

REPORT ON OIL ENGINE MACHINERY.

No. 15743 B

Received at London Office

AUG 10 1929

Date of writing Report 2 August 1929. When handed in at Local Office

Port of Amsterdam

in Survey held at Amsterdam

Date, First Survey 9 May 1928 Last Survey 1 August 1929

on the Single Screw vessel "ONDINA"

Number of Visits 69

Tons Gross 6341 Net 3606

built at Amsterdam By whom built Nederlandsche Dok M^y Yard No. 71 When built 1939

engines made at Amsterdam By whom made N.V. Werkspoor Engine No. 747 When made 1939

boilers made at Flushing By whom made Kon M^y De Schelde Boiler No. 1055 When made 1939

Indicated Horse Power 2800 Owners N.V. Petroleum M^y La Carona Port belonging to Amsterdam

nominal Horse Power as per Rule 377 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

service for which vessel is intended Open Sea Service

ENGINES, &c.—Type of Engines Werkspoor's Supercharged 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 700 LBS Diameter of cylinders 650 mm Length of stroke 1400 mm No. of cylinders 6 No. of cranks 6

Indicated Pressure 1354 LBS Is there a bearing between each crank yes

Revolutions per minute 120 Flywheel dia. 2260 mm Weight 6000 kg Means of ignition Solid inject Kind of fuel used Diesel

Crank shaft, Solid forged as per Rule approved Crank pin dia. 460 mm Crank Webs shrunk Mid. length breadth 870 mm Thickness parallel to axis shrunk

Intermediate Shafts, diameter as per Rule approved as fitted 350 mm Thrust Shaft, diameter at collars as per Rule approved as fitted 340 mm

Propeller Shaft, diameter as per Rule approved as fitted 370 mm Is the tube shaft fitted with a continuous liner yes

Cylinder Liners, thickness in way of bushes as per Rule approved as fitted 14.5 mm Thickness between bushes as per Rule approved as fitted 15 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 C.T.

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 no

two liners are fitted, is the shaft lapped or protected between the liners no Is an approved Oil Gland or other appliance fitted at the after end of the tube

Length of Bearing in Stern Bush next to and supporting propeller 1480 mm

Propeller, dia. 4270 mm Pitch 3580 No. of blades 4 Material bronze whether Moveable no Total Developed Surface 62 sq. feet

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

forced Thickness of cylinder liners 55 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with

non-conducting 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 funnel

Cooling Water Pumps, No. 3 Sald. 2 feet water 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. 2 Rotary type 35 ton/hour Stroke 10" Can one be overhauled while the other is at work yes

Pumps connected to the Main Bilge Line { No. and Size 2 Rotary 35 ton/hour and 1 duplex 8" x 8" x 10" How driven Main engines steam driven

Is the cooling water led to the bilges no, overboard so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

arrangements no

Ballast Pumps, No. and size one 8" x 8" x 10" Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 rotary 40 ton/hour 1 duplex 8" x 8" x 10"

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 5-3 1/2" and 2 à 2" gutterway (oil fuel pumps) In Pump Room 2-3"

In Holds, &c. Cofferdam four aft 1-5" each fore hold pump room 1 à 2", deep tank 2 à 2", fore hold 3 à 2"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 à 5" and 1 à 6 5/16"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces

protected 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 valves & cocks

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 overboard

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 Suction pipe from cofferdam aft How are they protected heavy steel pipe with valve chest bulkhead

What pipes pass through the deep tanks no Have they been tested as per Rule no

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 no Is it fitted with a watertight door no worked from no

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork no

Main Air Compressors, No. no No. of stages no Diameters no Stroke no Driven by no

Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 206 & 184 Stroke 160 mm Driven by one by steam engine one by "low Diesel"

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

What provision is made for first Charging the Air Receivers the compressor driven by steam engine

Scavenging Air Pumps, No. 2 each bottom end of cyl Diameter 650 Stroke 1400 mm Driven by Main engine

