

REPORT ON OIL ENGINE MACHINERY.

No. 17101

Received at London Office

12 NOV 1949

Port of Amsterdam 1949 When handed in at Local Office Amsterdam Date, First Survey 7 Jan 49 Last Survey 27 October 1949 Number of Visits 15

held at Amsterdam

Single ☒ Twin ☐ Triple ☐ Screw vessel ☒ Tons Gross ☐ Net ☐

Port of birth Amsterdam By whom built Yosner Ltd. Yard No. 1107 When built 1949

By whom made Werkspoor N.V. Engine No. 1107 When made 1949

By whom made 750 Boiler No. 150 When made 150

Owners 150 Port belonging to 150

Is Refrigerating Machinery fitted for cargo purposes 150 Is Electric Light fitted 150

Is intended 150

&c. —Type of Engines T.M.A.S. 396 2 or 4 stroke cycle 4 Single or double acting Single

Number of cylinders 504.99m² Diameter of cylinders 390mm Length of stroke 680mm No. of cylinders 6 No. of cranks 6

Pressure 16.04kg/cm² Ahead Firing Order in Cylinders 1-3-5-6-4-2 Span of bearings, adjacent to the crank, measured inner edge 495mm Is there a bearing between each crank 150 Revolutions per minute 350

Weight 3040kg Moment of inertia of flywheel (16 lbs. in² or Kg.cm.²) 10.50 x 10⁶ Means of ignition Copper Kind of fuel used Oil

dia. of journals 310mm Crank pin dia. 300mm Crank webs 115 hole Mid. length breadth 500mm Thickness parallel to axis 135mm

as per Rule 310mm as fitted 310mm Intermediate Shafts, diameter 310mm Thrust Shaft, diameter at collars 135mm

as per Rule 310mm as fitted 310mm Screw Shaft, diameter 310mm Is the (tube/screw) shaft fitted with a continuous liner 135mm

as per Rule 310mm as fitted 310mm Thickness in way of bushes 310mm Thickness between bushes 310mm 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.

Do 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-

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

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

of propeller (16 lbs. in² or Kg.cm.²) 3.487 x 10⁶ Kind of damper, if fitted.

g Engines By Governor governor or other arrangement fitted to prevent racing of the engine when declutched. Yes Means of

Thickness of cylinder liners 30mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled

conducting material. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned

Cooling Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel.

from the Main Engines, No. 1 Diameter. 36 ton p. hour Stroke. 36 ton p. hour Can one be overhauled while the other is at work.

the Main Bilge Line { No. and size. How driven.

led to the bilges. If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Power Driven Lubricating Oil Pumps, including spare pump, No. and size 10 ton p. hour

means arranged for circulating water through the Oil Cooler. Suctions, connected to both main bilge pumps and auxiliary

size:—In machinery spaces. In pump room.

Pump Direct Suctions to the engine room bilges, No. and size.

ion pipes in holds and tunnel well fitted with strum-boxes. Are the bilge suction in the machinery spaces led from easily

placed above the level of the working floor, with straight tail pipes to the bilges.

ons fitted direct on the skin of the Ship. Are they fitted with valves or cocks. Are they fixed

re ship's side to be seen without lifting the platform plates. Are the overboard discharges above or below the deep water line

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

ugh the bunkers. How are they protected.

ugh the deep tanks. Have they been tested as per Rule.

alves and pumps in connection with the machinery and all boiler mountings accessible at all times.

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

partment to another. Is the shaft tunnel watertight. Is it fitted with a watertight door. worked from.

means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork.

ssors, No. 1 No. of stages 1 diameters 150/100mm stroke 100mm driven by Engine

pressors, No. 1 No. of stages 1 diameters 150/100mm stroke 100mm driven by Engine

ir Compressors, No. 1 No. of stages 1 diameters 150/100mm stroke 100mm driven by Engine

made for first charging the air receivers.

Pumps, No. 1 diameter 150/100mm stroke 100mm driven by Engine

as per Rule. No. Position.

nes crank shafts, diameter 150/100mm as fitted. Position.

ry engines been constructed under special survey. Is a report sent herewith.

AIR RECEIVERS:—Have they been made under survey *Yes* State No. of report or certificate *C 2*
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
Injection Air Receivers, No. Cubic capacity of each Internal diameter thickness
Seamless, welded or riveted longitudinal joint Material Range of tensile strength Working pressure
Starting Air Receivers, No. *2* Total cubic capacity *4000 litres* Internal diameter *760 mm* thickness *16*
Seamless, welded or riveted longitudinal joint *Welded* Material *SM Steel* Range of tensile strength *36.12-40.16 kg/mm²* Working pressure

IS A DONKEY BOILER FITTED If so, is a report now forwarded
Is the donkey boiler intended to be used for domestic purposes only
PLANS. Are approved plans forwarded herewith for shafting *16-2-48* Receivers *13-7-47* Separat
(If not, state date of approval)
Donkey boilers General pumping arrangements Pumping arrangements in machinery space
Oil fuel burning arrangements
Have Torsional Vibration characteristics been approved *Yes* Date of approval *1-4-48*

SPARE GEAR.
Has the spare gear required by the Rules been supplied
State the principal additional spare gear supplied
Torsional Vibration Characteristics
Shafting installation have been arranged
for a service speed of 150 R.P.M.
a range of crawling speeds between
100 and 110 R.P.M. See letter 1-4
T.V. Case 1776

The foregoing is a correct description,
WERKSPOR N.V.

Manufacturer.

Dates of Survey while building
During progress of work in shops - *Jan 7, March 25, April 15-20-29-30, May 2-3-14-29 Aug*
During erection on board vessel - *Oct 10-11-24-27*
Total No. of visits *10-29-30/4/49*

Dates of examination of principal parts—Cylinders *2-3/5/49* Covers *24-3-49* Pistons *15-4-49* Rods Connecting
Crank shaft *10-10-49* Flywheel shaft Thrust shaft Intermediate shafts Tube

Screw shaft Propeller Stern tube Engine seatings Engine holding down

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions

Crank shaft, material *SM Steel* Identification mark *S.B. 1-9-49* Flywheel shaft, material Identification mark

Thrust shaft, material *SM Steel* Identification mark *K.K. 3-11-49* Intermediate shafts, material Identification mark

Tube shaft, material Identification mark Screw shaft, material Identification mark

Identification marks on air receivers *No 7204-7205 LLOYD'S TEST 40.5 kg/cm²*
W.P. 30 kg/cm² K.K. 7-2-49

Welded receivers, state Makers' Name *Werkspoor N.V. of Amsterdam*

Is the flash point of the oil to be used over 150°F

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with

Description of fire extinguishing apparatus fitted

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

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 vessel *Eng 1106 for Tost*

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

Special Survey in accordance with approved plan and local

material tested as required and workmanship found good

The Engine has been tested on makers test bench and found

good working order. In my opinion the vessel for which

Engine is intended will be eligible for the notation of

⊕ L.M.C. with date when the Machinery has been fitted

and tried under working condition.

The Engine has been shipped to Portsmouth.

Copy certificates of Crankshaft, Thrustshaft and Piston rods

attached.

The amount of Entry Fee ... £

Special ... £ *2 1/2 x 0.40 = 1.00*

Donkey Boiler Fee ... £

Travelling Expenses (if any) £ *0.00*

When applied for *5-11* 19 *49*

When received 19

(Committee's Minute

Assigned

Engineer Surveyor to Lloyd's Register

Lloyd's Register
Foundation