

REPORT ON OIL ENGINE MACHINERY.

Received at London Office

Date of writing Report 19th Dec. 1950. When handed in at Local Office 19 Port of Bremen

No. in Survey held at Vegesack Date, First Survey 23rd March Last Survey 12th August 1950.

Reg. Book. 061 Single on the Twin Triple Quadruple Screw vessel "ATALANTA" Number of Visits 17

Gross Tons 9683 Net Tons 5621

Built at Gothenburg By whom built Eriksbergs M.V. Aktieb. Yard No. - When built 1930/9

Engines made at Bremen-Vegesack By whom made Bremer Vulkan Engine No. 357/58 When made 1950

Monkey Boilers made at By whom made Boiler No. When made

Indicated Horse Power 2 x 2000 Owners Rederiaktiebolaget Dalen, Göteborg Port belonging to Göteborg

I.N. Power as per Rule 900 913 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which vessel is intended carrying petroleum in bulk

ENGINES, &c. - Type of Engines Bremer Vulkan MAN Diesel Eng. K4765/120 2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 48 kg/cm² Diameter of cylinders 650 mm Length of stroke 1200 mm No. of cylinders 4 No. of cranks 4

Mean Indicated Pressure 5.68 kg/cm² Ahead Firing Order in Cylinders starbd. 1, 4, 2, 3 Span of bearings, adjacent to the crank, measured from inner edge to inner edge 925 mm Is there a bearing between each crank yes Revolutions per minute 120

Flywheel dia. 2300 mm Weight 4.4 tons Moment of inertia of flywheel (lbs. in² or Kg. cm.²) 15 000 kgm² Means of ignition Kind of fuel used Diesel oil

Crank shaft, ~~As built~~ ^{Solid forged} dia. of journals as per Rule 401 mm as fitted 420 mm Crank pin dia. 420 mm Crank webs Mid. length breadth 1330 mm 625 Thickness parallel to axis 265 mm Mid. length thickness 265 mm shrunk Thickness around eyehole 187.5 mm

Flywheel Shaft, diameter as per Rule - as fitted - Intermediate Shafts, diameter as per Rule 276 mm as fitted 416 mm Thrust Shaft, diameter at collars as per Rule 290 mm as fitted 375 mm 430

Tube Shaft, diameter as per Rule - as fitted - Screw Shaft, diameter as per Rule 303 mm as fitted 340 mm Is the (tube/screw) shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule - as fitted 20 mm Thickness between bushes as per Rule - as fitted 16 mm Is the after end of the liner made watertight in the 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 - 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 1490 mm

Propeller, dia. 3930 mm Pitch 3700 mm No. of blades 4 Material bronze whether moveable no Total developed surface 5.1 m² sq. feet

Moment of inertia of propeller (lbs. in² or Kg. cm.²) 9000 kgm² Kind of damper, if fitted no

Method of reversing Engines crankshaft Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication forced emul. Thickness of cylinder liners 40 mm Are the cylinders fitted with safety valves yes 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. 3 FRESH WATER / SALT WATER / SPACE (EITHER SERVICE) Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Bilge Pumps worked from the Main Engines, No. - Diameter - Stroke - Can one be overhauled while the other is at work -

Pumps connected to the Main Bilge Line No. and size 1 ballast pump 150 t/h 1 bilge pump 20 t/h How driven steam driven electrical drive

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 -

Ballast Pumps, No. and size 150 t/h Power Driven Lubricating Oil Pumps, including spare pump, No. and size 3 - 42 m³/h

Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both main bilge pumps and auxiliary bilge pumps, No. and size: - In machinery spaces 1-75mm/p. ford., 2-75 mm s.ford., 1-75 mm aft In pump room no change

holds, &c. no change

Independent Power Pump Direct Suctions to the engine room bilges, No. and size one - 150 mm and one 75 mm

Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes yes 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 yes

Are all Sea Connections fitted direct on the skin of the Ship yes Are they fitted with valves or cocks valves Are they fixed efficiently high on the ship's side to be seen without lifting the platform plates yes Are the overboard discharges above or below the deep water line yes

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 old

Do pipes pass through the bunkers none How are they protected -

Do 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 - Is it fitted with a watertight door - worked from -

Is the wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -

Air Compressors, No. 2 No. of stages 2 diameters 105/270 mm stroke 220 mm driven by aux. Diesels

Auxiliary Air Compressors, No. one old No. of stages - diameters - stroke - driven by steam eng.

All Auxiliary Air Compressors, No. - No. of stages - diameters - stroke - driven by -

Is provision made for first charging the air receivers Aux. air compressor (steam driven)

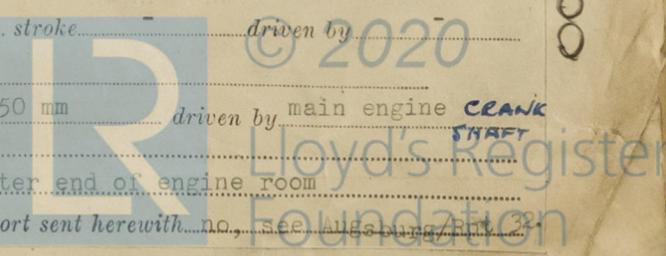
Refrigerating Air Pumps, No. 2 diameter 940 mm stroke 2 x 850 mm driven by main engine CRANK SHAFT

Auxiliary Engines crank shafts, diameter as per Rule - as fitted 130 mm Position after end of engine room

Were the auxiliary engines been constructed under special survey yes Is a report sent herewith no

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BUILT BY ENGINE BUILDERS AS PER APPROVED PLAN FOR BELPA

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... 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... PLANS. Are approved plans forwarded herewith for shafting... Donkey boilers... General pumping arrangements... Pumping arrangements in machinery space... Oil fuel burning arrangements... Have Torsional Vibration characteristics been approved... Counterweights... Date of approval 3.8.50 for 120 RPM

SPARE GEAR.

Has the spare gear required by the Rules been supplied... State the principal additional spare gear supplied... 1 cylinder cover 2 piston guide rings 2 cylinder liners 1 fuel injection pump 2 piston skirts 2 telescopic pipes scavenging air pump, spares

Bremer Vulkan Schiffbau und Maschinenfabrik Bremen-Vegesack

The foregoing is a correct description of the machinery described above.

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... 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... 240 and 241 LLOYD'S TEST WP 30 ATU TP 44 ATU JPG 25.5.50

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... Foam & steam smothering... 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... HERBRAND

General Remarks (State quality of workmanship, opinions as to class, &c... The main machinery has been constructed under special survey in accordance with the Society's Rules and Regulations, approved plans and instructions thereto. The material used was surfaced examined, of tested quality, and the workmanship to be satisfactory. Fitting out of machinery in ship chocking, alignment and deflection good. Dock and sea trials, engines functioned satisfactorily. In my opinion the vessel can now be eligible for the notation LMC (with date), re-engined. + NE 8/50

The amount of Entry Fee... Special... Donkey Boiler Fee... Travelling Expenses (if any) £ 10 : 0 : 0

THU 3 MAY 1951



Lloyd's Register Foundation

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

Assigned

See memo 2939

J.P. M... Engineer Surveyor to Lloyd's Register of Shipping.