; Ballast Suctions No. 1 - 70 m³/h x 2 - No. 2 - 70 m³/h x 2 - No. 3 - 70 m³/h x 2 - No. 4 - 70 m³/h x 2
 No. 5 - 70 m³/h x 2 - No. 6 - 70 m³/h x 2 - No. 7 - 70 m³/h x 2 - Afterpeak 70 m³/h x 1
 Independent Power Pump Direct Suctions to the engine room bilges, No. and size two 70 m³/h x 1 - 200 m³/h x 2
 Suction above lower deck 70 m³/h x 5 - 200 m³/h x 2
 Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes Y Are the bilge suction pipes in the machinery spaces led from easily
 accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Y

Are all Sea Connections fitted direct on the skin of the Ship Y Are they fitted with valves or cocks valves and cocks Are they fixed
 sufficiently high on the ship's side to be seen without lifting the platform plates Y 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 Y Are the blow off cocks fitted with a spigot and brass covering plate Y
 How are they protected _____
 Are all pipes pass through the deep tanks _____ Have they been tested as per Rule _____

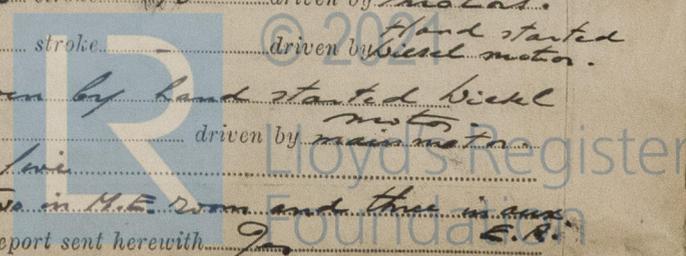
Are all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times Y
 Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery
 spaces, or from one compartment to another Y Is the shaft tunnel watertight Y Is it fitted with a watertight door Y worked from Main E.R.
 Are all wood vessels, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork _____

Air Compressors, No. none No. of stages _____ diameters _____ stroke _____ driven by _____
 Auxiliary Air Compressors, No. two No. of stages 2 diameters 2.50 - 2.90 stroke 8.90 driven by aux. motor
 1 Auxiliary Air Compressors, No. one No. of stages 2 diameters _____ stroke _____ driven by hand started diesel motor
 Is provision made for first charging the air receivers small aux. air comp. driven by hand started diesel motor
 Air Pumps, No. two diameter _____ stroke _____ driven by main motor

Auxiliary Engines crank shafts, diameter as per Rule _____ as fitted 1.50 m No. _____ Position two in M.E. room and three in aux. room
 Have the auxiliary engines been constructed under special survey no Is a report sent herewith Y

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014 925 - 014 934 - 0087



AIR RECEIVERS:—Have they been made under survey... State No. of report or certificate...

Is each receiver, which can be isolated, fitted with a safety valve as per Rule...

Can the internal surfaces of the receivers be examined and cleaned... Is a drain fitted at the lowest part of each receiver...

Injection Air Receivers, No. ... Cubic capacity of each... Internal diameter... thickness...

Seamless, welded or riveted longitudinal joint... Material... Range of tensile strength... Working pressure...

Starting Air Receivers, No. ... Total cubic capacity... Internal diameter... thickness...

Seamless, welded or riveted longitudinal joint... Material... Range of tensile strength... Working pressure...

IS A DONKEY BOILER FITTED... 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... Receivers... Separate fuel tanks...

Donkey boilers... General pumping arrangements... Pumping arrangements in machinery space...

Oil fuel burning arrangements...

Have Torsional Vibration characteristics been approved... Date of approval...

SPARE GEAR.

Has the spare gear required by the Rules been supplied...

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... Covers... Pistons... Rods... Connecting rods...

Crank shaft... Flywheel shaft... Thrust shaft... Intermediate shafts... Tube shaft...

Screw shaft... Propeller... Stern tube... Engine seatings... Engine holding down bolts...

Completion of fitting sea connections... Completion of pumping arrangements... Engines tried under working conditions...

Crank shaft, material... Identification mark... Flywheel shaft, material... Identification mark...

Thrust shaft, material... Identification mark... Intermediate shafts, material... Identification marks...

Tube shaft, material... Identification mark... Screw shaft, material... Identification mark...

Identification marks on air receivers...

Welded receivers, state Makers' Name...

Is the flash point of the oil to be used over 150°F...

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with...

Description of fire extinguishing apparatus fitted... Three foam apparatus 18g lit. each... 61 portable apparatus 10 lit. can throughout the ship...

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. The above machinery has been completely opened out and examined, the principal scantlings have been checked and found to correspond with the figures noted above and those shown on the approved plans. The machinery has been tried under working conditions and found satisfactory.)

The amount of Entry Fee... Special... Donkey Boiler Fee... Travelling Expenses (if any)...

Signature of Engineer Surveyor to Lloyd's Register of Shipping.

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

Committee's Minute... Assigned... LMC 12.50 Oil Eng. Subject... DBS 12.50... S(C.L.) 11.50 2 WTDB 171lb. (with endorsement)

