

REPORT ON OIL ENGINE MACHINERY.

No. 942.

24 OCT 1929

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Reg. Book. Number of Visits 106

35586 on the Single Twin Triple Quadruple Screw vessel "TAI SHAN"
Tons Gross 6603.7 Net 4057.41

built at Malmö By whom built Hockmms M. V. Aktief. Yard No. 160 When built 1929
Engines made at Malmö By whom made Hockmms M. V. Aktief. Engine No. 34835 When made 1929
Monkey Boilers made at Kiel By whom made Deutsche Werke A.-G. Boiler No. 1059 When made 1929
Indicated Horse Power 5500 Owners The Transoceanic Corporation Port belonging to Panama
Nominal Horse Power as per Rule 1169 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes
Vessel for which vessel is intended

ENGINES, &c.—Type of Engines Diesel M.A.N. 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 35 kg/cm² Diameter of cylinders 27 9/16" Length of stroke 55 1/8" No. of cylinders 2 x 8 = 16 No. of cranks 2 x 8 = 16
Distance of bearings, adjacent to the Crank, measured from inner edge to inner edge 982 mm Is there a bearing between each crank Yes
Revolutions per minute 115 - 120 Flywheel dia. 3019 mm Weight 9700 kg Means of ignition Diesel syst. Kind of fuel used Diesel oil
Crank Shaft, dia. of journals as per Rule 454.1 mm Crank pin dia. 455 mm Crank Webs Mid. length breadth 855 mm Thickness parallel to axis 290 mm
as fitted 455 mm Mid. length thickness 290 mm shrunk Thickness around eye-hole 197.5 mm
Wheel Shaft, diameter as per Rule 318.7 mm Thrust Shaft, diameter at collars as per Rule 335 mm
as fitted 420 - 410 - 336 mm Intermediate Shafts, diameter as per Rule 380 mm as fitted 420 mm
Screw Shaft, diameter as per Rule 350 mm Is the tube screw shaft fitted with a continuous liner Yes
as fitted 383 mm

Oil Liners, thickness in way of bushes as per Rule 18.5 mm Thickness between bushes as per rule 14 mm Is the after end of the liner made watertight in the
as fitted 18.5 & 19.5 mm Is the after end of the liner made watertight in the
peller 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

Is 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
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
of the tube shaft No Length of Bearing in Stern Bush next to and supporting propeller 1600 mm

Propeller, dia. 4430 mm Pitch 4340 mm No. of blades 3 Material Bronze whether Moveable No Total Developed Surface 126.92 sq. feet
Method of reversing Engines M.A.N. Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication
Speed Thickness of cylinder liner Bottom 40 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
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 funnel

Working Water Pumps, No. 2 of 300 m³/hr. & 1 of 60 m³/hr. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
Suction Pumps worked from the Main Engines, No. None Diameter Stroke Can one be overhauled while the other is at work Yes
Pumps connected to the Main Bilge Line No. and Size 3. One 2 cyl. double acting 220 x 245 mm and two 2 cyl. single acting 150 x 225 mm
How driven Electric motors

Pumps, No. and size 2. 2 cyl. dble act. 220 x 245 mm Lubricating Oil Pumps, including Spare Pump, No. and size 4 each of 50 m³/hr.
Independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
No. and size:—In Machinery Spaces 4-3 1/2": 2-3 1/2" in Tunnel wells
&c. 2-3 1/2" in Nos. 1, 2 & 4 holds. 2-2 1/2" in No. 3 hold or Oil drip tank. 3-3 1/2" in No. 5 hold.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-5" connected to ballast pumps. 2-9" for emergency use
Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces
easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Both
Are sufficiently high on the ship's side to be seen without lifting the platform plates Yes or by lifting Are the Overboard Discharges above or below the deep water line Above

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
pass through the bunkers Yes How are they protected Yes
pass through the deep tanks None Have they been tested as per Rule Yes

Valves, Cocks, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
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
to another Yes Is the Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from upper eng platform.

Vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork Yes
Compressors, No. 2 No. of stages 3 Diameter 340-665-150 mm Stroke 580 mm Driven by Main engines.
Air Compressors, No. 2 No. of stages 3 Diameter 380-340-75 mm Stroke 250 mm Driven by Aux. Diesel eng.

Auxiliary Air Compressors, No. 1 No. of stages 2 Diameter 105-42 mm Stroke 80 mm Driven by Steam engine.
Lubricating Air Pumps, No. 1 Diameter Stroke Driven by
Engines crank shafts, diameter as per Rule approved plan 170 mm MARKS ON SHAFTS. LLOYD'S 8380/12 V.B. 10.11.20

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
Are the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Injection. By means of steam & soda.

Where a drain arrangement fitted at the lowest part of each receiver Yes
High Pressure Air Receivers, No. 4 Cubic capacity of each 350 litres Internal diameter 448 mm thickness 26 mm
Seamless, lap welded or riveted longitudinal joint Lap welded Material Steel Range of tensile strength 393-411 kg/cm² Working pressure by Rules 78 kg/cm²

Starting Air Receivers, No. 2 Total cubic capacity 2 x 27 = 54 m³ Internal diameter 2004 mm thickness 27 mm
Seamless, lap welded or riveted longitudinal joint Riveted Material Steel Range of tensile strength 452-504 Working pressure by Rules 25.5 kg/cm²

