

REPORT ON OIL ENGINE MACHINERY.

First Entry
No. 22914

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No. in Survey held at KIEL + HAMBURG Date, First Survey 12th Oct. 1937 Last Survey 14th SEPT. 1938
Reg. Book. Number of Visits 89

on the Single Screw vessel ELSA ESSEBERGER Tons Gross 6103
Triple
Quadruple Net 3476

Built at HAMBURG By whom built HOWALDSWERKE, A.G. Yard No. 765 When built 1938

Engines made at KIEL By whom made HOWALDSWERKE, A.G. Engine No. 17 When made 1938

Donkey Boilers made at - By whom made - Boiler No. - When made -

Brake Horse Power 3000 Owners JOHN T. ESSEBERGER Port belonging to HAMBURG

Nom. Horse Power as per Rule 913 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES

Trade for which vessel is intended ATLANTIC TRADE. - OPEN SEA.

OIL ENGINES, &c. — Type of Engines Heavy Oil, maker Type K&Z 65/120. 2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 45 kg/cm² Diameter of cylinders 650 mm. Length of stroke 1200 mm. No. of cylinders 8 No. of cranks 8

Mean Indicated Pressure 5.6 kg/cm²

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 863 mm. Is there a bearing between each crank yes

Revolutions per minute 110 Flywheel dia. 2100 mm. Weight 3180 kg. Means of ignition Diesel prin. Kind of fuel used Diesel Oil

Crank Shaft, Solid forged dia. of journals as per Rule 402 mm. as fitted 440 mm. Crank pin dia. 440 mm. Crank Webs Mid. length breadth 620 mm. Thickness parallel to axis 265 mm.
Semi built as fitted 440 mm. Mid. length thickness 265 mm. Thickness around eyehole 200 mm.
All built

Flywheel Shaft, diameter as per Rule 402 mm. as fitted 440 mm. Intermediate Shafts, diameter as per Rule 309 mm. as fitted 331 mm. Thrust Shaft, diameter at collars as per Rule 325 mm. as fitted 380 mm.

Tube Shaft, diameter as per Rule - as fitted - Screw Shaft, diameter as per Rule 388 mm. as fitted 394 mm. Is the tube screw shaft fitted with a continuous liner no

Bronze Liners, thickness in way of bushes as per Rule - as fitted - Thickness between bushes as per Rule - as fitted - 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 the tube

shaft yes If so, state type Cedervall. Length of Bearing in Stern Bush next to and supporting propeller 1700 mm.

Propeller, dia. 4280 mm. Pitch 3700 mm. No. of blades 4 Material bronze whether Moveable solid Total Developed Surface 8.25 sq. m.

Method of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication

forced Thickness of cylinder liners 40 mm. Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine sound

Cooling Water Pumps, No. 3 1 fresh water - 310 t/h. 2 sea water - 35 t/h. each. 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 rotary - 150 t/h. - 1 rotary - 60 t/h. - 1 rotary - 60 t/h.
How driven electric electric electric

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 1 elect. driven - 150 t/h. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2 elect. driven. wheel 44 mm. each of 35 t/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 of 180 mm. - 1 of 160 mm. - 1 of 125 mm. - 2 of 90 mm. from forepeak, 2 of 90 mm. from after peak, 1 of 125 mm. Pump Room

In Holds, &c. from forepeak: 6 of 90 mm. - from after peak: 6 of 90 mm. - from forepeak: 1 of 100 mm. - from after peak: 1 of 125 mm.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 3: 1 of 180 mm. 1 of 160 mm. 1 of 125 mm. inside diam.

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions 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 sized 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 & 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 -

What pipes pass through the bunkers none pipe tunnel fitted 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 cyl. platform.

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

Main Air Compressors, No. solid injection No. of stages - Diameters - Stroke - Driven by two Diesel engines

Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 270/105 mm. Stroke 220 mm. Driven by by clutch

Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 100/35 mm. Stroke 80 mm. Driven by hand starting Diesel

What provision is made for first Charging the Air Receivers. small aux. air compressor driven by hand starting Diesel engine.

Scavenging Air Pumps, No. 1 - handcu Diameter 1200 mm. Stroke 1000 mm. Driven by extension of main crank shaft

Auxiliary Engines crank shafts, diameter as per Rule 440 mm. as fitted 190 mm. No. 3 Position Port side main engine Room

Have the Auxiliary Engines been constructed under special survey yes Is a report sent herewith yes

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