

REPORT ON OIL ENGINE MACHINERY.

No. 1451.
20 APR 1932

Received at London Office

Report 7th April 1932 When handed in at Local Office 16th April 1932 Port of Bremen
Date, First Survey 27th August 1931 Last Survey 7th April 1932
Number of Visits 112

Single
Twin
Triple
Quadruple
Screw vessel
Tons { Gross
Net
By whom built Cia. Euzalduna Yard No. 96 When built 1931/32
By whom made Maschinenfabrik Augsburg-Nürnberg Engine No. 350150/160 When made 1931/32
By whom made Boiler No. When made
Owner Compañia Armadora del Monopolio de Petroleos, Madrid Port belonging to
Power 2x1600 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
Power as per Rule 755
Which vessel is intended

2 or 4 stroke cycle 4 Single or double acting single
Type of Engines 2x K7V 60/110
Diameter of cylinders 600 mm Length of stroke 1100 mm No. of cylinders 2x7 No. of cranks 2x7
Flywheel dia. 2230 mm Weight 5030 kg Means of ignition airless ign. Kind of fuel used Diesel oil on hot bed
as per Rule 377 Crank pin dia. 390 mm Crank Webs Mid. length breadth 550 mm Thickness parallel to axis 242 mm
as fitted 390 mm Mid. length thickness 242 mm Thickness around eye hole 172.5 mm
Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted
Screw Shaft, diameter as per Rule as fitted Is the tube shaft fitted with a continuous liner
Thickness between bushes as per Rule as fitted Is the after end of the liner made watertight in the

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner
Is 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
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
Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet
Reversing Engines directly by means of compr. air Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication
Thickness of cylinder liners 45 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with
material Lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine
Pumps, No. 4, fitted to each engine, Is the sea suction provided with an efficient strainer which can be cleared within the vessel
arrangements are made for dealing with cooling water if discharged into bilges
worked from the Main Engines, No. 1 each eng. Diameter 135 mm Stroke 200 mm Can one be overhauled while the other is at work yes

No. and Size How driven
Main Bilge Line 1, fitted to each eng. 47 mm 3/4
2 spare independent for both engines
Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 4, spare independent 29 mm 3/4
Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
In Pump Room
In Machinery Spaces

Power Pump Direct Suctions to the Engine Room Bilges, No. and size
Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Spaces
accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges
Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks
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
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
pass through the bunkers How are they protected
Have they been tested as per Rule

Is it fitted with a watertight door worked from
Is the Shaft Tunnel watertight
Is it fitted with a watertight door worked from
Compressors, No. No. of stages Diameters Stroke Driven by
Air Compressors, No. 2 No. of stages 2 Diameters 300/110 Stroke 200 mm Driven by aux. engines
Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
Air Pumps, No. Diameter Stroke Driven by

Engines crank shafts, diameter as per Rule as fitted 130 mm Position
RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes
Internal surfaces of the receivers be examined and cleaned yes Is a drain fitted at the lowest part of each receiver yes
Air Receivers, No. 2, for main eng. Cubic capacity of each 10 000 lt Internal diameter 1500 mm thickness 26 mm
lap welded or riveted longitudinal joint riveted Material S.M. steel Range of tensile strength 41-47 kg/mm² Working pressure by Rules 30 atm Actual 30 atm
Air Receivers, No. 2, for aux. eng. Total cubic capacity 125 lt each Internal diameter 405 mm thickness 12 mm
lap welded or riveted longitudinal joint riveted Material S.M. steel Range of tensile strength 44-50 kg/mm² Working pressure by Rules 30 atm Actual 30 atm

WS16-0018

IS A DONKEY BOILER FITTED?

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

ANS.

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting *Yes. London Letters E*
 Donkey Boilers..... (If not, state date of approval) *6.11.31, 14.11.31.*
 General Pumping Arrangements

Donkey Boilers.

General Pumping Arrangements

Receivers *London letters E*
2.10.34

Separate Tanks

Oil Fuel Burning Arrangements.

Has the spare gear required by the Rules been supplied *Yes*
State the principal *11/11*

SPARE GEAR.

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
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Dates of Examination of principal parts—Cylinders ^{25.11.31} 18.12.31 ^{liners 4.11.31, 21.3.32, 9.12.31}
 Crank shaft ^{22.8.31} 20.11.31 7.4.32 ^{Covers 15.6.17.31} Flywheel shaft 7.4.32 ^{Pistons 2.1.32}
 Screw shaft ^{24.5.32} Thrust shaft ^{22.1.32} ^{Rods 2.1.32}
 Propeller ^{24.11.31, 18.1.32} Intermediate shafts ^{30.3.32} Connecting rods
 Completion of fitting sea connections Stern tube Engine seatings Tube shaft

| | | | |
|---|---|---|--|
| Completion of fitting sea connections | Stern tube | Engine seatings | Tube shaft |
| Crank shaft, Material S.M. Steel | LLOYD'S | Engines holding down bolts | |
| Thrust shaft, Material | Identification Mark 4199 M.K. 9.11.31
2536 F.K. 13.10.31 | Engines tried under working conditions 15/10 | |
| Tube shaft, Material | Identification Mark | Flywheel shaft, Material S.M. Steel | Identification Mark LLOYD'S
K.H. 14 |
| Is the flash point of the oil to be used over 150° F. | Identification Mark | Intermediate shafts, Material | Identification Marks |
| Have the requirements of the Port of London Authority been complied with? | | Screw shaft, Material | Identification Mark |

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

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

Is this machinery duplicate of a previous entry

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *Cia. Donaldaña yard N° 500*
 General Remarks (State quality of workmanship, opinions as to class, &c. *These heavy oil engines*
conform with the Soc. Rules

dance with the Soc. Rules and Regulations as well as with the approved plans and instructions thereto. The heavy oil engines have been constructed and used in the construction are good and the workmanship is satisfactory. The Port engine has been tested on the makers test bed during 12 hours incl. 2 hours 10 % overload and 6 hours partial loads in the opinion of the undersigned and was found to work satisfactorily. In my opinion the vessel for which these engines are intended will be eligible for the notation of  when the whole machinery has been fitted satisfactorily on board and tried under full working conditions.

A copy of this report has been sent to the Billies surveyors.

| | | | | |
|------------------------------|-------|----|------|-------------------|
| The amount of Entry Fee | .. £ | 4 | : 16 | When applied for, |
| <i>4/5 Special</i> | ... £ | 90 | : 4 | 18. 4. 1932 |
| <i>Last bed trials</i> | | | | |
| Donkey Boiler Fee | ... £ | 4 | : 4 | When received, |
| <i>4 kw. air receivers</i> | £ | 8 | : 8 | 18/5/ 19 32 |
| Travelling Expenses (if any) | £ | 25 | : 0 | |
| Committee's Minute | | | | FRI. 12 AUG 1932 |

Committee's Minute

Assigned

See F. C. Rpt.

Engineer Surveyor to Lloyd's Register of Ships