Auxiliary Engines crank shafts, diameter as per Rule approved as fitted 110 mm No. 2 Position horizontal, S.B. Position Handly Peak in Motor room

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

AIR RECEIVERS:—Have they been made under survey *Yes* State No. of Report or Certificate *2205-2206*
 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 ✓*
Starting Air Receivers, No. *2* Total cubic capacity *See cubic feet* Internal diameter *1495 mm* thickness *21 mm*
 Seamless, lap welded or riveted longitudinal joint *welded* Material *SMS* Range of tensile strength *2975-346* Working pressure *by Rules 350 LBS*
 Actual *350 LBS*

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 *E 13-5-38* Receivers *3-2-38* Separate Fuel Tanks *✓*
 (If not, state date of approval)
 Donkey Boilers *✓* General Pumping Arrangements *E 20-4-37* Pumping Arrangements in Machinery Space *17-6-38*
 Oil Fuel Burning Arrangements *5-7-39*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes*
 State the principal additional spare gear supplied
As per attached list

The foregoing is a correct description,

WERKSPOR N.V.
Schippers

Manufacturer.

Dates of Survey while building
 During progress of work in shops--
 May 9-16-17 June 1-9-16-17 July 11-12-13 Nov 15-29-30 Dec 1-2-5-9-29 Jan 4-11-17-19 Feb
 Feb 16-27 March 4-13-14-16-17-21-22-27-30 April 4-6-17-20-21-22-24-28-29
 During erection on board vessel--
 May 5-8-10-12-17-19-25 June 3-9-12-14-19-20-24-27-30 July 3-5-10-17-21-24-26-31 Aug
 Total No. of visits

Dates of Examination of principal parts—Cylinders *Nov 30 Dec 1-2-9-29* Covers *4-19 Jan* Pistons *15 Nov 11 Jan* Rods *11 Feb 22 Apr* Connecting rods *22-24 malle*
 Crank shaft *March 4-13-16* Flywheel shaft *29 Dec 16 March* Thrust shaft *11 July 9 Dec 16 March* Intermediate shafts *16 March* Tube shaft *✓*
 Screw shaft *24-28 April* Propeller *24-28 April* Stern tube *16 Feb 30 March* Engine seatings *29 April* Engines holding down bolts *14 May*
 Completion of fitting sea connections *17 April* Completion of pumping arrangements *10 July* Engines tried under working conditions *1-0-39*
 Crank shaft, Material *SMS* Identification Mark *GA 11-2-38* Flywheel shaft, Material *SMS* Identification Mark *WPN 297*
 Thrust shaft, Material *SMS* Identification Mark *HPB 29-12-38* Intermediate shafts, Material *SMS* Identification Marks *FS 3-2-37*
 Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *SMS* Identification Mark *KK 4-4-39*
 Identification Marks on Air Receivers *2205-2206* Spare Fuel shaft *4505 FS*
Reya's list *KK 4-4-39*
5504 BS
WP 3504 BS
KK 2-2-39

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 *Parker* 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 *Yes*
 Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *MY OPALIA Arms report 15288*

General Remarks (State quality of workmanship, opinions as to class, &c.)
The Machinery has been constructed under special survey to approve plans in accordance with the rules & Secretary's letter
Material & workmanship good.
Tested machinery whilst on her trial trip on the North sea under full work
Condition found good
She is eligible in our opinion for the approval of the Committee to be
recorded L.M.C. 8-39 oil engines C.T., with continuous survey on owner
request.

The amount of Entry Fee .. *£ 60 -* : When applied for,
 Special ... *£ 970.60* : *0-0-19 39*
 Donkey Boiler Fee .. *£* : When received,
 Travelling Expenses (if any) *£ 57.25* : *29-8-19 39*

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

Committee's Minute *TUE 15 AUG 1939*
 Assigned *+ LMC 8.39 Oil Eng*
DB 180 ll *CL*



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