

AY 1944

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25 MAY 1944

Report on On Engine Machinery.

No. 13 897

Received at London Office 24 MAY 1944.

Date of written Report 9th May, 1944. When landed in at Local Office 1944. Port of Gothenburg.

No. in Survey held at Gothenburg. Date, First Survey 15th Sept. 1942. Last Survey 13th May 1944. Reg. Book Number of Visits

39782 on the ~~TUNA~~ ~~TUNA~~ ~~TUNA~~ Single Screw vessel. SAIVN Tons {Gross 541 Net 305}

Built at Gothenburg By whom built A-B. Götaverken Yard No. 589. When built 1944.

Engines made at Gothenburg By whom made A-B. Götaverken Engine No. 1549. When made 1944.

Donkey Boilers made at Gothenburg By whom made A-B. Götaverken Boiler No. 2269. When made 1943.

Brake Horse Power 4200 Owners Trafik A-B. Grängesberg-Oxelösund Port belonging to Stockholm.

Nom. Horse Power as per Rule 744 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitter Yes

Trade for which vessel is intended General.

OIL ENGINES, etc. Type of Engines Heavy oil 2 or 4 stroke cycle 2 Single or double acting S.A.

Maximum pressure in cylinders 42 kg/cm² 26 3/4 59 1/6Mean Indicated Pressure 6.5 kg/cm² Diameter of cylinders 600 mm Length of stroke 1500 mm No. of cylinders 6 No. of cranks 6

Pitch of bearings, adjacent to the Crank, measured from inner edge to inner edge 974 mm Is there a bearing between each crank Yes

Revolutions per minute 112 Turning 8770 kgm Weights 2 2060 Means of ignition Compr. Kind of fuel used Diesel oil

Rank Shaft, as per Rule 155 mm. as fitted 120/130 Crank pin dia 100/105 mm Crank Webs Mid. length breadth 960 mm Thickness parallel to axis 300 mm

Flywheel Shaft, diameter as per Rule 346 mm. as fitted 347 mm Thrust Shaft, diameter at collars as per Rule 353 mm. as fitted 350 mm

Cable Shaft, diameter as per Rule 381.2 mm. as fitted 380 mm body of the screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 19.25 mm. as fitted 20.22 mm Thickness between bushes as per Rule 14.45 mm. as fitted 19.5 mm

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 the 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 tail shaft

If so, state type Length of Bearing in Stern Bush next to and supporting propeller 1800 mm

Propeller, dia. 5140 mm Pitch 3930 mm No. of blades 4 Material C. Steel whether Moveable No Total Developed Surface 10.6 sq m

Method of reversing Engines Comp. air Is a governor or other arrangement fitted to prevent racing of the engine Yes Means of lubrication Forced

Thickness of cylinder liners 50 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with conducting material Lagged

Cooling Water Pumps, No. 2x3400 lit/min. S.W. Is the sea provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. None Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No and Size 1 ballast at 150 tons, 1 ballast at 350 tons, 1 sea bilge at 20 tons

How driven All electrically

Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pump arrangements

Ballast Pumps, No. and size 1x150 tons, 1x350 tons Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2x2750 lit/min

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 5x3", 1x3" to cofferdam, 1x3" to tunnel wall In Pump Room

Holds, etc. Nos. 1, 2, 3 and 4 each 2x7", Nos. 5 and 6 each 2x7" forward and 2x2" aft

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 x 6"

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

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 One Others on tank top 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 No 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

Do the pipes pass through the bunkers How are they protected

Do the pipes pass through the deep tanks Bilge Suctions to Nos. 1, 2 & 3 holds 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 Sea Toward watertight Yes Is it fitted with a watertight door Yes worked from E.R. top

Is a good method, what means are provided to prevent leakage of either fuel oil or lubricating oil from saturating the woodwork

Main Air Compressors, No. None No. of stages Diameters Stroke Driven by

Auxiliary Air Compressors, No. 3 No. of stages 2 Diameters 90, 235 mm Stroke 220 mm Driven by Aux. engines

Small Auxiliary Air Compressors, No. 1 No. of stages 1 Diameter 60 mm Stroke 60 mm Driven by Hand starting

The above small compressor

Are the main air compressors fitted on under sides of main plates

Diameters 138 mm 138 mm Stroke 160 mm

Are the main air compressors fitted on under sides of main plates

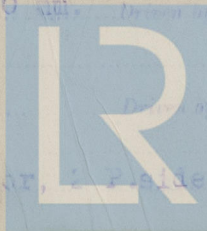
Diameters 138 mm 138 mm Stroke 160 mm

Are the main air compressors fitted on under sides of main plates

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RECEIVERS - Have they been made under survey? **Yes** ✓ State No. of Report or Certificate **Yes** ✓
 each receiver, which can be tested with a safety valve on its side **Yes** ✓
 on the internal surfaces of the receivers be painted and covered **Yes** ✓
 ejection Air Receivers, No. **None** ✓
 unless lap welded or riveted longitudinal joints **None** ✓
 arting Air Receivers, No. **2** ✓ Total cubic capacity **2x10-3 m³** ✓ Range of tensile strength **1800 kg/cm²** ✓
 unless lap welded or riveted longitudinal joints **Riveted** ✓ Material **S.M. Steel** ✓ Range of tensile strength **43/50 kg/cm²** ✓
 A DONKEY BOILER FITTED? **No** ✓
 the donkey boiler intended to be used for domestic purposes only **No** ✓
 Are approved plans forwarded hereto for Shifting? **Yes** ✓ Date **13.5.1942** ✓
 Donkey Boilers, **Got. 10.8.1942** ✓ General Pumping Arrangements, **Got. 1.12.1942** ✓ Pumping Arrangements in Machine, **Got. 1.12.1942** ✓
 Fuel Burning Arrangements, **Got. 1.12.1942** ✓

as the spare gear required by the Rules been supplied? **Yes** ✓
 the principal additional spare gear supplied: **3 fuel valves complete, 1 exhaust valve complete, 3 exhaust valve
 pindles and seats, 1 piston rod, 1 bottom end bearing top half, 1 main bearing complete, 5 fuel
 pump chests liners and plungers, 1 propeller shaft and nut**

The foregoing is a correct description.

INTERVIEWS

Manufacture

Date	During progress of work in shops	During erection on board vessel	Total No. of visits
15th September 1942			
10.10.1942			
15.7.1943			
6.11.1943			
27.9.1943			
11.4.1944			
17.5.1943			
13.8.43			
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