

REPORT ON OIL ENGINE MACHINERY.

No. 157886

Received at London Office

20 OCT 1939

Date of Report 11 Oct 1939 When handed in at Local Office 19 Port of Amsterdam
No. in Survey held at Amsterdam Date, First Survey 8 June 1938 Last Survey 4 Oct 1939
Reg. Book. Number of Visits 63
on the Single Twin Triple Quadruple Screw vessel M.V. TARIA Tons Gross 1035.454 Net 614.614
Built at Amsterdam By whom built Nr. Nederl Schepb N° Yard No. 273 When built 1939
Engines made at Amsterdam By whom made N.V. Werkspoor Engine No. 744 When made 1939
Donkey Boilers made at Amsterdam By whom made N.V. Werkspoor Boiler No. 2239/20 When made 1939
Brake Horse Power 4660 Owners N.V. Petroleum N° La Caena Port belonging to 's Groenhuys
Nom. Horse Power as per Rule 620 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
Trade for which vessel is intended Open sea service 25-3 55-8

OIL ENGINES, &c.—Type of Engines Werkspoor's Diesel Supercharged 2 or 4 stroke cycle 4 Single or double acting singleMaximum pressure in cylinders 700.435 Diameter of cylinders 650 mm Length of stroke 1400 mm No. of cylinders 10 No. of cranks 10
Mean Indicated Pressure 135.435Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 855 mm Is there a bearing between each crank yes
Revolutions per minute 120 Flywheel dia. ✓ Weight ✓ Means of ignition Solid injected Kind of fuel used Diesel oilCrank Shaft, Solid forged dia. of journals as per Rule approved Crank pin dia. 475 mm Crank Webs Mid. length breadth 960 mm Thickness parallel to axis 273
Semi built as fitted 475 mm shrunk Mid. length thickness 273/297 mm Thickness around eye hole 210.5
All builtFlywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule approved Thrust Shaft, diameter at collars as per Rule approved
as fitted as fitted 440 mm as fitted 460 mmTube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule approved Is the tube shaft fitted with a continuous liner yes
as fitted as fitted 440 mm screwBronze Liners, thickness in way of bushes as per Rule approved Thickness between bushes as per Rule approved Is the after end of the liner made watertight in the
as fitted 21 mm as fitted 16 mmpropeller 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.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 tubeshaft no If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller 1547Propeller, dia. 4460 mm Pitch 3660 mm No. of blades 4 Material Brass whether Moveable no Total Developed Surface 89.8 sq. feetMethod of reversing Engines by the Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubricationforced Thickness of cylinder liners 55 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged withnon-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 funnelCooling Water Pumps, No. 3 Salt 2 fresh water Is the sea suction provided with an efficient strainer which can be cleared within the vessel yesBilge Pumps worked from the Main Engines, No. 2 Rotary 35 ton/hour duplex 8" x 8" x 10" Can one be overhauled while the other is at work yesPumps connected to the Main Bilge Line No. and Size 2 Rotary 35 ton/hour duplex 8" x 8" x 10" How driven Main engine steam drivenIs 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 pumpingarrangements ✓Ballast Pumps, No. and size one 8" x 8" x 10" Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 rotary 50 ton/hour 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 BilgePumps, No. and size:—In Machinery Spaces 2-4", 1-4" mill aft 1-6", 2-4" off forward 2-2" oil well (oil fuel pump) In Pump Room 1-2" aft 2-3"In Holds, &c. Fore peak 1-4", fore hold 3-2" duplex 2-4" fore off forward 1-5" aft off forward 1-5"Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-150 mmAre all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spacesled from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yesAre all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks Valves & cocksAre 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 aboveAre 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 yesWhat 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 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 ✓ 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. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 206-104 mm Stroke 160 mm Driven by 1 steam engineSmall Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓What provision is made for first Charging the Air Receivers One Auxiliary compressor steam drivenScavenging Air Pumps, No. each bottom end of cyl Diameter 650 mm Stroke 1400 mm Driven by main engineAuxiliary Engines crank shafts, diameter as per Rule approved Position Motorman Is a report sent herewith yesHave the Auxiliary Engines been constructed under special survey yes

