

REPORT ON OIL ENGINE MACHINERY.

No 12801

FEB -7 1940

Date of writing Report 25th Jan 40 When handed in at Local Office 31st Jan 40 Port of **GOTHENBURG**
 No. in Survey held at **GOTHENBURG** Date, First Survey 30th May 1939 Last Survey 15th Jan. 1940
 Reg. Book. 39774 on the **Single** **Triple** **Quadruple** Screw vessel **M/S KOLLSKEGG.** Number of Visits 64

Tons { Gross 9857.78
 Net 5844.81

Built at **GOTHENBURG** By whom built **ERIKSBERGS M.V.A.B.** Yard No. **291** When built **1940**
 Engines made at **GOTHENBURG** By whom made **ERIKSBERGS M.V.A.B.** Engine No. **231** When made **1940**
 Donkey Boilers made at **GOTHENBURG** By whom made **ERIKSBERGS M.V.A.B.** Boiler No. **605** When made **1940**
 Brake Horse Power **4150** Owners **ODDBERGS TANKREDERI** Port belonging to **OSLO**
 Nom. Horse Power as per Rule **861** Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **YES**
 Trade for which vessel is intended **OPEN SEA SERVICE**

OIL ENGINES, &c. Type of Engines **Heavy Oil Engine, Solid Injection** 2 or 4 stroke cycle **2** Single or double acting **Double**
 Maximum pressure in cylinders **49 kg/cm²** Diameter of cylinders **450 mm** Length of stroke **1200 mm** No. of cylinders **8** No. of cranks **8**
 Mean Indicated Pressure **6.5 kg/cm²** Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **854 mm** Is there a bearing between each crank **Yes**
 Revolutions per minute **115** Flywheel dia. **2400 kgm²** Weight **CO² 1020 kgm²** Means of ignition **Compression** Kind of fuel used **Diesel fuel oil**
 Crank Shaft, { Solid forged **390 mm** dia. of journals as fitted **390 mm** Crank pin dia. **390 mm** Crank Webs Mid. length breadth **340 mm** Mid. length thickness **340 mm** Thickness parallel to axis **210 mm** Thickness around eye-hole **210 mm**
 Flywheel Shaft, diameter as per Rule **340 mm** as fitted **340 mm** Intermediate Shafts, diameter as fitted **340 mm** Thrust Shaft, diameter at collars as fitted **365 mm**
 Tube Shaft, diameter as per Rule **377 mm** as fitted **377 mm** Is the { tube screw } shaft fitted with a continuous liner **Yes**
 Bronze Liners, thickness in way of bushes as fitted **19 mm** Thickness between bushes as fitted **19 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 **in one length**
 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 **Yes** Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft **Yes** If so, state type **Vickers Vista gland** Length of Bearing in Stern Bush next to and supporting propeller **2180 mm**
 Propeller, dia. **17'-0"** Pitch **11.75'** No. of blades **4** Material **Bronze** whether Moveable **No** Total Developed Surface **102** sq. feet
 Method of reversing Engines **Direct reversible** Is a governor or other arrangement fitted to prevent racing of the engine when disengaged **Yes** Means of lubrication **Forced**
 Thickness of cylinder liners **32 mm** Are the cylinders fitted with safety valves **Yes** Are the exhaust pipes and silencers water cooled or 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 **led to funnel**
 Cooling Water Pumps, No. **2** **1 fresh water, 200 tons/hour. 2 saltwater, 225 tons/hour.** 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. **None** Diameter **Stroke** Can one be overhauled while the other is at work **Yes**
 Pumps connected to the Main Bilge Line { No. and Size **One ballast pump (150 tons) electrically** **One piston pump (20 tons) electrically** **One duplex piston pump (40 tons) steam**
 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 **Yes**
 Ballast Pumps, No. and size **One, 150 tons/hour** Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size **Two, 225 tons/hour.**
 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 **Three - 3 1/2", One 2 1/2"** In Pump Room **None**
 In Holds, &c. **Two - 2 1/2" from dry cargo hold, Two 4" to main pump room, One 2 1/2" to fore pump room, Two 2 1/2" to FP. tank top.**
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **One 5", Two 3 1/2"**
 Are all the Bilge Suction pipes in Holds and Tanker Well fitted with strum-boxes **Yes** Are the Bilge Suctions in the Machinery Spaces **Yes**
 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 **Yes**
 Are they fixed sufficiently 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 **Above**
 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 **No coal bunkers** How are they protected **Yes**
 What pipes pass through the deep tanks **Gas pipes and heating coils** Have they been tested as per Rule **Yes**
 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 **No tunnel** Is it fitted with a watertight door **Yes** worked from **Yes**
 If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork **Yes**
 Main Air Compressors, No. **None** No. of stages **Two** Diameters **250 & 280 mm** Stroke **190 mm** Driven by **the aux. engines**
 Auxiliary Air Compressors, No. **Two** No. of stages **Two** Diameters **8.1 cub ft** Stroke **600 revs.** Driven by **the aux. engine**
 Small Auxiliary Air Compressors, No. **1** No. of stages **2** What provision is made for first Charging the Air Receivers **Small auxiliary air compressors.**
 Scavenging Air Pumps, No. **Two** Diameter **150 mm** Capacity total **2 x 186 m³/min** Driven by **the main engine**
 Auxiliary Engines crank shafts, diameter as fitted **150 mm** No. **One - 4 cyl. on port side** **One 3-cyl. on starboard side.** Position **port side**
 Have the Auxiliary Engines been constructed under special survey **Yes** Is a report sent herewith **Yes**

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, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure

by Rules

Actual

Starting Air Receivers, No.

Total cubic capacity

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure

by Rules

Actual

IS A DONKEY BOILER FITTED?

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

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,

Eriksholms Mek. Verkstads Aktiebolag

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
Crank shaft
Screw shaft
Completion of fitting sea connections
Crank shaft, Material
Thrust shaft, Material
Tube shaft, Material
Identification Marks on Air Receivers

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

Is the vessel 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 machinery of this vessel is eligible in my opinion to be classed in the Register Book of this Society with notation of LMC 1.40. Working pressure of donkey boilers 142 lbs/sq in.

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

Committee's Minute

Assigned

J. Aspelin
Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation