

Rpt. 4b

Amf Newcastle-on-Tyne No. 85779.
REPORT ON OIL ENGINE MACHINERY.

No. 3205.

14 MAR 1930

Received at London Office

Date of writing Report 10 March 1930 When handed in at Local Office

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.

Single
on the Twin
Triple Screw vessel
Quadruple

Tons
Gross
Net

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 as per Rule 164 mm. Crank pin dia. 165 mm. Crank Webs Mid. length breadth 220 mm. Thickness parallel to axis
as fitted 165 " Mid. length thickness 92 " shrunk Thickness around eye hole
The flywheel is fitted on the crank shaft
Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as fitted Thrust Shaft, diameter at collars as per Rule
as fitted as fitted as fitted
Tube Shaft, diameter as per Rule Screw Shaft, diameter as fitted Is the tube screw shaft fitted with a continuous liner
as fitted as fitted
Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per rule Is the after end of the liner made watertight in the
as fitted as fitted
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, solid injection 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 lap welded Material S.M. Steel Range of tensile strength 38 kg./mm² Working pressure by Rules 51 Kg./cm²

002830-002837-0097

IS A DONKEY BOILER FITTED?

See Secretary's letters

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 1929; 17 & 27, 19, 3 & 4 1930.
12 1
During erection on board vessel - - -
Total No. of visits in shop 6.

Dates of Examination of principal parts—Cylinders with Covers 3 & 4 30 Pistons 4 30 Rods - Connecting rods 27, 9 30.
12 1 2 30

Crank shaft 529, 17, 19 30 Flywheel shaft Thrust shaft Intermediate shafts Tube shaft
12 1 2 30
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 36

Crank shaft, Material S.M. Steel Identification Mark Lloyd's No. N:o 5845 Flywheel shaft, Material Identification Mark

Thrust shaft, Material Identification Mark AI. 19.2.30 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. "Pennis"

L. J. Pedersen.

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

Assigned

TUE. 3 JUN 1930

Engine Surveyor to Lloyd's Register of Shipping.

Resisted by Mr. K. J. Andersson

Lloyd's Register Foundation