

REPORT ON OIL ENGINE MACHINERY.

No. 9503

Received at London Office

TUE JUL 29 1924

Date of writing Report 14 July 1924 When handed in at Local Office

Port of Amsterdam

No. in Survey held at Amsterdam
Reg. Book.

Date, First Survey March 6 Last Survey 14 July 19

Number of Visits 5

12015 on the Single Screw vessels Motor Vessel

H E R A No. 2492

Tons, Gross 538
Net 188

Master W. J. J. van der Meer Built at Stadisch By whom built Schep. W. J. J. van der Meer Yard No. 6 When built 1915

Engines made at Amsterdam By whom made N. O. Kraanhouw Motor Van Tuben Engine No. 492 When made 1924

Donkey Boilers made at Amsterdam By whom made Amsterdam Boiler No. Amsterdam When made Amsterdam

Brake Horse Power 15 Owners Ned. Ind. Tand. Staand. Mij. Port belonging to Amsterdam

Nom. Horse Power as per Rule 4 Is Refrigerating Machinery fitted for cargo purposes Amsterdam Is Electric Light fitted Amsterdam

OIL ENGINES, &c. Type of Engines Accumulator horizontal oil engine stroke cycle 2 or 4 Single or Double acting

Maximum pressure in cylinders 15 Atm. No. of cylinders 1 No. of cranks 1 Diameter of cylinders 19 1/2 in.

Length of stroke 205 in. Revolutions per minute 480 Means of ignition Hot bulb Kind of fuel used Crude oil

Is there a bearing between each crank Yes Span of bearings (Page 92, Section 2, par. 7 of Rules) 34 1/2 in.

Distance between centres of main bearings 34 1/2 in. Is a flywheel fitted Yes Diameter of crank shaft journals as per Rule as fitted 4 5/8 in.

Diameter of crank pins 4 5/8 in. Breadth of crank webs as per Rule as fitted 1 1/2 in. Thickness of ditto as per Rule as fitted 4 1/2 in.

Diameter of flywheel shaft as per Rule as fitted 4 1/2 in. Diameter of tunnel shaft as per Rule as fitted Amsterdam Diameter of thrust shaft as per Rule as fitted Amsterdam

Diameter of screw shaft as per Rule as fitted Amsterdam Is the screw shaft fitted with a continuous liner the whole length of the stern tube Amsterdam

Is the after end of the liner made watertight in the propeller boss Amsterdam If the liner is in more than one length are the joints burned Amsterdam

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 Amsterdam

If two liners are fitted, is the shaft lapped or protected between the liners Amsterdam If without liners, is the shaft arranged to run in oil Amsterdam

Type of outer gland fitted to stern tube Amsterdam Length of stern bush Amsterdam Diameter of propeller Amsterdam

Pitch of propeller Amsterdam No. of blades Amsterdam state whether moveable Amsterdam Total surface Amsterdam square feet

Method of reversing Amsterdam Is a governor or other arrangement fitted to prevent racing of the engine when declutched Amsterdam Thickness of cylinder liners Amsterdam

Are the cylinders fitted with safety valves Amsterdam Means of lubrication Amsterdam Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material Amsterdam If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Amsterdam

No. of cooling water pumps Amsterdam Is the sea suction provided with an efficient strainer which can be cleared Amsterdam

within the vessel Amsterdam No. of bilge pumps fitted to the main engines Amsterdam Diameter of ditto Amsterdam Stroke Amsterdam

Can one be overhauled while the other is at work Amsterdam No. of auxiliary pumps connected to the main bilge lines Amsterdam How driven Amsterdam

Sizes of pumps Amsterdam No. and sizes of suction connected to both main bilge pumps and auxiliary bilge pumps:—In engine room Amsterdam

and in holds, etc. Amsterdam No. of ballast pumps Amsterdam How driven Amsterdam Sizes of pumps Amsterdam

Is the ballast pump fitted with a direct suction from the engine room bilges Amsterdam State size Amsterdam Is a separate auxiliary pump suction fitted in Amsterdam

Engine Room and size Amsterdam Are all the bilge suction pipes fitted with roses Amsterdam Are the roses in Engine Room always accessible Amsterdam

Are the stoves on Engine Room bulkheads always accessible Amsterdam Are all connections with the sea direct on the skin of the ship Amsterdam

Are they valves or cocks Amsterdam Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates Amsterdam

Are the discharge pipes above or below the deep water line Amsterdam Are they each fitted with a discharge valve always accessible on the plating of the vessel Amsterdam

Are all pipes, cocks, valves and pumps in connection with the machinery accessible at all times Amsterdam Are the bilge suction pipes, cocks and valves arranged so as to prevent any

communication between the sea and the bilges Amsterdam Is the screw shaft tunnel watertight Amsterdam Is it fitted with a watertight door Amsterdam

worked from Amsterdam If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork Amsterdam

No. of main air compressors Amsterdam No. of stages Amsterdam Diameters Amsterdam Stroke Amsterdam Driven by Amsterdam

No. of auxiliary air compressors Amsterdam No. of stages Amsterdam Diameters Amsterdam Stroke Amsterdam Driven by Amsterdam

No. of small auxiliary air compressors Amsterdam No. of stages Amsterdam Diameters Amsterdam Stroke Amsterdam Driven by Amsterdam

No. of scavenging air pumps Amsterdam Diameter Amsterdam Stroke Amsterdam Driven by Amsterdam

