

REPORT ON OIL ENGINE MACHINERY.

No. 10648

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Date of writing Report Feb 1950 When handed in at Local Office Feb 1950 Port of BILBAO

Survey held at BILBAO Date, First Survey 22nd Dec 1945 Last Survey 13th June 1947 Number of Visits 18

Single on the Tipte Screw vessel "TIO PEPE"

Tons Gross 323 Net

By whom built Astilleros Torac Ruiz de Ylanc SA Yard No. 5 When built

Engines made at Barcelona By whom made Maquinista Terrestre Maritima Engine No. 46 When made 1946

Boilers made at By whom made Boiler No. When made

Indicated Horse Power 380 Owners Naviera Anonima Xerezana Port belonging to Cadiz

N. Power as per Rule 102 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes

Trade for which vessel is intended Coasting Service

ENGINES, &c. —Type of Engines 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks

Mean Indicated Pressure Ahead Firing Order Cylinders Span of bearings, adjacent to the crank, measured

From inner edge to inner edge Is there a bearing between each crank Revolutions per minute

Flywheel dia. Moment of inertia of flywheel (16lbs. in² or Kg. cm.²) Means of ignition Kind of fuel used

Crank shaft Solid forged dia. of journals as per Rule as fitted Crank pin dia. Crank webs Mid. length breadth shrunk Thickness parallel to axis

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the shaft fitted with a continuous liner Yes

Bronze 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 Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Yes

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 tube shaft No If so, state type Length of bearing in Stern Bush next to and supporting propeller 585

Propeller, dia. 1700 Pitch 1.03 m. No. of blades 3 Material Cast Iron whether moveable No Total developed surface 1.044 sq. ft

Moment of inertia of propeller (16lbs. in² or Kg. cm.²) Kind of damper, if fitted

Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Four Thickness of cylinder liners 20 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. One Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. One Diameter 110 Stroke 64 Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and size One 110 x 64 How driven Main Engine Auxiliary Engine

Is the cooling water led to the bilges. No 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 One 25 m³/hour Power Driven Lubricating Oil Pumps, including spare pump, No. and size One 8.2 m³/hour

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 Two, 2 1/2" diam. These are direct suctions In pump room

In holds, &c. Two 2" diam. 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 they fixed

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. one No. of stages one diameters 100 stroke 80 driven by Main Engine

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. one diameter stroke driven by Main Engine

Auxiliary Engines crank shafts, diameter as per Rule as fitted Position Engine room starting platform star side

Have the auxiliary engines been constructed under special survey Is a report sent herewith

610-819110-019110

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, welded or riveted longitudinal joint.....

Material.....

Range of tensile strength.....

Working pressure.....

by Rules.....

Starting Air Receivers, No.....

Total cubic capacity.....

Internal diameter.....

thickness.....

Working pressure.....

by Rules.....

IS A DONKEY BOILER FITTED.....

No.....

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.....

(If not, state date of approval).....

Receivers.....

Separate fuel tanks.....

Donkey boilers.....

General pumping arrangements.....

Pumping arrangements in machinery space.....

Oil fuel burning arrangements.....

Have Torsional Vibration characteristics been approved.....

Yes.....

Date of approval.....

SPARE GEAR.

for 372 rpm with banned speed
range of 145 to 175 rpm.

Has the spare gear required by the Rules been supplied.....

State the principal additional spare gear supplied.....

The foregoing is a correct description.....

Manufacturer.....

Dates of Survey while building.....

During progress of work in shops - -

During erection on board vessel - -

Total No. of visits.....

22nd December 1945 to 13 June 1947

18.

Dates of examination of principal parts—Cylinders.....

Covers.....

Pistons.....

Rods.....

Connecting rods.....

Crank shaft.....

Flywheel shaft.....

Thrust shaft.....

Intermediate shafts.....

Tube shaft.....

Screw shaft.....

Propeller.....

Stern tube.....

Engine seatings.....

Engine holding down bolts.....

Completion of fitting sea connections.....

Completion of fitting sea connections.....

Completion of pumping arrangements.....

Engines tried under working conditions.....

Crank shaft, material.....

Identification mark.....

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.....

Identification marks on air receivers.....

Welded receivers, state Makers' Name.....

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.....

Description of fire extinguishing apparatus fitted.....

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.....

If so, state name of vessel.....

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

The Machinery of this Vessel has been satisfactorily fitted under Special Survey in accordance with the Society's Rules & Regulations and Approved Plans except as stated below. A full power trial at sea was carried out with satisfactory results.

To complete the Survey the auxiliary engine requires to be examined and tested. Control gear to be fitted to oil fuel valves where required by the Rules and pumping arrangements to be examined & tested. It is understood that this has been done at Cadiz.

It is recommended that when the Survey has been completed the machinery be classed in the Register Book with the records of + LMC (with date) and TS-cl.

The amount of Entry Fee.....

1/3 Special.....

Donkey Boiler Fee.....

Travelling Expenses (if any).....

When applied for.....

When received.....

J. R. Zubizar, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute.....

Assigned.....

Lme 9.49 (with endorsement)



Lloyd's Register Foundation