

Rpt. RECEIVED REPORT ON OIL ENGINE MACHINERY

No. 17472
2 OCT 1950

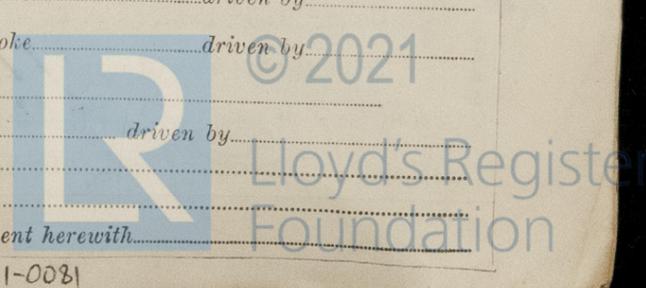
4 OCT 1950

Received at London Office

Date of writing Report 10 Sept 1950 When handed in at Local Office 19 Port of Amsterdam
IN D.O. Survey held at Amsterdam Date, First Survey 8 May 1950 Last Survey 9 September 1950
Reg. Book. Number of Visits 13

Single on the Twin Triple Quadruple Screw vessel M.V. "R.P.S."
Built at Haanlandam By whom built Haanlandische Scheepbouw Maatschappij Yard No. 454 When built
Engines made at Amsterdam By whom made Werkspoor N.Y. Engine No. 1012 When made 1950
Donkey Boilers made at By whom made Boiler No. When made
Brake Horse Power 500 Owners Port belonging to
I.N. Power as per Rule 103 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
Trade for which vessel is intended

OIL ENGINES, &c. — Type of Engines T.M.A.S. 270 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 270 mm Length of stroke 500 mm No. of cylinders 0 No. of cranks 0
Mean Indicated Pressure 7.5 kg/cm² Ahead Firing Order in Cylinders 1-4-7-6-0-5-2-3 Span of bearings, adjacent to the crank, measured from inner edge to inner edge 320 mm Is there a bearing between each crank Yes Revolutions per minute 325
Flywheel dia 1120 mm Weight 560 kg Moment of inertia of flywheel (lbs. in² or Kg.cm²) 1189 10⁶ Means of ignition Compa Kind of fuel used Diesel Oil
Crank Shaft Solid forged dia. of journals as per Rule 200 mm Crank pin dia. 200 mm Crank webs Mid. length breadth 340 mm Thickness parallel to axis
Semi built All built as fitted 200 mm Crank webs Mid. length thickness 0.2 mm Thickness around eye-hole
Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted 200 mm Thrust Shaft, diameter at collars as fitted 215 mm
Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 196 mm Is the (tube screw) shaft fitted with a continuous liner
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
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 tube shaft
If so, state type Length of bearing in Stern Bush next to and supporting propeller 470 mm
Propeller, dia 1700 mm Pitch 1093/1098 No. of blades 4 Material Bronze whether moveable Total developed surface 50% sq. feet
Moment of inertia of propeller (lbs. in² or Kg.cm²) 0.41 10⁶ Kind of damper, if fitted
Method of reversing Engines By Hand Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication forced Thickness of cylinder liners 11 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled
Lagged with non-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
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. 1 Diameter 130 mm Stroke 45 mm 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 10 4.5 t.p.h.
Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both main bilge pumps and auxiliary bilge pumps, No. and size:—In machinery spaces In pump room
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 suction 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 efficiently 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
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
On 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. 1 No. of stages 1 diameters 120/100 mm stroke 90 mm driven by M. Engine
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
Suctioning Air Pumps, No. diameter stroke driven by
Auxiliary Engines crank shafts, diameter as per Rule as fitted No. Position
Have the auxiliary engines been constructed under special survey Is a report sent herewith



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AIR RECEIVERS:—Have they been made under survey *Yes* State No. of report or certificate *C 3701*

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*

Injection Air Receivers, No. *2* Cubic capacity of each *1240 liters* Internal diameter *500 mm* thickness *12 mm*

