

REPORT ON OIL ENGINE MACHINERY.

No. 28311-6

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Date of writing Report 2.6.1939 When handed in at Local Office 19 Port of Rotterdam

No. in Survey held at Rotterdam Date, First Survey 12.5.38 Last Survey 1.6.1939 Reg. Book. Number of Visits 46

on the ^{Single} ~~Twin~~ ^{Triple} ~~Quadruple~~ Screw vessel MV. PENDRECHT

Tons ^{Gross} 10746 _{Net} 6567

Built at Rotterdam By whom built Rott Droogd My Yard No. 202 When built 1939

Engines made at Bengels By whom made Gebr. Hoek Engine No. 4168 When made 1939

Donkey Boilers made at Rotterdam By whom made Rott Droogd My Boiler No. 558-59 When made 1939

Brake Horse Power 3700 Owners MV. Hoorn My Diebaan Port belonging to Rotterdam

Nom. Horse Power as per Rule 633 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended Carrying Petroleum in Bulk

OIL ENGINES, &c. Type of Engines Please see Amsterdam Report No. 15633A for double acting four-stroke engines founded hereunder

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

Mean Indicated Pressure Span of bearings, adjacent to the Crank, measured from inner edge to inner edge Is there a bearing between each crank

Revolutions per minute 90 Flywheel dia. Weight 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 Mid. length thickness Thickness parallel to axis shrunk Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted 363 mm 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 403 mm Is the tube shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule as fitted 20 mm Thickness between bushes as per Rule as fitted 20 mm 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 One length

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

Propeller, dia. 5750 mm Pitch 4600 No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 10.38 sq. M

Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication

Tones Thickness of cylinder liners Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Yes

Cooling Water Pumps, No. 2 a 180 dia 1/4 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. None Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line { No. and Size 2 a 20 ton 1/4 1 a 9 x 9 x 10 1 a 7 1/2 x 8 x 7 How driven Steam Engine Steam Steam

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 9 x 9 x 10 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 a 140 dia 1/4 1 a 540 dia 1/4

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 3 a 3 1/2 In engine room 1 a 3 1/2 1 a 5 In Pump Room 4 a 4

In Holds, &c. 1 in engine room a 4 One in forward engine room a 4 In dry cargo spaces 2 a 6 In stores 2 a 3

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 a 5

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 Yes

Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Yes Are the Overboard Discharges above or below the deep water line Yes

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes

What pipes pass through the bunkers None 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 Yes

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 Yes

Is the Shaft Tunnel watertight Mach aft 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. Solid injection of stages Diameters Stroke Driven by

Auxiliary Air Compressors, No. 2 3 cylinders No. of stages 2 Diameters 172-170 Stroke 90 Driven by Steam Engine

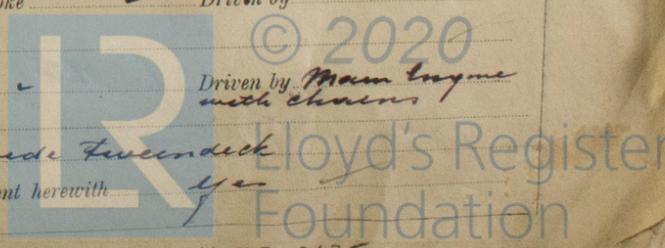
Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

What provision is made for first Charging the Air Receivers Steam Engine Driven by Main Engine with chains

Scavenging Air Pumps, No. Two blowers for supercharging Stroke

Auxiliary Engines crank shafts, diameter as per Rule as fitted See Amsterdam report No. 15633B Position Port side foredeck

Have the Auxiliary Engines been constructed under special survey Yes Is a report sent herewith Yes



W1155-0135

AIR RECEIVERS:—Have they been made under survey *Yes* State No. of Report or Certificate *Amsterdam report CV: 15633 A*
 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. *—* 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? *Yes. 2.* If so, is a report now forwarded? *Yes*
 Is the donkey boiler intended to be used for domestic purposes only *—*

PLANS. Are approval plans forwarded herewith for Shafting *24.6.38* Receivers *—* Separate Fuel Tanks *—*
 Donkey Boilers *26.4.38* General Pumping Arrangements *27.6.38* Pumping Arrangements in Machinery Space *27.6.38*
 Oil Fuel Burning Arrangements *—*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes*
 State the principal additional spare gear supplied *Screw shaft and further as per owners specification*

The foregoing is a correct description
DE ROTTERDAMSCH E DROOGDOK MIJ.
 Directly *—* Manufacturer.

Dates of Survey while building
 During progress of work in shops-- *1938 14/5 18/9 19/10 1-2.9-10-14-17-18-21-26-28/11 2/12 3/16/20-22-25/2 17/13*
 During erection on board vessel-- *1939 1/3 10/3 16/3 31/3 3-7-11-12-14-15-18-20-24-25-27/4 5-10-12-13-20-23-29/6*
 Total No. of visits *46*

Dates of Examination of principal parts—Cylinders *—* Covers *—* Pistons *—* Rods *—* Connecting rods *—*
 Crank shaft *—* Flywheel shaft *—* Thrust shaft *—* Intermediate shafts *20.2.39* Tube shaft *—*
 Screw shaft *20.2.39* Propeller *—* Stern tube *7.2.39* Engine seatings *27.4.39* Engines holding down bolts *10.5.39*
 Completion of fitting sea connections *16.3.39* Completion of pumping arrangements *1-3.39* Engines tried under working conditions *1-6-39*
 Crank shaft, Material *—* Identification Mark *—* Flywheel shaft, Material *—* Identification Mark *—*
 Thrust shaft, Material *—* Identification Mark *—* Intermediate shafts, Material *J.M. Heel* Identification Marks *—*
 Tube shaft, Material *—* Identification Mark *—* Screw shaft, Material *J.M. Heel* Identification Mark *—*
 Identification Marks on Air Receivers *On Amsterdam report*

LLOYD'S
 PK. 10270
 29.10.2.39
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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*
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *Oil tanker* 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 *No*
 Is this machinery duplicate of a previous case *No* If so, state name of vessel *—*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery has been made and fitted in accordance with the Society's Rules, approved plans and Secretary's letters, materials tested as required and workmanship good. The whole was found in a good working condition during a trial trip on the North Sea and I am of opinion that the vessel is eligible to be recorded in the Society's Register Book with *LMC 6.39. Oil Eng CL. (No CS will be required by the Owners)*

Certificate (if required) to be sent to Rotterdam Surveyors
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee .. £
 1/3 Special ... £ *426.60* When applied for, *20.6.1939*
 Donkey Boiler Fee ... £
 Travelling Expenses (if any) £ *45.00* When received, *21/7 1939*

J. J. Tetlow
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned *2 LMC 6.39 Oil Eng*
2 DB 100 H CL