

REPORT ON OIL ENGINE MACHINERY.

Received at London Office 31 DEC 1929

Date of writing Report 10 When handed in at Local Office 28-12-1929 Port of Rauen
 No. in Survey held at Le Havre Date, First Survey 16 July Last Survey 12 Dec 1929
 Reg. Book. Number of Visits 12

on the ^{Single} Twin ^{Triple} Screw vessel Motor tanker "Mpinza"
 Built at Le Havre By whom built W. Worms & Co. Ateliers et Chantiers de Yard No. 53 When built 1929
 Engines made at Amsterdam By whom made Westspeer Engine No. 4287 When made 1929
 Donkey Boilers made at Le Havre By whom made Ateliers et Chantiers de la Seine Maritime Boiler No. 123/124 When made 1929
 Brake Horse Power 2x 1425 Owners Anglo Saxon Petroleum Co London Port belonging to A. Gravenhage
 Nom. Horse Power as per Rule 2x 407 = 814 Is Refrigerating Machinery fitted for cargo purposes 40 Is Electric Light fitted yes
 Trade for which vessel is intended 806

OIL ENGINES, &c.—Type of Engines 2 or 4 stroke cycle Single or double acting
 Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge Is there a bearing between each crank
 Revolutions per minute Flywheel dia. Weight Means of ignition Kind of fuel used
 Crank Shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank Webs Mid. length breadth Mid. length thickness Thickness parallel to axis shrunk Thickness around eyehole
 Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule 276 as fitted 310 Thrust Shaft, diameter at collars as per Rule as fitted
 Tube Shaft, diameter as per Rule as fitted none Screw Shaft, diameter as per Rule 304.82 as fitted 351 Is the tube shaft fitted with a continuous liner yes
 Bronze Liners, thickness in way of bushes as per Rule 18.3 as fitted 22.5 & 23.5 Thickness between bushes as per rule 13.72 as fitted 19.75 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
 Propeller, dia. 4.15 Pitch 3.700 No. of blades 3 Material bronze whether Moveable no Total Developed Surface 575 sq. feet
 Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication
 Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with non-conducting material 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. Is the sea suction provided with an efficient strainer which can be cleared within the vessel
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 150 Stroke 260 Can one be overhauled while the other is at work yes
 Pumps connected to the Main Bilge Line No. and Size 1 ballast pump 203/260/254 How driven steam
 Ballast Pumps, No. and size 1 203/260/254 Lubricating Oil Pumps, including Spare Pump, No. and size
 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 40, 90 in stern box, main line 120 2 Direct suction 115
 In Holds, &c. 1 each side 60/70 Pumps compartments one each side 60/60 One peak one 150/100 left peak one 100/100
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 Ballast pump 90 203/260/254
 Are all the Bilge Suction pipes in Holds and Parcel Well fitted with strum-boxes yes no tunnel 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 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 none 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 non return valves 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 steel vessel

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule
 Can the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces
 Is there a drain arrangement fitted at the lowest part of each receiver
 High Pressure Air Receivers, No. 2 Cubic capacity of each 200 Internal diameter 470 thickness 28
 Seamless, lap welded or riveted longitudinal joint Material steel Range of tensile strength Working pressure by Rules
 Starting Air Receivers, No. 4 + 1 for steam boiler Total cubic capacity 4000 Internal diameter 1m 650 thickness 35 @ 38 end 35 shell Working pressure by Rules 35-98 per shell 40-26 per shell
 Seamless, lap welded or riveted longitudinal joint riveted Material steel Range of tensile strength 44 to 55 Working pressure by Rules 40-26 per shell

IS A DONKEY BOILER FITTED? *yes two* If so, is a report now forwarded? *yes*

PLANS. Are approved plans forwarded herewith for Shafting *yes* Receivers *yes* Separate Tanks *L*

Donkey Boilers *yes* General Pumping Arrangements *yes* Oil Fuel Burning Arrangements *L*

SPARE GEAR

The foregoing is a correct description.

Manufacturer. P. Pon WORMS & Cie Le Sous Directeur

Dates of Survey while building: During progress of work in shops-- 1929 April 5-27 - May 2-17 - June 27 - July 10; During erection on board vessel-- 1929 July 16 - Aug 26 - Sept 25 & 26 - Oct 2-4-22 - Nov 4-5-15-25-28 - Dec 2-5-12; Total No. of visits 21

Dates of Examination of principal parts—Cylinders *L* Covers *L* Pistons *L* Rods *L* Connecting rods *L*

Crank shaft *L* Flywheel shaft *L* Thrust shaft *L* Intermediate shafts 17/2/28 Tube shaft *none*

Screw shaft 17/2/28 Propeller 17/2/28 Stern tube 26/8/28 Engine seatings 25 September Engines holding down bolts *5 Nov*

Completion of fitting sea connections *2 October* Completion of pumping arrangements *10 December* Engines tried under working conditions *12 December*

Crank shaft, Material *L* Identification Mark *L* Flywheel shaft, Material *L* Identification Mark *L*

Thrust shaft, Material *L* Identification Mark *L* Intermediate shafts, Material *Steel* Identification Marks *2452 KK 12.29*

Tube shaft, Material *none* Identification Mark *L* Screw shaft, Material *Steel* Identification Mark *no 7625 3694 KK 12.1.28*

Is the flash point of the oil to be used over 150° F. *yes*

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *Megara*

General Remarks (State quality of workmanship, opinions as to class, &c.)

The erection on board has been surveyed, the workmanship is good, the motors have been tried at the sea and the result found very satisfactory. This vessel merit in my opinion the favourable consideration of the Committee for to be classed and to have notation of ~~L~~ L MC 12.29 inserted in the Register Book.

The starting air receivers have been surveyed during their construction the material is of good quality, the workmanship is good.

Table with columns for No. of stages, No. of cylinders, and other technical specifications for various machinery components.

The amount of Entry Fee ... £ 4778; Special Certificate ... £ 650; Donkey Boiler Fee Separate report ... £ 1039; Travelling Expenses (if any) ... £ 2650. Includes dates when applied for and when received.

Committee's Minute Assigned + Lamb 12 29 Oil Engines 180. Includes a signature and the Lloyd's Register Foundation logo.