Seamless, welded or riveted longitudinal joint *Welded* Material *Stn. Steel* Range of tensile strength *4147 kg* Working pressure *30 kg*

Starting Air Receivers, No. *2* Total cubic capacity *1240 liters* Internal diameter *500 mm* thickness *12 mm*

Seamless, welded or riveted longitudinal joint *Welded* Material *Stn. Steel* Range of tensile strength *4147 kg* Working pressure *30 kg*

IS A DONKEY BOILER FITTED *Yes* If so, is a report now forwarded *Yes*

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

PLANS. Are approved plans forwarded herewith for shafting *19-0-50* Receivers *19-0-50* Separate fuel tanks *Yes*

Donkey boilers *Yes* General pumping arrangements *Yes* Pumping arrangements in machinery space *Yes*

Oil fuel burning arrangements *Yes*

Have Torsional Vibration characteristics been approved *Yes* Date of approval *21-7-50*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes*

State the principal additional spare gear supplied *None*

The foregoing is a correct description,

WERKSPOR N.V.

Manufacturer.

Dates of Survey while building: During progress of work in shops - *1950 May 0-9-11-12-13. June 6-0. July 10-15. Aug 1-4-10*

During erection on board vessel - *Sept 9*

Total No. of visits *13*

Dates of examination of principal parts—Cylinders *0-9-11/5/50* Covers *6-0/5/50* Pistons *12-5-50* Rods *12-5-50* Connecting rods *12-5-50*

Crank shaft *4-5-50* Flywheel shaft *13-6-50* Thrust shaft *13-6-50* Intermediate shafts *9-9-50* Tube shaft *9-9-50*

Screw shaft *9-9-50* Propeller *9-9-50* Stern tube *10-0-50* Engine seatings *9-9-50* Engine holding down bolts *9-9-50*

Completion of fitting sea connections *9-9-50* Completion of pumping arrangements *9-9-50* Engines tried under working conditions *4-0-50*

Crank shaft, material *Stn. Steel* Identification mark *LLOYD'S No 10457* Flywheel shaft, material *Stn. Steel* Identification mark *LLOYD'S No 111*

Thrust shaft, material *Stn. Steel* Identification mark *LLOYD'S No 1116* Intermediate shafts, material *Stn. Steel* Identification marks *LLOYD'S No 111*

Tube shaft, material *Stn. Steel* Identification mark *LLOYD'S No 111* Screw shaft, material *Stn. Steel* Identification mark *LLOYD'S No 111*

Identification marks on air receivers *No 1073-1074 LLOYD'S TEST 60 kg/cm² W.P. 30 kg/cm² A.Y.B. 24-2-50*

Welded receivers, state Makers' Name *De Plaatsmijlery of Telken.*

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 *Yes*

Description of fire extinguishing apparatus fitted *None*

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *Yes* If so, have the requirements of the Rules been complied with *Yes*

If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with *Yes*

Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *None*

General Remarks (State quality of workmanship, opinions as to class, &c. *This Engine has been built under*

Special Survey in accordance with approved plans and Society's rules. Material

tested as required and workmanship found good. The engine has been tested and

full load condition on makers test bench and found in good working order.

The engine has been shipped to Haarlem (Amsterdam district). In my opinion

the vessel for which this engine is intended will be eligible for the notation

of + L.M.C. (with date) when the whole machinery has been fitted satisfactorily

on board and tried under full working condition.

Copy certificates of crankshaft, thrust shaft, Int. shaft, screw shaft and

two receivers attached.

The amount of Entry Fee... £ *304.50*

1/3 x 103 x 9.50 Special ... £ *10.00*

Donkey Boiler Fee... £ *10.00*

Travelling Expenses (if any) £ *10.00*

When applied for *21-9* 19 *50*

When received 19 *50*

Engineer Surveyor *W. J. J. J.* Lloyd's Register of Shipping

(The Committee's Minute) **FRI. 13 APR 1951**

Assigned *See F.E. mch. rpt.*

