

REPORT ON OIL ENGINE MACHINERY.

No. 16003

Received at London Office 22 OCT 1945

Date of writing Report 12 May 1942 When handed in at Local Office

19 42 Port of Amsterdam

No. in Survey held at Amsterdam
Reg. Book.

Date, First Survey 1 Sept 1941 Last Survey 6 May 1942

Number of Visits 12

Single
on the Twin } Screw Vessel Stet Nda 073
Triple }
Quadruple }

Tons } Gross
Net

Built at _____ By whom built _____ Yard No. _____ When built _____
Engines made at Amsterdam By whom made N.V. Werkspoor Engine No. 073 When made 1942
Donkey Boilers made at _____ By whom made _____ Boiler No. _____ When made _____
Brake Horse Power 400 Owners _____ Port belonging to _____
Nom. Horse Power as per Rule 07 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 45 kg/cm² Diameter of cylinders 270 Length of stroke 500 No. of cylinders 2 No. of cranks 2

Mean Indicated Pressure 6.5 kg/cm² Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 310 mm Is there a bearing between each crank yes

Revolutions per minute 300 Flywheel dia. 1120 mm Weight 1300 kg Means of ignition solid magnet Kind of fuel used Diesel oil

Crank Shaft, { Solid forged as per Rule approved Crank pin dia. 220 mm Crank Webs Mid. length breadth 340 mm Thickness parallel to axis _____
Semi built dia. of journals as fitted 220 mm Mid. length thickness 220 mm shrunk Thickness around eye-hole _____
AH built _____

Flywheel Shaft, diameter as per Rule _____ as fitted _____ Intermediate Shafts, diameter as per Rule 114.5 as fitted _____ Thrust Shaft, diameter at collars as per Rule approved 120.3 as fitted 145 mm

Tube Shaft, diameter as per Rule _____ as fitted _____ Screw Shaft, diameter as per Rule _____ as fitted _____ Is the {tube} shaft fitted with a continuous liner {screw} _____

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 the tube shaft _____

Length of Bearing in Stern Bush next to and supporting propeller _____

Propeller, dia. _____ Pitch _____ No. of blades _____ Material _____ whether Moveable _____ Total Developed Surface _____ sq. feet

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 2.1 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material water cooled

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 rotary 16 ton/hour Is the sea suction provided with an efficient strainer which can be cleared within the vessel _____

Bilge Pumps worked from the Main Engines, No. one Diameter _____ Stroke _____ 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 _____

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 _____ In Pump Room _____

In 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 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 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. one No. of stages 2 Diameters 100/120 Stroke 90 mm Driven by Main Motor

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

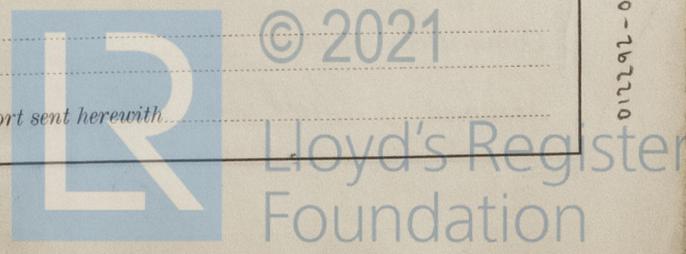
Small Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____

What provision is made for first Charging the Air Receivers _____

Scavenging 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 _____



5400-562110-0045

AIR RECEIVERS:—Have they been made under survey *no* State No. of Report or Certificate *720-721 Garm. Reg. d*
 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 *500 mm* thickness *12 mm*
 Seamless, lap welded or riveted longitudinal joint *✓* Material *✓* Range of tensile strength *✓* Working pressure *by Rules ✓ Actual ✓*

Starting Air Receivers, No. *2* Total cubic capacity *1240* Internal diameter *500 mm* thickness *12 mm*
 Seamless, lap welded or riveted longitudinal joint *welded* Material *S.N.S.* Range of tensile strength *30/344* Working pressure *by Rules approved Actual 30 A.P.M.*

IS A DONKEY BOILER FITTED? *no* If so, is a report forwarded? *✓*
 Is the donkey boiler intended to be used for domestic purposes only *✓*

PLANS. Are approved plans forwarded herewith for Shafting *520-6-39 ✓* Receivers *Plan 25-4-42 ✓* Separate Fuel Tanks
 (If not, state date of approval)

Donkey Boilers *✓* General Pumping Arrangements *✓* Pumping Arrangements in Machinery Space *✓*
 Oil Fuel Burning Arrangements *✓*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *✓*
 State the principal additional spare gear supplied

The foregoing is a correct description,
Schippers **WERKSPOR N.V.** Manufacturer.

Dates of Survey while building
 During progress of work in shops - *1941. Sep 1-3-9 Nov 26 Dec 16. 1942: Feb 12 April 14-15-21-22-27 May 6*
 During erection on board vessel - *✓*
 Total No. of visits *✓*

Dates of Examination of principal parts—Cylinders *2/1 April ✓* Covers *21-22 April ✓* Pistons *Dec 16 ✓* Rods *✓* Connecting rods *12 Feb ✓*
 Crank shaft *21 Feb 14 April ✓* Flywheel shaft *✓* Thrust shaft *16 Dec Feb 12 ✓* Intermediate shafts *✓* Tube shaft *✓*
 Screw shaft *✓* Propeller *✓* Stern tube *✓* Engine seatings *✓* Engines holding down bolts *✓*

Completion of fitting sea connections *✓* Completion of pumping arrangements *✓* Engines tried under working conditions *✓*
 Crank shaft, Material *S.N.S.* Identification Mark *0631 4404 D.S.* Flywheel shaft, Material *✓* Identification Mark *✓*
 Thrust shaft, Material *S.N.S.* Identification Mark *HP B 21-4-42 0516* Intermediate shafts, Material *✓* Identification Marks *✓*
 Tube shaft, Material *✓* Identification Mark *4404 D.S. 42 B 16-12-41* Screw shaft, Material *✓* Identification Mark *✓*

Identification Marks on Air Receivers *721-722 + A D*
9 12
7. 1941
4404 D.S. P.E.S.T. 50 kg. HP B 21-4-42

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 *✓* 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 *yes* If so, state name of the vessel *Nota 721. Am. up. 15.9.01*
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The Nota has been built under special survey in accordance with the approved plans and the Society's rules. Material duly tested. Workmanship throughout good.

The Nota is kept for stock.

The amount of Entry Fee .. £	When applied for,
Special <i>3.50</i>	<i>15-5-1942</i>
Donkey Boiler Fee <i>24</i>	When received,
Travelling Expenses (if any) <i>10-</i>	<i>19</i>

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

Committee's Minute
 Assigned *not for Classing Committee / See P.E. meeting report*



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