

REPORT ON OIL ENGINE MACHINERY.

No. 93536

Date of writing Report

19

When handed in at Local Office

6/3/36 Port of

Received at London Office

-9 MAR 1936

NEWCASTLE-ON-TYNE

No. in Survey held at
Reg. Book.

Newcastle on Tyne

Date, First Survey

29 April 35

Last Survey

17 Dec 1935

Number of Visits

6193

Single
on the
Triple
Quadruple

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. 3852 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
 as fitted 460 mm Mid. length thickness 267 mm Thrust Shaft, diameter at collars as per Rule 328 mm
 Flywheel Shaft, diameter as per Rule 340 mm Intermediate Shafts, diameter as fitted 312 mm as fitted 340 mm
 Tube Shaft, diameter as per Rule None Screw Shaft, diameter as per Rule None Is the tube shaft fitted with a continuous liner Yes
 as fitted None as fitted None Is the screw shaft fitted with a continuous liner Yes
 Bronze Liners, thickness in way of bushes as per Rule None Thickness between bushes as per rule None Is the after end of the liner made watertight in the
 as fitted None as fitted None 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 If so, state type None 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 Yes
 Method of reversing Engines Air Servo Is a governor or other arrangement fitted to prevent racing of the engine when detached 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) Yes 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 Sanitary How driven rotary
 Ballast Pumps, No. and size 1- ME driven 40 tons/hr Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 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 oil or fuel or of lubricating oil from saturating the woodwork Yes
 Main Air Compressors, No. 1 No. of stages 1 Diameters 12" Stroke 12" Driven by Electric
 Auxiliary Air Compressors, No. 1 No. of stages 1 Diameters 12" Stroke 12" Driven by Electric
 Small Auxiliary Air Compressors, No. 1 No. of stages 1 Diameters 12" Stroke 12" Driven by Electric
 Scavenging Air Pumps, No. 1 Diameter 12" Stroke 12" Driven by Electric
 Auxiliary Engines crank shafts, diameter as per Rule 12" No. 1 Position 1
 as fitted 12"

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per RuleCan 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. 1 Cubic capacity of each 100 cu ft Internal diameter 12" thickness 1/2"
 Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 40,000 lbs/sq in Working pressure by Rules 150 lbs/sq in
 Actual 150 lbs/sq in

Starting Air Receivers, No. 1 Total cubic capacity 100 cu ft Internal diameter 12" thickness 1/2"
 Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 40,000 lbs/sq in Working pressure by Rules 150 lbs/sq in
 Actual 150 lbs/sq in

