

REPORT ON OIL ENGINE MACHINERY.

No. 999

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No. in Survey held at Malmö.

Reg. Book. Hyppl.

42561. on the Twin Screw vessel "TRITON"

Single

Triple

Quadruple

Built at Malmö

Engines made at Malmö

Donkey Boilers made at Amman

Brake Horse Power 5500

Nom. Horse Power as per Rule 1169 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes.

Trade for which vessel is intended Cruelie & airless ejection 6.36

Tons Gross 6607
Net 4045

By whom built *Kockums M.V. Aktiebol* Yard No. 164 When built 1930
 By whom made *Kockums M.V. Aktiebol* Engine No. 5085 When made 1930
 By whom made *Cochran & Co. Amman Ltd.* Boiler No. 11391 When made 1930
 Owners *9/5 Den Norske Afrika og Australasia* Port belonging to Tönberg.
A/S Tankfart I. II. III & IV

2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 35 kg/cm² Diameter of cylinders 700 mm = 27 9/16 Length of stroke 400 mm = 55 1/8 No. of cylinders 2 x 8 = 16 No. of cranks 2 x 8 = 16

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 972 mm Is there a bearing between each crank Yes

Revolutions per minute 116 Flywheel dia. 3019 mm Weight 9700 kgs 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 Mid. length breadth 855 mm Thickness parallel to axis 290 mm

as fitted 455 Crank pin dia. 455 mm Mid. length thickness 290 " shrunk Thickness around eyehole 197.5 "

Flywheel/Shaft, diameter as per Rule 420-410.336 mm Intermediate Shafts, diameter as per Rule 318.7 mm Thrust Shaft, diameter at collars as per Rule

as fitted 320 " as fitted 320 " as per Rule

Tube Shaft, diameter as per Rule 350 mm Screw Shaft, diameter as per Rule 383 mm Is the tube shaft fitted with a continuous liner Yes

as fitted 383 mm as per rule 14 mm 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 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 No Length of Bearing in Stern Bush next to and supporting propeller 1600 mm

Propeller, dia. 4450 mm Pitch 4250 mm No. of blades 3 Material Bronze whether Moveable No Total Developed Surface 135.6 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

torced. Thickness of cylinder liners top 60 mm bottom 40 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with

on-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being siphoned back to the engine funnel

Cooling Water Pumps, No. 3 of 300 m³/hour 1 of 60 m³/hour 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. 2000 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 2. 2-cyl. single acting 150 x 225 mm

No. and size How driven Electric motors

Ballast Pumps, No. and size 1-2 cyl. dbl act 220 x 245 mm 150 tons/hour Lubricating Oil Pumps, including Spare Pump, No. and size 4 each of 50 m³/hour

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 4-3 1/2" and 1-2" T-3 1/2" in tunnel well 2-3 1/2" in tunnels (from bilge holes)

In Holds, &c. 2-3 1/2" in Nos. 1, 2, 3 & 4 holds, 3-3 1/2" in No. 5 hold

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2-5"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces

ed 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 Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates small covers 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 Yes How are they protected

What pipes pass through the deep tanks Yes 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 Is the Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from upper eng. platform

Is 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. 2 removed 6.36 No. of stages 3 Diameters 340-665-150 mm Stroke 580 mm Driven by Main engines

Auxiliary Air Compressors, No. 2 No. of stages 3 Diameters 380-340-75 mm Stroke 250 mm Driven by Aux. Diesel Eng.

Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 105-42 mm Stroke 80 mm Driven by Sham engine

Cavenging Air Pumps, No. 1 Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule approx. 170 mm

LLOYD'S 8547/8 V.B. 21-12-29 Marks on Sharts.

LLOYD'S 8589 V.B. 18-1-30

R 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.

