

REPORT ON OIL ENGINE MACHINERY.

No. 4983

Received at London Office

24 OCT 1939

Date of writing Report 10th Oct 39 When handed in at Local Office 10

Port of Stockholm.

No. in Survey held at Sickla Skarv District

Date, First Survey 19/5/37

Last Survey 31/8/ 19 39

Number of Visits 19

Single
Twin
Triple
Quadruple

Screw vessel

NAME "BEYERLAND"

NOTE: Engines to be installed at Mosses, Boals Scheepswaer en
Maritime Fabriek, Rotterdam.Tons { Gross
Net

Built at Rotterdam

By whom built Kander Giesse & Zonen Scheepsw. N. V. Yard No.

When built

Engines made at Stockholm

By whom made A.B. Atlas-Diesel

Engine No. 85696

When made 1939

Monkey Boilers made at

By whom made

Boiler No.

When made

Indicated Horse Power 640

Owners Shipping & Coal Co.

Port belonging to Rotterdam

Indicated Horse Power as per Rule 125

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which vessel is intended

ENGINES, &c.—Type of Engines Polar Diesel Oil Engine, type M44M 2 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 55 kg/cm²

Diameter of cylinders 340 mm

Length of stroke 570 mm

No. of cylinders 4

No. of cranks 4

Indicated Pressure 7

Distance of bearings, adjacent to the Crank, measured from inner edge to inner edge 484 mm

Is there a bearing between each crank Yes

Revolutions per minute 250

Flywheel dia. 1550 mm

Weight 1900 kg

Means of ignition Compression

Kind of fuel used Marine Diesel Oil

Crank Shaft, dia. of journals as per Rule

as fitted 235 mm

Crank pin dia. 235 mm

Crank Webs

Mid. length breadth 346.3 mm

Thickness parallel to axis

Flywheel is fitted on the crankshaft.

Flywheel Shaft, diameter as fitted

Intermediate Shafts, diameter as fitted

as per Rule

Thrust Shaft, diameter at collars as per Rule

as fitted 260 mm

Propeller Shaft, diameter as fitted

Screw Shaft, diameter as fitted

as per Rule

Is the { tube
screw } shaft fitted with a continuous liner {

Liner Liners, thickness in way of bushes as per Rule

as fitted

Thickness between bushes as per Rule

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 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

If so, state type

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 By compressed air

Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes

Means of lubrication

Thickens of cylinder liners 25.5 mm

Are the cylinders fitted with safety valves Yes

Are the exhaust pipes and silencers water-cooled or lagged with

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

Suction Water Pumps, No. One

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Pumps worked from the Main Engines, No. 1

Diameter 90 mm

Stroke 140 mm (Double acting)

Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line

No. and Size

How driven

Cooling water led to the bilges

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Pumps, No. and size

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2, each 235 ltr/min

Independent means arranged for circulating water through the Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

No. and size:—In Machinery Spaces

In Pump Room

Pipes, &c.

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

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

Are the Bilge Suctions in the Machinery Spaces

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

Sea Connections fitted direct on the skin of the ship

Are they fitted with Valves or Cocks

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

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

Pipes pass through the bunkers

How are they protected

Pipes pass through the deep tanks

Have they been tested as per Rule

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

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

ment to another

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

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

Air Compressors, No. One

No. of stages 2

Diameters 175/70 mm

Stroke 350 mm

Driven by Main engine

Auxiliary Air Compressors, No. 1

No. of stages 2

Diameters 95/40 mm

Stroke 125 mm

Driven by Elec motor.

Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Suctioning Air Pumps, No. One

D.F.

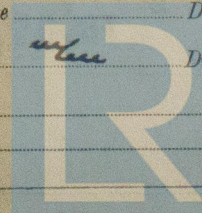
Diameter 770 mm

Stroke 350 mm

Driven by Main engine

Main Engines crank shafts, diameter as per Rule

as fitted

Lloyd's Register
FOW1044-0247

AIR 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 and cleaned Yes. Is a drain 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 _____
Starting Air Receivers, No. 2 Total cubic capacity 1600 litres Internal diameter 650 mm thickness 14 mm
Seamless, lap welded or riveted longitudinal joint Riveted Material S.H. Steel Range of tensile strength 41-44 kg/mm² Working pressure _____
by Rules _____ Actual 25 kg/cm²

IS A DONKEY BOILER FITTED?

Is the donkey boiler intended to be used for domestic purposes only _____

PLANS. Are approved plans forwarded herewith for Shafting E. 24, 23, 36, 30, 37 Receivers E. 6, 38 Separate Tanks _____
(If not, state date of approval) 1/12

Donkey Boilers _____ General Pumping Arrangements _____ Oil Fuel Burning Arrangements _____

SPARE GEAR.

Has the spare gear required by the Rules been supplied } As per enclosed list. The spare gear has
State the principal additional spare gear supplied } been examined before it was despatched.
A Jolly fuel supply pump (type Jmo), electrically driven,
100 litres/min. delivered.
The additional water circulating pump will be delivered
by the Ship Builders.

The foregoing is a correct description,

AKTIEBOLAGET ATLAS DIESEL

G. Jacobsson

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 19.7.1937, 15.12.1937, 18.2.1938, 25.12.1938, 1.16.1938, 24.14.1939, 21.3.1939, 22.28.31.39
During erection on board vessel - - 19 in shop.
Total No. of visits 19 in shop.

Dates of Examination of principal parts—Cylinders 28.8.39 Covers 28.8.39 Pistons 28.8.39 Rods _____ Connecting rods 19.7.39
Crank shaft 24.12.39 Sea air pump Flywheel shaft 15.12.37, 28.39 Thrust shaft 18.2.38, 28.39 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 22/8/39
Crank shaft, Material S.H. Steel. Identification Mark LLOYDS N° 8624 Sea air pump Flywheel shaft, Material S.H. Steel. Identification Mark LLOYDS N° 8
Thrust shaft, Material S.H. Steel. Identification Mark F.C. 17.3.39 Intermediate shafts, Material _____ Identification Marks F.C. 23.12
Tube shaft, Material _____ Identification Mark LLOYDS N° 8296 Screw shaft, Material _____ Identification Mark F.C. 2.2.38

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 _____

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with _____

Is this machinery duplicate of a previous case Yes. If so, state name of vessel Please see Sku. Rpt. N° 49

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 respectfully
submit that it be classed +LHC, as soon as it
has been installed in "Beyerland" to the
satisfaction of the Society's Surveyors.

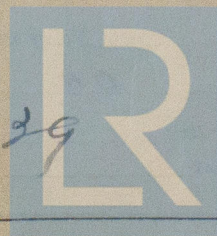
The amount of Entry Fee .. £ : : When applied for, 11.10.1939
Special ... £ 400.-
Donkey Boiler Fee ... £ : : When received, 20.12.1939
Travelling Expenses (if any) £ : : FRI. 17 NOV 1939

Committee's Minute

Assigned

Folke Cassel.

Engineer Surveyor to Lloyd's Register of Shipping



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