

REPORT ON OIL ENGINE MACHINERY.

No. 8341

Received at London Office

15 APR 1929

Date of writing Report 1. 4. 1929. When handed in at Local Office 8/4/29 Port of TRIESTE. Date, First Survey 22/11/27 Last Survey 27/3/29

No. in Survey held at 0126 on the Twin Triple Screw vessel

"M/S. FUSIJAMA"

Tons Gross 6669.20 Net 4195.73

Built at TRIESTE By whom built STABILIMENTO T. TRI. Yard No. 773 When built 1929
Engines made at TRIESTE By whom made STABILIMENTO TEC. TRI. Engine No. 5119 When made 1929
Monkey Boilers made at HAMIBUARG. By whom made DEUTSCHE WERFF. A.G. Boiler No. 443 When made 1926.
Brake Horse Power WITHOUT- 3900. Owners LLOYD TRIESTINO Port belonging to TRIESTE.
Nom. Horse Power as per Rule 986. Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES.
Trade for which vessel is intended Japan (SUPERCHARGER FITED.)

ENGINES, &c. Type of Engines 6 CYLINDER B.W. DIESEL E. 2 or 4 stroke cycle 4 Single or double acting S.A.
Maximum pressure in cylinders 35 1/2 em² 510 lbs. Diameter of cylinders 240 mm. Length of stroke 1800 mm. No. of cylinders 12. No. of cranks 12.
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 994 mm. Is there a bearing between each crank YES.
Revolutions per minute 125. Flywheel dia. 3740 mm. Weight 11372 kg. Means of ignition COMPRESSION Kind of fuel used DIESEL OIL
Crank Shaft, dia. of journals as per Rule 449 mm. Crank pin dia. 456 mm. Crank Webs Mid. length breadth 1000 mm. Thickness parallel to axis 300 mm.
as fitted 456 mm. Mid. length thickness 300 mm. Thickness around eye-hole 198 mm.
Flywheel Shaft, diameter as per Rule 449 mm. Intermediate Shafts, diameter as per Rule 388 mm. Thrust Shaft, diameter at collars as per Rule 302 mm.
as fitted 520 mm. as fitted 294 mm. as fitted 340 mm.
Tube Shaft, diameter as per Rule as fitted. Screw Shaft, diameter as per Rule 318 mm. Is the shaft fitted with a continuous liner YES.
as fitted. as fitted 327 mm. Is the after end of the liner made watertight in the stern tube YES. See plan.

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
Propeller, dia. 4000 mm. Pitch 3760 mm. No. of blades 3 Material BA. MAN. whether Moveable NO Total Developed Surface 5.10 M²
Method of reversing Engines COMP. AIR. Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES. Means of lubrication FORGED. Thickness of cylinder liners 60 mm. Are the cylinders fitted with safety valves YES. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material BOTH. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Cooling Water Pumps, No. TWO CENT. 210 TON. 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. 2. Diameter 160 mm. Stroke 225 mm. Can one be overhauled while the other is at work YES.
Pumps connected to the Main Bilge Line No. and Size 2 MAIN ENGINE BILGE PUMP 160 x 225 mm. How driven MAIN ENGINE. BALAST, 150 TON. p.h. 2 BILGE 410 TON. p.h. ELECTRIC MOTOR.
Ballast Pumps, No. and size ONE 150 TON. p.h. Lubricating Oil Pumps, including Spare Pump, No. and size 2. ROTATIVE 60 T. p.h.
Are two independent means arranged for circulating water through the Oil Cooler NO OIL COOLER. Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces 2 @ 90 mm. 2 @ 70 mm. ISOLATED BILGE SUCTIONS; 1 @ 90 mm. IN TUNNEL WELL

In Holds, &c. N°1-2 @ 90 mm. N°2-2 @ 90 mm. N°3-2 @ 90 mm. N°4 (DEEPTANK) 2 @ 150 mm. 2 @ 90 mm. N°5-2 @ 83 mm. 2 @ 70 mm. N°6-1 @ 70 mm.
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 @ 90 mm. 1 @ 200 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.
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 How are they protected
What pipes pass through the deep tanks SUCTION PIPES TO D.A.T. N°8 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 TOP PLATFORM.
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. TWO. No. of stages 3. Diameters 750. 675. 150. Stroke 400 Driven by MAIN MOTOR
Auxiliary Air Compressors, No. THREE. No. of stages 3. Diameters 322. 328. 79. Stroke 820 Driven by AUX DIESEL MOT.
Small Auxiliary Air Compressors, No. ONE. No. of stages 2. Diameters 106. 34. Stroke 80 Driven by STEAM. ENG.

Scavenging Air Pumps, No. Diameter Stroke Driven by
Auxiliary Engines crank shafts, diameter as per Rule AS APPROVED. as fitted 170/190 mm.
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 YES. What means are provided for cleaning their inner surfaces ACCESSIBLE FOR CLEANING.
Is there a drain arrangement fitted at the lowest part of each receiver YES.
High Pressure Air Receivers, No. 2. Cubic capacity of each 500 LIT. 350 LIT. 80 LIT. Internal diameter 480 mm. 360 mm. 180 mm. thickness 30 mm. 15 mm. 10 mm. Working pressure by Rules 10 mm. 65 ATM.

Seamless, lap welded or riveted longitudinal joint 3. SEAMLES. Material STEEL Range of tensile strength SEE CERTIF. Working pressure by Rules
Starting Air Receivers, No. TWO Total cubic capacity 44 M³ Internal diameter 1900 x 1953 mm. thickness 26.5 mm.
Seamless, lap welded or riveted longitudinal joint FIN. D.B. STA. Material STEEL Range of tensile strength 44 ~ 60 kg Working pressure by Rules 27.9 ATM.

