

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
held at Amsterdam Number of Visits 15
Screw vessel Tons Gross 150 Net 150
By whom built Portsmouth Yard No. 403 per Lot 1 When built 1949
By whom made Amsterdam Works Werkspoor N.Y. 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

&c. —Type of Engines T.M.A.S. 396 2 or 4 stroke cycle 4 Single or double acting Single
No. of cylinders 506.99m² 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 1350 Revolutions per minute 1350
Weight 3040kg Moment of inertia of flywheel (16 lbs. in² or Kg.cm.²) 10.50 x 10⁶ Means of ignition Compo Kind of fuel used D. Oil
dia. of journals as per Rule 310mm as fitted 310mm Crank pin dia. 300mm Crank webs Mid. length breadth 500mm Thickness parallel to axis 1.25mm Mid. length thickness 1.25mm Thickness around eyehole 1.35mm
Intermediate Shafts, diameter as per Rule 1.35mm as fitted 1.35mm
Screw Shaft, diameter as per Rule 1.35mm as fitted 1.35mm Is the (tube/screw) shaft fitted with a continuous liner 1.35mm

Thickness in way of bushes as per Rule 1.35mm as fitted 1.35mm Thickness between bushes as per Rule 1.35mm as fitted 1.35mm Is the after end of the liner made watertight in the 1.35mm
If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner 1.35mm
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 1.35mm Is an approved Oil Gland or other appliance fitted at the after 1.35mm
If so, state type 1.35mm Length of bearing in Stern Bush next to and supporting propeller 1.35mm
Pitch 1.35mm No. of blades 1.35mm Material 1.35mm whether moveable 1.35mm Total developed surface 1.35mm sq. feet 1.35mm
of propeller (16 lbs. in² or Kg.cm.²) 3.487 x 10⁶ Kind of damper, if fitted 1.35mm
g Engines By Governor governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of 1.35mm
Thickness of cylinder liners 30mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled 1.35mm
conducting material 1.35mm If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned 1.35mm
Cooling Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel 1.35mm
from the Main Engines, No. 1 Diameter 1.35mm Stroke 1.35mm Can one be overhauled while the other is at work 1.35mm
the Main Bilge Line { No. and size 1.35mm How driven 1.35mm
led to the bilges 1.35mm If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping 1.35mm

Power Driven Lubricating Oil Pumps, including spare pump, No. and size 1.35mm
means arranged for circulating water through the Oil Cooler 1.35mm Suctions, connected to both main bilge pumps and auxiliary 1.35mm
size:—In machinery spaces 1.35mm In pump room 1.35mm
Pump Direct Suctions to the engine room bilges, No. and size 1.35mm
ion pipes in holds and tunnel well fitted with strum-boxes 1.35mm Are the bilge suction in the machinery spaces led from easily 1.35mm
placed above the level of the working floor, with straight tail pipes to the bilges 1.35mm
ons fitted direct on the skin of the Ship 1.35mm Are they fitted with valves or cocks 1.35mm Are they fixed 1.35mm
re ship's side to be seen without lifting the platform plates 1.35mm Are the overboard discharges above or below the deep water line 1.35mm
with a discharge valve always accessible on the plating of the vessel 1.35mm Are the blow off cocks fitted with a spigot and brass covering plate 1.35mm
ugh the bunkers 1.35mm How are they protected 1.35mm
ugh the deep tanks 1.35mm Have they been tested as per Rule 1.35mm
alves and pumps in connection with the machinery and all boiler mountings accessible at all times 1.35mm

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 1.35mm
partment to another 1.35mm Is the shaft tunnel watertight 1.35mm Is it fitted with a watertight door 1.35mm worked from 1.35mm
means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork 1.35mm
ssors, No. 1 No. of stages 1 diameters 150/100mm stroke 100mm driven by M. Engine
mpressors, No. 1 No. of stages 1 diameters 150/100mm stroke 100mm driven by M. Engine
ir Compressors, No. 1 No. of stages 1 diameters 150/100mm stroke 100mm driven by M. Engine
made for first charging the air receivers 1.35mm
Pumps, No. 1 diameter 150mm stroke 100mm driven by M. Engine
nes crank shafts, diameter as per Rule 150mm as fitted 150mm Position 150mm
ry engines been constructed under special survey 1.35mm Is a report sent herewith 1.35mm



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 lbs* Internal diameter *760 mm* thickness *16*
 Seamless, welded or riveted longitudinal joint *Welded* Material *St. Steel* Range of tensile strength *36.12-40.16 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* Separated
 (If not, state date of approval) Pumping arrangements in machinery space
 Donkey boilers General pumping arrangements
 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 approved
for a service speed of 150 R.P.M.
a range of steaming speeds between
100 and 110 R.P.M. See letter 1-4-48
T.V. Case 1776

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

Dates of Survey while building
 During progress of work in shops - *Jan 7, March 24, April 15-20-29-30, May 2-3-14-29 Aug*
 During erection on board vessel - *Oct 10-21-24-27*
 Total No. of visits
 Dates of examination of principal parts—Cylinders *2-3-15-49* 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 *St. Steel* Identification mark *LLOYD'S NO 272* Flywheel shaft, material Identification mark
 Thrust shaft, material *St. 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 405 kgm²*
W.P. 30 kgm² 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 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 vessel *Eng 406 for Tost*

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

The amount of Entry Fee ... £
 Special *2 1/2 x 0.40 =* £ *750.00* } When applied for *5-11 19 49*
 Donkey Boiler Fee... £ } When received
 Travelling Expenses (if any) £ *70.00* }
 Committee's Minute
 Assigned