Diameter of auxiliary Diesel Engine crank shafts as per Rule as fitted Amsterdam Are the air compressors and their coolers made so as to be easy of access Amsterdam

IR RECEIVERS:—No. of high pressure air receivers Amsterdam Internal diameter Amsterdam Cubic capacity of each Amsterdam

material Amsterdam Seamless, lap welded or riveted longitudinal joint Amsterdam Range of tensile strength Amsterdam

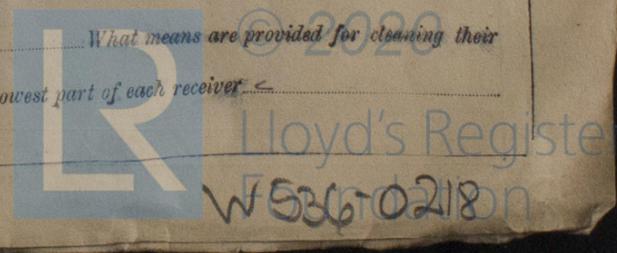
working pressure by Rules Amsterdam No. of starting air receivers Amsterdam Internal diameter Amsterdam

Total cubic capacity Amsterdam Material Amsterdam Seamless, lap welded or riveted longitudinal joint Amsterdam

Range of tensile strength Amsterdam thickness Amsterdam Working pressure by rules Amsterdam Is each receiver, which can be isolated,

fitted with a safety valve as per Rule Amsterdam Can the internal surfaces of the receivers be examined Amsterdam

inner surfaces Amsterdam Is there a drain arrangement fitted at the lowest part of each receiver Amsterdam



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

HYDRAULIC TESTS:—

| DESCRIPTION. | DATE OF TEST. | WORKING PRESSURE. | TEST PRESSURE. | STAMPED. | REMARKS. |
|----------------------------------|---------------|-------------------|----------------|----------------|----------|
| ENGINE CYLINDERS | 31. 5. 24 | 15 Atm | 32 Atm | Test 15. 5. 24 | Good |
| Combustion chambers | 31. 5. 24 | 15 Atm | 32 Atm | Test 15. 5. 24 | ✓ |
| COVERS | | | | | |
| " " JACKETS | | | | | |
| " PISTON WATER PASSAGES | | | | | |
| MAIN COMPRESSORS—1st STAGE | | | | | |
| " 2nd " | | | | | |
| " 3rd " | | | | | |
| AIR RECEIVERS—STARTING | | | | | |
| " INJECTION | | | | | |
| AIR PIPES | | | | | |
| FUEL PIPES | 25. 6. 24 | 15 Atm | 32 Atm | | |
| FUEL PUMPS | 25. 6. 24 | 15 Atm | 32 Atm | | |
| SILENCER | | | | | |
| " WATER JACKET | | | | | |
| SEPARATE FUEL TANKS | | | | | |

PLANS. Are approved plans forwarded herewith for shafting *Receivers* *Separate Tanks*
 (If not, state date of approval) *21. 5. 24*

SPARE GEAR 4 Burner. Blow lamp; 4 Crank case air valves; 1 gudgeon pin, 1 bush for same; 1 combustion chamber; 4 ignition plates; 2 spraying nozzle; 1 piston with con. complete; 1 set of piston spacers; 1 connecting rod bolts, nut & fuel pump complete; A quantity assorted bolts, nuts; 1 set of studs with nuts; one length of fuel pipe with coupling; 2 cones for spraying nozzle.

The foregoing is a correct description,
 p.p. N.V. KROMBOUT MOTOREN FABRIEK
 D. Goepel, Jr. Manufacturer.

Dates of Survey while building { During progress of work in shops - } *May 1. 19. 31.*
 { During erection on board vessel - } *June 25. 30.*
 Total No. of visits *5.*

Dates of Examination of principal parts—Cylinders *2/5. 3/5* Covers *2/5* Pistons *2/5. 3/5* Rods *✓* Connecting rods *2/5. 24*
 Crank shaft *1/5. 24* Thrust shaft *✓* Tunnel shafts *✓* Screw shaft *✓* Propeller *✓* Stern tube *✓* Engine seatings *✓*
 Engines holding down bolts *25/6. 24* Completion of pumping arrangements *✓* Engines tried under working conditions *20/6. 24*
 Completion of fitting sea connections *✓* Stern tube *✓* Screw shaft and propeller *✓*
 Material of crank shaft *Steel* Identification Mark on Do. *W.G.K. 1. 5. 24* Material of thrust shaft *Steel* Identification Mark on *W.G.K. 1. 5.*
 Material of tunnel shafts *✓* Identification Marks on Do. *✓* Material of screw shafts *✓* Identification Marks on Do. *✓*

Is the flash point of the oil to be used over 150° F. *Yes*
 Is this machinery duplicate of a previous case *✓* If so, state name of vessel *✓*

General Remarks (State quality of workmanship, opinions as to class, &c.)
The auxiliary oil engine has been made in accordance with the approved plans, Secretary's letter, Rules. The material has been tested as required and workmanship good.

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

| | | |
|--------------------------------|-------|-------------------|
| The amount of Entry Fee ... | £ 120 | When applied for, |
| Special ... | £ : | |
| Donkey Boiler Fee ... | £ : | When received, |
| Travelling Expenses (if any) £ | £ : | |

H. K. Bennett
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI 8 AUG 1924**

Assigned