IS A DONKEY BOILER FITTED?

YES.

If so, is a report now forwarded? YES

PLANS. Are approved plans forwarded herewith for Shafting

YES.

Receivers

YES.

Separate Tanks

YES.

Donkey Boilers No

General Pumping Arrangements

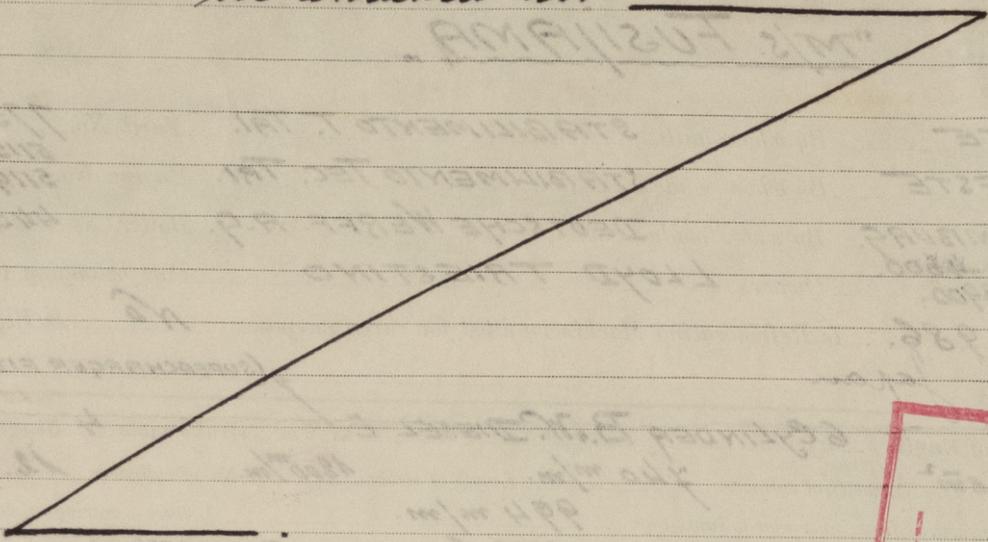
YES.

Oil Fuel Burning Arrangements

No

SPARE GEAR

Examined and found in order and complete. Please see attached list.



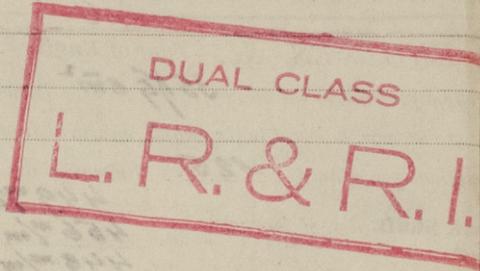
The foregoing is a correct description.

Stabilimento Tecnico Triestino

Fabbrica macchine S. Andrea - Trieste

Manufacturer.

Aut. Roma



Dates of Survey while building

See attached list

163.

Dates of Examination of principal parts - Cylinders 5.12.27, Covers 30.11.27, Pistons 29.2.28, Rods 15.1.27, Connecting rods 3.6.27, Crank shaft 4.1.27, Flywheel shaft 8.5.28, Thrust shaft 8.5.28, Intermediate shafts 8.5.28, Tube shaft 28.9.27, Screw shaft 8.5.28, Propeller 7.3.29, Stern tube 7.11.28, Engine seatings 24.11.28, Engines holding down bolts 16.2.29.

Completion of fitting sea connections 12.11.28, Completion of pumping arrangements 2.2.3.29, Engines tried under working conditions 23.3.29. Crank shaft, Material STEEL, Identification Mark 71. N° 645-646-22/9/27. Flywheel shaft, Material STEEL, Identification Mark LLOYD'S-510-5.28/9/28. Thrust shaft, Material STEEL, Identification Mark LLOYD'S N° 510-SPEZIA-28/9/28. Intermediate shafts, Material STEEL, Identification Marks LLOYD'S-119 508, 531, 526, 504, 509, 539-28. Tube shaft, Material ---, Identification Mark ---. Screw shaft, Material STEEL, Identification Mark LLOYD'S-N° 511-28/9/28.

Is the flash point of the oil to be used over 150° F. YES. SPARE " " STEEL IDENTIFICATION MARK- LLOYD'S- N° 543-28/9/28.

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with YES.

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo YES (in DEEPTANK). If so, have the requirements of the Rules been complied with YES.

Is this machinery duplicate of a previous case YES. If so, state name of vessel MS. MINIALE-ESQUILINO-TREMO-TROMOLO.

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been constructed under special survey in accordance of the rules and approved plans. The material and workmanship are good. The machinery has been efficiently installed on board of the vessel. Examined under full working condition and found satisfactory and is eligible in my opinion for classification and to have the RECORD OF LMC-3-29.

The auxiliary engine fitted on this vessel are follows: STARBOARD N° 5118 LLOYD'S-TEST 396 M13-13.12.28 - H.P.W. 100/75 DINAMOS N° 7654-LS-20/10/28. PORT CENTRE N° 5116 LLOYD'S-TEST 394 M13-26.11.28 - H.P.W. 100/75 . N° 7635-LS-20/10/28. PORT AFT N° 5117 LLOYD'S-TEST 395 V.L-5.12.28 - H.P.W. 100/75 . N° 7636-LS-29/10/28.

Vertical text on the left margin: Lloyd's Register of Shipping (Committee's Minute)

The amount of Entry Fee 5.58.-, Special 12.341.-, Donkey Boiler Fee, Travelling Expenses (if any) 455.-

When applied for, When received, 13.5.29. Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute 23 APR 1929, Assigned L.M.C. 3:29 Cl. Oil engine 57 100 lbs.



CERTIFICATE WRITTEN