

Received at London Office

12 DEC 1949

Date of writing Report

19

When handed in at Local Office

19

Port of Cleveland, Ohio

No. in Survey held at Milwaukee, Wisconsin

Date, First Survey March 31

Last Survey May 25

1949

Reg. Book.

on the Twin Screw vessel

Argentine Vessel (2) Main Propulsion Engines

Number of Visits

Single

Tons

Gross

Net

Built at Uddevalla Sweden

By whom built Uddevallavarvet Aktiebolag

Yard No. 111

When built

Engines made at Milwaukee, Wisconsin

By whom made Nordberg Mfg. Co.

Engine No. TSM-2971

When made 1949

Donkey Boilers made at

By whom made

Boiler No. TSM-2972

When made

Brake Horse Power 8500 total

Owners Argentine Owners

Port belonging to

Nom. Horse Power as per Rule 2062

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which Vessel is intended

OIL ENGINES, &c.—Type of Engines Crosshead type. Solid Injection 2 or 4 stroke cycle 2 Single or double acting S

Motor driven scavenge blower

Maximum pressure in cylinders 800 psi

Mean Indicated Pressure 80 psi

Diameter of cylinders 29"

Length of stroke 40"

No. of cylinders 7

No. of cranks 7

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 36.5"

Is there a bearing between each crank Yes

Revolutions per minute 160

Turning wheel dia. 84.625"

Weight 2600 lbs.

Means of ignition Compression

Kind of fuel used Diesel

Crank Shaft, {Solid forged 2 sections as per Rule 20"

Crank pin dia. 20"

Crank Webs

Mid length breadth 27"

Thickness parallel to axis

Mid length thickness 9.75"

Thickness around eyehole

Flywheel Shaft, diameter as per Rule

Intermediate Shafts, diameter as per Rule

Thrust Shaft, diameter at collars as per Rule

Tube Shaft, diameter as per Rule

Screw Shaft, diameter as per Rule

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

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 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

If so, state type

Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch 42 5/8"

No. of blades

Material

whether Moveable

Total Developed Surface

sq. feet

Method of reversing Engines Rot. Camshaft

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

Means of lubrication

Pressure Thickness of cylinder liners 1.25" Min

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.

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

Is the 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 arrangements

Ballast Pumps, No. and size

Power Driven 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 Pump Room

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.

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

What provision is made for first Charging the Air Receivers

Scavenging Air Pumps, No. Two-centrifugal

Diameter 20" dia. impeller

11750 cu. ft. min.

Driven by motor

Auxiliary Engines crank shafts, diameter as per Rule

Journals 7" Crankpins 6"

Four sets Busch Sulzer Bros. 320 K.W.

Position Diesel Generators

Have the Auxiliary Engines been constructed under special survey Yes

Is a report sent herewith No. Clv. Rpt. 1346

4³ 1376

AIR RECEIVERS:—Have they been made under survey..... State No. of Report or Certificate.....

Is each receiver, which can be isolated, fitted with a safety valve as per Rule.....

Can the internal surfaces of the receivers be examined and cleaned..... Is a drain fitted at the lowest part of each receiver.....

Injection Air Receivers, No..... Cubic capacity of each..... Internal diameter..... thickness.....

Seamless, lap welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure..... by Rules..... Actual.....

Starting Air Receivers, No..... Total cubic capacity..... Internal diameter..... thickness.....

Seamless, lap welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure..... by Rules..... Actual.....

IS A DONKEY BOILER FITTED?..... If so, is a report now forwarded?.....

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

PLANS. Are approved plans forwarded herewith for Shafting..... Separate Fuel Tanks.....
(If not, state date of approval)

Donkey Boilers..... General Pumping Arrangements..... Pumping Arrangements in Machinery Space.....

Oil Fuel Burning Arrangements.....

SPARE GEAR.

Has the spare gear required by the Rules been supplied..... To Rule Requirements.....

State the principal additional spare gear supplied..... See Manufacturer's list of spares attached.....

The foregoing is a correct description

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } March 31, April 13, 21, May 2, 5, 9, 19, 25, 1949
{ During erection on board vessel - - - }
Total No. of visits 8

Dates of Examination of principal parts—Cylinders 31.3.49 Covers 2.5.49 13.4.49 19.5.49
Crank shaft 13.4.49 Flywheel shaft - Thrust shaft 19.5.49 Intermediate shafts - Tube shaft -

Screw shaft - Propeller - Stern tube - Engine seatings - Engines holding down bolts -

Completion of fitting sea connections (2 sections each) - Completion of pumping arrangements - Engines tried under working conditions -

Crank shaft, Material OH Forge Steel Identification Mark Lloyds 5941, 5942 Flywheel shaft, Material - Identification Mark -

Thrust shaft, Material OH Forge Steel Identification Mark Lloyds 5956, 5954 Intermediate shafts, Material - Identification Marks -

Tube shaft, Material - Identification Mark Lloyds 6018, 6050 Screw shaft, Material - Identification Mark -

Identification Marks on Air Receivers.....

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

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 Uddevalla Hulls Nos. 111, 112, 113

General Remarks (State quality of workmanship, opinions as to class, &c. These two main propulsion engines have been constructed under Special Survey and to approved drawings in accordance with the Rules of this Society. The materials were tested by the Society's Surveyors with satisfactory results, and the workmanship found to be of good quality throughout. Each engine was rotated by means of the turning gear and on completion was partially dismantled and shipped to the shipbuilder in Sweden for installation in the vessel.

It is recommended that the vessel be assigned the record of L.M.C. (with date), subject to these two engines being installed aboard and tested under working conditions, all to the satisfaction of the Society's Surveyors.

See Sec's letter to NYK of 15/8/49 re T.V.C.
(possible restricted range)

The amount of Entry Fee ... \$1640.00 : When applied for,
Special ... £ : Nov. 10 1949
Donkey Boiler Fee ... £ : When received,
Travelling Expenses (if any) \$ 320.00 :

Committee's Minute.....

Assigned Transmit to London

R. F. Haagenen
Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 22 SEP 1950

Lloyd's Register
Foundation