

## REPORT ON OIL ENGINE MACHINERY.

No. 9208

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Date of writing Report 28th March 1934 When handed in at Local Office 31st March 1934 Port of Göteborg

No. in Survey held at Göteborg Date, First Survey 19th August 1931 Last Survey 27th March 1934  
Reg. Book. 34786 on the Twin Screw vessel M/S "SENATOR" Number of Visits 21

Tons { Gross 6588.55  
Net 4001.75

Built at GÖTHEBURG By whom built AB. GÖTAVERKEN Yard No. 461 When built 1934  
Engines made at GÖTHEBURG By whom made AB. GÖTAVERKEN Engine No. 1003 When made 1934  
Donkey Boilers made at GÖTHEBURG By whom made AB. GÖTAVERKEN Boiler No. 1104 When made 1934  
Brake Horse Power 2475 Owners STAVANGER TANKREDERI A/S Port belonging to STAVANGER  
Horse Power as per Rule 543 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES  
Use for which vessel is intended GENERAL

ENGINES, &c.—Type of Engines Two Diesel engines 2 or 4 stroke cycle 4 Single or double acting Single  
Mean pressure in cylinders 35 kg/cm<sup>2</sup> Diameter of cylinders 550 mm Length of stroke 593 mm No. of cylinders 12 No. of cranks 12  
Bearings, adjacent to the Crank, measured from inner edge to inner edge 750 mm Is there a bearing between each crank Yes  
Revolutions per minute 140 Flywheel dia. None Weight ✓ Means of ignition Diesel System Kind of fuel used Diesel fuel oil  
Shaft, dia. of journals 340 mm Crank pin dia. 343 mm Crank Webs 285 mm Mid. length breadth ✓ Thickness parallel to axis 193-213 mm  
Intermediate Shafts, diameter 285 mm Thrust Shaft, diameter at collars 290 mm Thickness around eyehole 159 mm  
Screw Shaft, diameter 285-287 mm Is the shaft fitted with a continuous liner Yes

Liners, thickness in way of bushes 16 mm Thickness between bushes 15.5 mm Is the after end of the liner made watertight in 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  
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

Length of Bearing in Stern Bush next to and supporting propeller 1350 mm  
If so, state type ✓ Material Brass whether Moveable No Total Developed Surface 2.2 m<sup>2</sup>

Reversing Engines Direct reversing Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Yes

Thickness of cylinder liners Bottom 34 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with

ducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Yes

Water Pumps, No. 2 — 140 tons each Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Pumps worked from the Main Engines, No. 2 Diameter 150 mm Stroke 155 mm Can one be overhauled while the other is at work Yes

connected to the Main Bilge Line { No. and Size Two plunger pumps 20 tons each | One bilge pump 30 tons | One 100 tons ballast  
How driven Main engine | Steam | Steam

Lubricating Oil Pumps, including Spare Pump, No. and size Two 55 tons each

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 Three 3 1/2", Two 2 1/2", Two 2", Two 2" to engine room overhead tanks In Pump Room and

in Hold forward One 2 1/2" in pump room, Two 4" in main pump room, all from separate pumps

Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 5" from ballast pump, One 3 1/2" from bilge pump

Are the Bilge Suctions in the Machinery Spaces Yes

the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes

Are they fitted with Valves or Cocks Yes

Are the Overboard Discharges above or below the deep water line Above

Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes

How are they protected ✓

Have they been tested as per Rule Yes

Pipes, Cocks, Valves, 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 No tunnel Is it fitted with a watertight door None worked from ✓

Food vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork ✓

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

Auxiliary Air Compressors, No. One No. of stages 2 Diameters 350 x 310 mm Stroke 160 mm Driven by Steam engine

Engineering Air Pumps, No. None Diameter ✓ Stroke ✓ Driven by ✓

Auxiliary Engines crank shafts, diameter 150 mm No. of stages 2 Diameters 335 x 90 mm Stroke 220 mm Driven by aux. oil engine

Position — Port side | Starboard side | in the engine room

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

Is a drain fitted at the lowest part of each receiver Yes

Internal surfaces of the receivers be examined and cleaned Yes

Internal diameter 197 mm thickness 9.5 mm

Cubic capacity of each 35 litres

Range of tensile strength 30.2 kg/mm<sup>2</sup> Working pressure 47.2 kg/cm<sup>2</sup>

Actual 40 kg/cm<sup>2</sup>

Material 1 1/4" Steel

Thickness 25 mm

by Rules 26.7 kg/cm<sup>2</sup>

Actual 25 kg/cm<sup>2</sup>

Material 1 1/4" Steel

Range of tensile strength 45.7-48.5 kg/mm<sup>2</sup>

Working pressure 40 kg/cm<sup>2</sup>

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