Is there a drain arrangement fitted at the lowest part of each receiver Yes 3 removed & one left for air charges of each receiver can be removed 6.36

High Pressure Air Receivers, No. 4 3 removed & one left for air charges of each receiver can be removed 6.36 Cubic capacity of each 300 litres Internal diameter 448 mm thickness 26 mm

Seamless, lap welded or riveted longitudinal joint welded Material Steel Range of tensile strength 377-38 kg/mm² Working pressure by Rules 75 kg/cm²

Starting Air Receivers, No. 2 Total cubic capacity 54 m³ Internal diameter 2034 mm thickness 27 mm

Seamless, lap welded or riveted longitudinal joint Riveted Material Steel Range of tensile strength 44-50 kg/mm² Working pressure by Rules 75.5 kg/cm²

IS A DONKEY BOILER FITTED? *Yes*
 PLANS. Are approved plans forwarded herewith for Shaving 5-6-29. 2-11-29. Receivers 3-4-29. 2-11-29. Separate Tanks 14-10-29.
 (If not, state date of approval)
 Donkey Boilers ✓ General Pumping Arrangements 23-5-29. Oil Fuel Burning Arrangements ✓

SPARE GEAR Main engines: 2 cylinder covers complete with all valves. 16 complete exhaust valves and 16 extra mats and valves. 2 complete air inlet valves. 8 complete fuel valves and 9 extra mats and valves. Also 4 nozzles and 4 spindles. 2 complete starting air valves. 2 complete safety valves. 1 cylinder liner. 1 piston rod. 2 pistons and 5 sets of piston rings for one piston. 2 set telescopic guides. 1 set of cog and skew wheels for the cam shaft drive for one engine also 2 set cam roller for each valve. 2 bolts with nuts for cylinder covers (No studs used). 4 studs with nuts for each of the air inlet, exhaust and fuel valves. 2 bolts for the starting air valve and 3 bolts for the safety valves. 4 crosshead bearing bolts and nuts and 4 halves of bushes. 2 crank pin bearing bolts and nuts and 2 halves of bearings. 2 main bearing bolts and nuts and 2 halves of bearings. 1 set of coupling bolts for each size of coupling. 1 propeller shaft. 1 cast iron propeller of each hand. 1 set of flanges with liners for bolt fuel pumps and 1 set of all working parts for one pump and additional gaskets etc for same. (continued on sheet II)

The foregoing is a correct description.

KOCKUMS MEKANISK VÄRKSTADS
AKTIE-BOLAG

Manufacturer.

Dates of Survey while building	2/10/29 3/11/29 2/12/29 2/13/29 2/14/29 2/15/29 2/16/29 2/17/29 2/18/29 2/19/29 2/20/29 2/21/29 2/22/29 2/23/29 2/24/29 2/25/29 2/26/29 2/27/29 2/28/29 2/29/29 2/30/29 2/31/29 2/1/30 2/2/30 2/3/30 2/4/30 2/5/30 2/6/30 2/7/30 2/8/30 2/9/30 2/10/30 2/11/30 2/12/30 2/13/30 2/14/30 2/15/30 2/16/30 2/17/30 2/18/30 2/19/30 2/20/30 2/21/30 2/22/30 2/23/30 2/24/30 2/25/30 2/26/30 2/27/30 2/28/30 2/29/30 2/30/30 2/31/30 2/1/31 2/2/31 2/3/31 2/4/31 2/5/31 2/6/31 2/7/31 2/8/31 2/9/31 2/10/31 2/11/31 2/12/31 2/13/31 2/14/31 2/15/31 2/16/31 2/17/31 2/18/31 2/19/31 2/20/31 2/21/31 2/22/31 2/23/31 2/24/31 2/25/31 2/26/31 2/27/31 2/28/31 2/29/31 2/30/31 2/31/31 2/1/32 2/2/32 2/3/32 2/4/32 2/5/32 2/6/32 2/7/32 2/8/32 2/9/32 2/10/32 2/11/32 2/12/32 2/13/32 2/14/32 2/15/32 2/16/32 2/17/32 2/18/32 2/19/32 2/20/32 2/21/32 2/22/32 2/23/32 2/24/32 2/25/32 2/26/32 2/27/32 2/28/32 2/29/32 2/30/32 2/31/32 2/32/32 2/1/33 2/2/33 2/3/33 2/4/33 2/5/33 2/6/33 2/7/33 2/8/33 2/9/33 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