

REPORT ON OIL ENGINE MACHINERY.

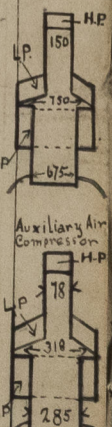
No. 4469

Date of writing Report 1-8-1924 When handed in at Local Office 10 Port of Kobe
 No. in Survey held at Tama, Uno Date, First Survey 18th JANY 1924 Last Survey 27th July 1924
 Reg. Book. 38045. on the ~~Triple~~ ^{Single} Motor Screw vessel "AKAGISAN MARU" Number of Visits 23
 Master Built at Uno, Japan By whom built Mitsui Bussan Kaisha Yard No. 63 When built 1924
 Engines made at Copenhagen By whom made Akts. Burmeister & Wain Engine No. 996 When made 1923
 Donkey Boilers made at Uno, Japan. By whom made Mitsui Bussan K. Ltd. Boiler No. 63 When made 1924
 Brake Horse Power 1950 Owners Mitsui Bussan Kaisha Ltd. Port belonging to Tokio, Japan.
 Indicated " 2600
 Nom. Horse Power as per Rule 489 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

OIL ENGINES, &c.—Type of Engines Vertical Diesel Oil Engine 2 or 4 stroke cycle 4 Single or double acting Single
 Maximum pressure in cylinders 35 Kg/cm² No. of cylinders 6 No. of cranks 6 Diameter of cylinders 740 m/m=29¹/₈"
 Length of stroke 1500 m/m=59¹/₁₆" Revolutions per minute 95 Means of ignition air compression Kind of fuel used Crude Oil (Flash point above 150°F.)
 Is there a bearing between each crank yes Span of bearings (Page 92, Section 2, par. 7 of Rules) 1004 m/m
 Distance between centres of main bearings 1450 m/m Is a flywheel fitted yes Diameter of crank shaft journals as per Rule 470.16 m/m
 Diameter of crank pins 472 m/m Breadth of crank webs as approved 870 m/m as fitted 870 m/m Thickness of ditto as approved 310 m/m as fitted 310 m/m
 Diameter of flywheel shaft as per Rule 470.16 m/m as fitted 472 m/m Diameter of tunnel shaft as per Rule 12.876" as fitted 13"
 Diameter of screw shaft as per Rule 13.77" as fitted 14" Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes
 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 joints burned -
 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 - If without liners, is the shaft arranged to run in oil -
 Type of outer gland fitted to stern tube - Length of stern bush 5'0" Diameter of propeller 15"-9"
 Pitch of propeller 12'-0" No. of blades 4 state whether moveable no Total surface 76 square feet
 Method of reversing direct reversible Governor or other arrangement fitted to prevent racing of the engine when declutched yes Thickness of cylinder liners 53.5 m/m
 Are the cylinders fitted with safety valves yes Means of lubrication Forced lubrication Are the exhaust pipes and silencers water cooled or lagged with non-conducting material or lagged of the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine
 Silencers lagged. No. of cooling water pumps one Is the sea suction provided with an efficient strainer which can be cleared within the vessel - No. of bilge pumps fitted to the main engines 2 off Diameter of ditto 160 m/m Stroke 220 m/m
 Can one be overhauled while the other is at work Yes No. of auxiliary pumps connected to the main bilge lines one How driven Electro motor
 Sizes of pumps Diam=6¹/₂" Stroke=9" No. and sizes of suctions connected to both main bilge pumps and auxiliary bilge pumps:—In engine room six 4¹/₂"
 and in holds, etc. Nos. 1, 2, 3, & 4, Holds—Each two 3" No. of ballast pumps one How driven Motor with reduction gear Sizes of pumps 150 tons/hour
 Is the ballast pump fitted with a direct suction from the engine room bilges yes State size 4¹/₂" Is a separate auxiliary pump suction fitted in Engine Room and size yes - 4¹/₂" Are all the bilge suction pipes fitted with roses yes Are the roses in Engine Room always accessible yes
 Are the sluices on Engine Room bulkheads always accessible none Are all connections with the sea direct on the skin of the ship yes
 Are they valves or cocks valves Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates yes
 Are the discharge pipes 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 all pipes, cocks, valves and pumps in connection with the machinery accessible at all times yes Are the bilge suction pipes, cocks and valves arranged so as to prevent any communication between the sea and the bilges yes Is the screw shaft tunnel watertight yes Is it fitted with a watertight door yes
 worked from of Engine Room If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -
 No. of main air compressors 1 off No. of stages 3 Diameter 150 m/m Stroke 480 m/m Driven by the main oil engine.
 No. of auxiliary air compressors 3 off No. of stages 3 Diameter 170 m/m Stroke 170 m/m Driven by Auxiliary oil engine.
 No. of small auxiliary air compressors 1 off No. of stages 2 Diameter 140 m/m Stroke 140 m/m Driven by hand
 No. of scavenging air pumps - Diameter - Stroke - Driven by -
 Diameter of auxiliary Diesel Engine crank shafts approved 154 m/m as fitted 154 m/m Are the air compressors and their coolers made so as to be easy of access yes

IR RECEIVERS:—No. of high pressure air receivers I-2 off I=17³/₈" I-500 litres
 material Siemens Martin St. Seamless, lap welded or riveted longitudinal joint Internal diameter II=15¹/₄" Cubic capacity of each II-250 "
 thickness II=1¹/₈" working pressure 65 ATM Seamless Range of tensile strength 26-30 tons per sq. in.
 Total cubic capacity 2x 550 cubic feet Material Siemens Martin St. Seamless, lap welded or riveted longitudinal joint Riveted
 Range of tensile strength Shell=28.8-30.6 tons Shell=1¹/₈" 15/16 + 1/32" Working pressure by rules 25 Atm 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 The starting air receivers are fitted with Manholes Is there a drain arrangement fitted at the lowest part of each receiver yes

Main Air Compressor



yes

* L. M. 7. 24. C. L.
oil engines 1873.

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