003341-603348-0056

AIR RECEIVERS:—Have they been made under survey

State No. of Report or Certificate **2203-2204**

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 **—**

Starting Air Receivers, No. **2**

Total cubic capacity **1000 cub feet**

Internal diameter **1695 mm**

thickness **28 mm**

Seamless, lap welded or riveted longitudinal joint **united**

Material **SM5**

Range of tensile strength **40 kg**

Working pressure **by Rules 3504.85**

IS A DONKEY BOILER FITTED?

Yes (Two)

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 11-2-30**

(If not, state date of approval)

Receivers **E 2-2-30**

Separate Fuel Tanks **E 15-5-39**

Donkey Boilers **E 14-2-30**

General Pumping Arrangements **E 2-12-30**

Pumping Arrangements in Machinery Space **E 2-12-30**

Oil Fuel Burning Arrangements **E 13-4-39**

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

WERKSPOOR N.V.

Manufacturer.

1930. June 3-30, July 16, Sept 2, Oct 3, 4, 13, 20 Nov 3, 11, 12, 15, 23, 30 Dec 1, 3, 6, 10, 12, 16, 22 Jan 10.
 Dates of Survey while building { During progress of work in shops - Feb 9, 10, 13, 14, 15, 16, 20, March 4, 6, 9, 21, 24 April 7, 11 May 5, 9, 10, 15 June 15, 19, 30
 During erection on board vessel - July 6, 12, 14, Aug 2, 8, 10, 14, 23, 25, 28, 30 Sept 4, 17, 19, 26, 27, Oct 3, 4
 Total No. of visits **63**

Dates of Examination of principal parts—Cylinders **7-4-39** Covers **15-5-39** Pistons **4-21** Rods **5 May** Connecting rods **5-15 May**
 Crank shaft **3-10 Dec 6** Flywheel shaft **—** Thrust shaft **22 Dec 23 Feb** Intermediate shafts **3-10 Dec 30 Jan** Tube shaft **—**
 Screw shaft **20 Nov 9 June** Propeller **6 July** Stern tube **15 Feb 18 June** Engine seatings **20 Aug** Engines holding down bolts **22 28 Aug**
 Completion of fitting sea connections **6 July** Completion of pumping arrangements **4 Sept** Engines tried under working conditions **16, 27 Sept**
 Crank shaft, Material **SM5** Identification Mark **HPD 6-3-39** Flywheel shaft, Material **—** Identification Mark **—**
 Thrust shaft, Material **SM5** Identification Mark **HPD 23-2-39** Intermediate shafts, Material **SM5** Identification Marks **6174 30-6-39**
 Tube shaft, Material **—** Identification Mark **—** Screw shaft, Material **SM5** Identification Mark **6140 30-6-39**
 Identification Marks on Air Receivers **HPD 6-3-39**
6141
HPD 6-3-39

Identification Marks on Air Receivers

Nº 2203-2204
Leijer's test
550 405
WP 330485
KK 26-1-39

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 **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 **—**

Is this machinery duplicate of a previous case **Yes** If so, state name of vessel **MT. Tibia HMS up-157386**

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery has been built under special survey, approved plans & Secretary's letters and the Society's rules. Material duly tested, workmanship throughout good. Fitted Machinery on the Channel of Ymuiden and Mooring beach found working good. She is eligible in my opinion for the approval of the Committee to be recorded in LMC 10-39, oil engines C.I. with continuous survey on owners request in the Society's Register book.

The amount of Entry Fee **£ 72:—** When applied for, **15-10 1939**
 Special **£ 1276.80**
 Donkey Boiler Fee **£ 350:—** When received, **31/10/1939 R.B.Y.**
 Travelling Expenses (if any) **£ 44.50**

Committee's Minute

Assigned

+ Lmb. 10.39
2203-180th

oil Eng
C.I.

Engdoffer
 Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation

Certificate (if required) to be sent to Surveyors Antwerp

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