

REPORT ON OIL ENGINE MACHINERY.

14 MAR 1930

Received at London Office

Date of writing Report **10 March 1930** when handed in at Local Office **19** Port of **Stockholm**

No. in Survey held at **Sickla, Skm. Distr.** Date, First Survey **5 Dec. 1929** Last Survey **4 March 1930**

Reg. Book. Number of Visits **6**

on the **Single** } **Screw vessel**
Twin }
Triple }
Quadruple }

Built at _____ By whom built _____ Yard No. _____ When built _____

Engines made at **Stockholm** By whom made **Aktieb. Atlas-Diesel** Engine No. **80356** When made **1930**

Donkey Boilers made at _____ By whom made _____ Boiler No. _____ When made _____

Brake Horse Power **50** Owners **Aktieb. Atlas-Diesel** Port belonging to **London**

Nom. Horse Power as per Rule **23** Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

Trade for which vessel is intended _____

OIL ENGINES, &c. Type of Engines **Stationary Diesel Oil Engine, type 1 H 29/** Single or double acting

Maximum pressure in cylinders **35 kg./cm²** Diameter of cylinders **290 mm.** Length of stroke **410 mm.** No. of cylinders **1** No. of cranks **1**

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **454 mm.** Is there a bearing between each crank _____

Revolutions per minute **275** Flywheel dia. **1400 mm.** Weight **1185 kg.** Means of ignition **Compression** Kind of fuel used **Grade oil**

Crank Shaft, dia. of journals **164 mm.** as per Rule **165** * as fitted Crank pin dia. **165 mm.** Crank Webs Mid. length breadth **220 mm.** Thickness parallel to axis **92** * shrunk Thickness around eye-hole _____

The flywheel is fitted on the crank shaft Flywheel Shaft, diameter _____ as fitted Intermediate Shafts, diameter _____ as fitted Thrust Shaft, diameter at collars _____ as fitted

Tube Shaft, diameter _____ as fitted Screw Shaft, diameter _____ as fitted Is the tube screw shaft fitted with a continuous liner _____

Bronze Liners, thickness in way of bushes _____ as fitted Thickness between bushes _____ as fitted Is the after end of the liner made watertight in the _____

propeller boss _____ 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 two 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 shaft _____ Length of Bearing in Stern Bush next to and supporting propeller _____

Propeller, dia. _____ Pitch _____ No. of blades _____ Material _____ whether Moveable _____ Total Developed Surface _____ sq. feet

Method of reversing Engines _____ Is a governor or other arrangement fitted to prevent racing of the engine when declutched **yes** Means of lubrication _____

pumps _____ Thickness of cylinder liners **none fitted** Are the cylinders fitted with safety valves **yes** Are the exhaust pipes and silencers water cooled or lagged with _____

non-conducting material _____ If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine _____

Cooling Water Pumps, No. **1** Is the sea suction provided with an efficient strainer which can be cleared within the vessel _____

Bilge Pumps worked from the Main Engines, No. _____ Diameter _____ Stroke _____ Can one be overhauled while the other is at work _____

Pumps connected to the Main Bilge Line { No. and Size _____ How driven _____

Ballast Pumps, No. and size _____ Lubricating Oil Pumps, including Spare Pump, No. and size _____

Are two independent means arranged for circulating water through the Oil Cooler _____ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge _____

Pumps, No. and size:—In Machinery Spaces _____

In Holds, &c. _____

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size _____

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

led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges _____

Are all Sea Connections fitted direct on the skin of the ship _____ Are they fitted with Valves or Cocks _____

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates _____ Are the Overboard Discharges above or below the deep water line _____

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel _____ Are the Blow Off Cocks fitted with a spigot and brass covering plate _____

What pipes pass through the bunkers _____ How are they protected _____

What pipes pass through the deep tanks _____ 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 _____

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 _____ Is the Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

If 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. **none fitted** No. of stages _____ Diameters _____ Stroke _____ Driven by _____

Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____

Small Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____

Scavenging Air Pumps, No. _____ Diameter _____ Stroke _____ Driven by _____

Auxiliary Engines crank shafts, diameter _____ as per Rule _____ as fitted _____

IR RECEIVERS:—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 **mudhole 120 mm.**

Is there a drain arrangement fitted at the lowest part of each receiver **yes**

High Pressure Air Receivers, No. **none fitted** Cubic capacity of each _____ Internal diameter _____ thickness _____

seamless, lap welded or riveted longitudinal joint _____ Material _____ Range of tensile strength _____ Working pressure by Rules _____

Starting Air Receivers, No. **1** Total cubic capacity **100 litres** Internal diameter **340 mm.** thickness **15 mm.**

seamless, lap welded or riveted longitudinal joint **lapwelded** Material **S.M. Steel** Range of tensile strength **38 kg./mm²** Working pressure by Rules **51 Kg./cm²**

002830-002831-0097

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting **E. 27.4.25**

Receivers **25.10.26**

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR as per list, approved on the 4th Febr. 1926, will be inspected, when machinery is being fitted in ship.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } **5/12 1929; 17&27/1, 19, 3 & 4/3 1930.**
 { During erection on board vessel - - - }
 Total No. of visits **in shop 6.**

Dates of Examination of principal parts—Cylinders **with** Covers **3&4/3 30** Pistons **4/3 30** Rods — Connecting rods **27,9/1,2 30.**
 Crank shaft **5,29,17,19/12 30** Flywheel shaft Thrust shaft Intermediate shafts Tube shaft
 Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions **in shop 3/3 30**
 Crank shaft, Material **S.M. Steel** Identification Mark **Lloyd's No. N:o 5845 AI.19.2.30A** Flywheel shaft, Material Identification Mark
 Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks
 Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

Is the flash point of the oil to be used over 150° F.

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo

If so, have the requirements of the Rules been complied with

Is this machinery duplicate of a previous case **yes** If so, state name of vessel **see Skm. Report no. 3199.**

General Remarks (State quality of workmanship, opinions as to class, &c.)

I am of opinion, that this engine is of superior material and workmanship, and as it has been designed and constructed under special survey, I have respectfully to submit, that it be approved as auxiliary to a classed main engine.

This Engine has been fitted on board the M.V. "Pemis"

L. Peckert.

The amount of Entry Fee **Kr. 218:40** : When applied for, **10.3.1930.**
 Special ... £ :
 Donkey Boiler Fee ... £ :
 Travelling Expenses (if any) **28:00** : 31.3.1930
Total Kr. 246:00

Committee's Minute

TUE 3 JUN 1930

Assigned

See Pw. 18/11/29

W. Gattson
 Engineer Surveyor to Lloyd's Register of Shipping.

Witnessed by *Mr. K. J. Andersson*



Lloyd's Register Foundation

Certificate (if required) to be sent to (The Surveys are requested not to write on or below the space for Committee's Minutes.)