

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 22126

Date of writing Report 8th Dec. 1936, When handed in at Local Office 19 Port of HAMBURG Received at London Office 21 DEC 1936

No. in Survey held at AUGSBURG & HAMBURG Date, First Survey 15th Aug. Last Survey 25th Nov. 1936 Reg. Book. Number of Visits 21

on the Single Triple Quadruple Screw vessel

"RIGEL"

Tons } Gross 1016
Net 611

Built at HAMBURG By whom built DEUTSCHE WERFT. A.G. Yard No. 170 When built 1936

Engines made at AUGSBURG By whom made M.SCHPK. AUGSBURG-NÜRNBERG Engine No. 580140 When made 1936

Donkey Boilers made at HAMBURG By whom made DEUTSCHE WERFT. A.G. Boiler No. 573 When made 1936

Brake Horse Power 500/500 Owners TRELLEBORGS ANGT. NYA AKTIEBOL. Port belonging to TRELLEBORG

Nom. Horse Power as per Rule 161 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which vessel is intended CARRYING PETROLEUM IN BULK.

OIL ENGINES, &c.—Type of Engines 8 Vtr 50 14 3/8 19 1/6 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 49 kg/cm² Diameter of cylinders 365 mm. Length of stroke 500 mm. No. of cylinders 8 No. of cranks 8

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 452 mm. Is there a bearing between each crank yes

Revolutions per minute 190/215 Flywheel dia. 1300 mm. Weight 2000 kg. Means of ignition Diesel prin. Kind of fuel used Diesel oil

Crank Shaft, dia. of journals as per Rule appr. as fitted 220 mm. Crank pin dia. 220 mm. Crank Webs Mid. length breadth 360 mm. Thickness parallel to axis ✓ Mid. length thickness 115 mm. Thickness around eye-hole ✓

Flywheel Shaft, diameter as per Rule appr. as fitted 290 mm. Intermediate Shafts, diameter as per Rule appr. as fitted 210 mm. Thrust Shaft, diameter at collars as per Rule appr. as fitted 210 mm.

Tube Shaft, diameter as per Rule ✓ as fitted ✓ Screw Shaft, diameter as per Rule appr. as fitted 210 mm. Is the tube screw shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule appr. as fitted from 15 mm aft 16 mm. Thickness between bushes as per rule appr. as fitted 11 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 the tube shaft ✓ If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller 1000 mm.

Propeller, dia. 2250 mm Pitch 1600 mm No. of blades 4 Material semi-steel whether Moveable no Total Developed Surface 1.613 sq. feet

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 27 mm. Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled ✓ 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 scumel

Cooling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes What special arrangements are made for dealing with cooling water if discharged into bilges cooling water line overboard.

Bilge Pumps worked from the Main Engines, No. 1 Diameter 95 mm. Stroke 160 mm. Can one be overhauled while the other is at work yes

Pumps connected to the Main Bilge Line } No. and Size 3 - 1-224 mm 2 - self priming - rotary, each 25 ton per hour. How driven main Eng. electric driven

Ballast Pumps, No. and size See Cargo Spr. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2 - 1-3.9 ton (main eng.) 1-5 ton electric driven.

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 4 - 1 of 71 mm, 3 of 50 mm inside diam. - 2 of 50 mm copper dam aft. In Pump Room removable plug.

In Holds, &c. Forward hold 1 of 51.5 mm - inside diam. - 1 from Fore Deck of 51.5 mm - 1 from Aft Deck of 50 mm inside diam.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 of 60 mm.

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 & cocks

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 & 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 yes

What pipes pass through the bunkers ✓ How are they protected ✓

What pipes pass through the deep tanks Cargo lines 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 Is it fitted with a watertight door worked from

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 2 Diameters 155/58 mm. Stroke 125 mm. Driven by electric and driven by hand

Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 110/45 mm. Stroke 70 mm. Driven by hand.

Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 110/45 mm. Stroke 70 mm. Driven by hand.

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

Auxiliary Engines crank shafts, diameter as per Rule appr. as fitted 75 mm. No.:— 2 : 2 - 2051-22052 Position — main Engine Room Port & St. side.

AIR RECEIVERS:—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

High Pressure Air Receivers, No. — Cubic capacity of each — Internal diameter — thickness —

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

Starting Air Receivers, No. 3 Total cubic capacity 2 - 800 liters Internal diameter 572 mm. thickness 14 mm.

Seamless, lap welded or riveted longitudinal joint 1 - solid drawn Material S. M. Steel Range of tensile strength 44-47 kg/cm² Working pressure — thickness 6 mm.

Seamless, lap welded or riveted longitudinal joint 1 - solid drawn Material S. M. Steel Range of tensile strength 44-47 kg/cm² Working pressure — thickness 30 kg/cm²



