

# REPORT ON OIL ENGINE MACHINERY.

No. 26536

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to of writing Report 3 March 1951 When handed in at Local Office 24-3-1951 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. Cockaill Yard No. 682 When built 1940  
 Engines made at Deving By whom made de Engine No. 6222 When made 1940  
 Key Boilers made at Reet By whom made Reet Boiler No. 1941 When made 1941  
 Brake Horse Power 1800 Owners Belgian Navy Port belonging to -  
 N. Power as per Rule 226 826 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted 2  
 Use for which vessel is intended Unrestricted (Troopship)

ENGINES, &c. —Type of Engines Burneister 2 Cyl 7-62 V 115 2 or 4 stroke cycle 2 Single or double acting single  
 Maximum pressure in cylinders 19.48 Diameter of cylinders 6.2 Length of stroke 115.2 No. of cylinders 7 No. of cranks 7  
 Indicated Pressure 6.8 Ahead Firing Order in Cylinders 1-7-2-5-4-3-6 Span of bearings, adjacent to the crank, measured  
 inner edge to inner edge 792 Is there a bearing between each crank 2 Revolutions per minute 130  
 Wheel dia. 2.147 Weight 5450 kg Moment of inertia of flywheel (lbs. in<sup>2</sup> or Kg. cm.<sup>2</sup>) 10260 Means of ignition Comp. Kind of fuel used coal oil  
 Link Solid forged dia. of journals as per Rule Crank pin dia. 4.5 Mid. length breadth 1.2 Thickness parallel to axis 2.7  
 aft, Semi built as fitted 115 Crank webs as per Rule Mid. length thickness 2.3 Thickness around eye hole 2.6  
All built  
 Wheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as fitted  
 Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube screw shaft fitted with a continuous liner 2  
 Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as fitted Is the after end of the liner made watertight in the  
 propeller boss 2 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner 2  
 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-  
 erosive 2 If two liners are fitted, is the shaft lapped or protected between the liners 2 Is an approved Oil Gland or other appliance fitted at the after  
 of tube shaft 2 If so, state type 2 Length of bearing in Stern Bush next to and supporting propeller 1485  
 Propeller, dia. 4.5 Pitch 1.2 No. of blades 4 Material brass whether moveable 2 Total developed surface 42.2 sq. feet  
 Moment of inertia of propeller (lbs. in<sup>2</sup> or Kg. cm.<sup>2</sup>) 2 Kind of damper, if fitted 2  
 Method of reversing Engines can shaft Is a governor or other arrangement fitted to prevent racing of the engine when declutched 2 Means of  
 rotation free Thickness of cylinder liners 42 Are the cylinders fitted with safety valves 2 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  
 to the engine two attached M.E. 150 T/h. each. two independent 150 m/h. each.  
 Cooling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel 2  
 Pumps worked from the Main Engines, No. 2 Diameter 2 Stroke 2 Can one be overhauled while the other is at work 2  
 Pumps connected to the Main Bilge Line { No. and size two 10 m/h. 100 m/h. How driven electric motor

Is the cooling water led to the bilges 2 If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping  
 arrangements 2  
 Last Pumps, No. and size 2 Power Driven Lubricating Oil Pumps, including spare pump, No. and size one attached M.E. 150 T/h. one independent 160 m/h.  
 Are two independent means arranged for circulating water through the Oil Cooler 2 Suctions, connected to both main bilge pumps and auxiliary  
 pumps, No. and size:—In machinery spaces 70 m/h. x 11 In pump room 70 m/h. x 2 - 200 m/h. x 1  
 Pumps, &c. 70 m/h. x 1: Hand off of pump 70 m/h. x 1: Ballant James No. 1 - 70 m/h. x 2 - No. 2 - 70 m/h. x 2 - No. 3 - 70 m/h. x 2 - No. 4 - 70 m/h. x 2  
 Independent Power Pump Direct Suctions to the engine room bilges, No. and size No. 5 - 70 m/h. x 2 - No. 6 - 70 m/h. x 2 - No. 7 - 70 m/h. x 2 - Afterpeak 70 m/h. x 1  
 Suction above lower deck 70 m/h. x 5 - 200 m/h. x 2  
 Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes 2 Are the bilge suction 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 2  
 Are all Sea Connections fitted direct on the skin of the Ship 2 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 2 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 2 Are the blow off cocks fitted with a spigot and brass covering plate 2  
 Do all pipes pass through the bunkers 2 How are they protected 2  
 Do all pipes pass through the deep tanks 2 Have they been tested as per Rule 2  
 Are all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times 2  
 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 2 Is the shaft tunnel watertight 2 Is it fitted with a watertight door 2 worked from Main E.R.  
 Are wood vessels, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork 2  
 Are Air Compressors, No. none No. of stages 2 diameters 2 stroke 2 driven by 2  
 Auxiliary Air Compressors, No. two No. of stages 2 diameters 250 - 290 stroke 80 driven by aux. motor  
 Auxiliary Air Compressors, No. one No. of stages 2 diameters 2 stroke 2 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  
 Are Air Pumps, No. two diameter 2 stroke 2 driven by main motor  
 Auxiliary Engines crank shafts, diameter as per Rule No. 2 Position Two in M.E. room and three in aux. room  
 Have the auxiliary engines been constructed under special survey 2 Is a report sent herewith 2

DM 12-10-51

014 925 - 014 934 - 0087



AIR RECEIVERS:—Have they been made under survey. *Yes* State No. of report or certificate. *2*

5c.

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

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

Injection Air Receivers, No. *none* Cubic capacity of each. *-* Internal diameter. *-* thickness. *-*

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

Starting Air Receivers, No. *two* Total cubic capacity. *12 m<sup>3</sup>* Internal diameter. *14 1/2* thickness. *1/2*

Seamless, welded or riveted longitudinal joint. *riveted* Material. *S. M. steel* Range of tensile strength. *44/55* Working pressure. *1/2*

IS A DONKEY BOILER FITTED. *Yes* If so, is a report now forwarded. *Yes*

Is the donkey boiler intended to be used for domestic purposes only. *Yes*

PLANS. Are *approved* plans forwarded herewith for shafting. *Yes* Receivers. *2* Separate fuel tanks. *-*

Donkey boilers. *2* General pumping arrangements. *2* Pumping arrangements in machinery space. *2*

Oil fuel burning arrangements. *2*

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

### 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. *-* 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. *Yes*

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

Description of fire extinguishing apparatus fitted. *Three foam apparatus 18g lit. each (one H.E. room; one Aux. E.R. and one in Galley) 61 portable extinguishers 10 lit. can throughout the ship.*

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo. *Yes* 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. *Yes* If so, state name of vessel. *-*

General Remarks (State quality of workmanship, opinions as to class, &c. *The above machinery has been completed*

*opened out and examined, the principal scantling 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 ... £ *See Rpt. 9*

Special ... *See Rpt. 9* When applied for. *19*

Donkey Boiler Fee... *See Rpt. 9* When received. *19*

Travelling Expenses (if any) *9*

Committee's Minute *FRI. 19 OCT 1951*

Assigned *LMC 12.50 Oil Eng. Subject*

*DBS 12.50*

*SCCL 11.50 2 WTDB 1711b. (with endorsement)*



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