

REPORT ON OIL ENGINE MACHINERY.

No. 93536

Date of writing Report 6/3/36 When handed in at Local Office Port of NEWCASTLE-ON-TYNE Received at London Office 9 MAR 1936
 No. in Survey held at Newcastle on Tyne Date, First Survey 29 April 35 Last Survey 17 Dec 1935
 Reg. Book. MACTRA Number of Visits 6193

on the Single Screw vessel MACTRA Tons Gross 5267 Net 3627
 Built at Newcastle (Walker) By whom built Swan Hunter & Wigham Richardson Ltd Yard No. 1511 When built 1936-3
 Engines made at do (St Peters) By whom made R W Hawthorn Leslie & Co Engine No. 2852 When made 1936
 Donkey Boiler made at do (Walker) By whom made Swan Hunter & Wigham Richardson Ltd Boiler No. 1488 When made 1936
 Brake Horse Power 2800 Owners Anglo Saxon Petroleum Co Ltd Port belonging to LONDON
 Nom. Horse Power as per Rule 377 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which vessel is intended 2596" 558"

OIL ENGINES, &c.—Type of Engines Werkspoor Supercharged 2 or 4 stroke cycle 4, Single or double acting Single
 Maximum pressure in cylinders 700 lbs/sq in Diameter of cylinders 650 mm Length of stroke 1400 mm No. of cylinders 6 No. of cranks 6
 Mean indicated pressure 135 lbs/sq in max Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 844 mm Is there a bearing between each crank Yes
 Revolutions per minute 120 max Flywheel dia. 7'5 1/2 Weight 6.8 tons Means of ignition Compression Kind of fuel used Diesel oil
 Crank Shaft, dia. of journals as per Rule 442 mm Crank pin dia. 460 mm Crank Webs Mid. length breadth 870 mm Thickness parallel to axis 267 mm Thickness around eye-hole 204 mm
 Flywheel Shaft, diameter as per Rule 340 mm Intermediate Shafts, diameter as per Rule 312 mm Thrust Shaft, diameter at collars as per Rule 328 mm
 Tube Shaft, diameter as per Rule None Screw Shaft, diameter as per Rule Is the tube shaft fitted with a continuous liner Yes
 Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per rule 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 Yes

Propeller, dia. Yes Pitch Yes No. of blades Yes Material Yes whether Moveable Yes Total Developed Surface Yes sq. feet
 Method of reversing Engines Air Servo Is a governor or other arrangement fitted to prevent racing of the engine Yes Means of lubrication Forced
 Thickness of cylinder liners 55 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 - Standby (Steam) 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 led overboard
 Bilge Pumps worked from the Main Engines, No. 1 Bilge Diameter Rotary Stroke 35 tons/hr Can one be overhauled while the other is at work Yes
 Pumps connected to the Main Bilge Line No. and Size How driven rotary

Ballast Pumps, No. and size Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 - ME driven 40 tons/hr 1 - 8x8x10" Steam 50 tons/hr
 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 Yes In Pump Room Yes
 In Holds, &c. Yes

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size Yes
 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 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 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 Yes
 What pipes pass through the bunkers Yes How are they protected Yes
 What pipes pass through the deep tanks Yes 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 Yes 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. Yes No. of stages Yes Diameters Yes Stroke Yes Driven by Yes
 Auxiliary Air Compressors, No. Yes No. of stages Yes Diameters Yes Stroke Yes Driven by Yes
 Small Auxiliary Air Compressors, No. Yes No. of stages Yes Diameters Yes Stroke Yes Driven by Yes
 Scavenging Air Pumps, No. Yes Diameter Yes Stroke Yes Driven by Yes
 Auxiliary Engines crank shafts, diameter as per Rule No. Yes
 as fitted Yes Position Yes

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. Yes Cubic capacity of each Yes Internal diameter Yes thickness Yes
 Seamless, lap welded or riveted longitudinal joint Yes Material Yes Range of tensile strength Yes Working pressure Yes
 Starting Air Receivers, No. Yes Total cubic capacity Yes Internal diameter Yes thickness Yes
 Seamless, lap welded or riveted longitudinal joint Yes Material Yes Range of tensile strength Yes Working pressure Yes

for further particulars see Shipbuilders Report



