

REPORT ON OIL ENGINE MACHINERY.

No. 870

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Date of writing Report 18-1-1929 When handed in at Local Office 19-1-1929 Port of Malmö
No. in Survey held at Reg. Book, Suppl. 91106 on the ^{Single} ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel "MAX ALBRECHT"
Date, First Survey 18th May, 1928 Last Survey 14th Jan. 1929 Number of Visits 15

Built at Malmö By whom built Rockström M. J. Aktief. Yard No. 158 When built 1929
Engines made at Malmö By whom made Rockström M. J. Aktief. Engine Nos. 2526 When made 1929
Donkey Boilers made at Malmö By whom made Deutsche Werkf. A. G. Boiler No. 889 When made 1929
Brake Horse Power 2500 Owners Dr. Max Albrecht Kommanditgesellschaft Port belonging to Hamburg
Nom. Horse Power as per Rule 584 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which vessel is intended

OIL ENGINES, &c.—Type of Engines Diesel Oil Engines M.A.N. 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 35 kg/cm² Diameter of cylinders 570 mm = 22 7/16" Length of stroke 470 mm = 18 9/16" No. of cylinders 2 x 6 = 12 No. of cranks 2 x 6 = 12
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 770 mm Is there a bearing between each crank Yes
Revolutions per minute 145 Flywheel dia. 2100 mm Weight 5880 kg Means of ignition Diesel Kind of fuel used Diesel Oil
Crank Shaft, dia. of journals as per Rule 351 mm as fitted 360 mm Crank pin dia. 360 mm Crank Webs Mid. length breadth 750 mm shrunk Thickness parallel to axis 225 mm
Flywheel Shaft, diameter as per Rule 351 mm as fitted 360 mm Intermediate Shafts, diameter as per Rule 238 mm as fitted 238 mm Thrust Shaft, diameter at collars as per Rule 250 mm as fitted 260 mm
Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 261 mm as fitted 261 mm Is the {tube} shaft fitted with a continuous liner {screw} Yes
Bronze Liners, thickness in way of bushes as per Rule 15.5 mm as fitted 18 mm Thickness between bushes as per rule 12 mm as fitted 15 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 Yes
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 Length of Bearing in Stern Bush next to and supporting propeller 1200 mm
Propeller, dia. 3260 mm Pitch 2900 mm No. of blades 3 Material Bronze whether Moveable No Total Developed Surface each 39.5 sq. feet
Method of reversing Engines M.A.N. system Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication forced Thickness of cylinder liners both 49 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 Yes
Cooling Water Pumps, No. 2 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
Pumps connected to the Main Bilge Line No. and Size 1 of 165 x 240 mm ddb 1 of 7 1/2 x 8 x 10 ddb (Ballast pump) 1 of 6 x 6 x 6 ddb (Bilge pump in main pump room) 6 x 6 x 6 ddb
How driven By electric motor By steam By steam By steam
Ballast Pumps, No. and size 2 See above Lubricating Oil Pumps, including Spare Pump, No. and size 2 of 60 m³/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 3-4", 1-4" in after cofferdam 3-3 1/2" in main pump room 1-3 1/2" in pump room fwd. 1-3 1/2" in fwd. cofferdam
In Holds, &c. 2-3 1/2" in dry cargo hold Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-4" conn. to ballast pump 2-6" for emergency use
Are all the Bilge Suction pipes in Holds and Tunnel Wall 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 Both
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 None How are they protected
What pipes pass through the deep tanks Suction pipe from fwd. cofferdam 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 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. 2 No. of stages 3 Diameters 530-470-105 mm Stroke 400 mm Driven by main engines
Auxiliary Air Compressors, No. 1 No. of stages 3 Diameters 280-340-75 mm Stroke 250 mm Driven by electric motor
Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 105-42 mm Stroke 80 mm Driven by steam engine
Scavenging Air Pumps, No. Diameter Stroke Driven by
Auxiliary Engines crank shafts, diameter as per Rule 142.5 mm as fitted 155 mm Marked LLOYD'S No. 8228/9 V.B. 22.5.28

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes Injection air receivers by means of steam and soda
Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces
Is there a drain arrangement fitted at the lowest part of each receiver Yes
High Pressure Air Receivers, No. 3 Cubic capacity of each 400 litres Internal diameter 448 mm thickness 26 mm
Seamless, lap welded or riveted longitudinal joint lap welded Material Steel Range of tensile strength 36.3-39.2 kg/mm² Working pressure by Rules 71.3 kg/cm²
Starting Air Receivers, No. 1 Total cubic capacity 20 m³ Internal diameter 1850 mm thickness 25.5 mm
Seamless, lap welded or riveted longitudinal joint Riveted Material Steel Range of tensile strength 45.9-49.6 kg/mm² Working pressure by Rules 25.8 kg/cm²

