

10 MAY 1927

pt. 4b

REPORT ON OIL ENGINE MACHINERY.

No. 10520

Received at London Office

24 FEB 1927

Date of writing Report 18 February 1927 When handed in at Local Office

Port of AMSTERDAM

Date, First Survey 14 August 24 Last Survey 11 February 1927

Number of Visits 9

on the ~~XXXXXX~~ KROMHOUT OIL ENGINES NOS. 3738/39Tons { Gross -
Net -

Built at London

By whom built J.I. Thornycroft & Co. Lim. Yard No. 1062 When built 1926

Engines made at Amsterdam

By whom made Kromhout Works, D. Goedkoop Jr Engine No. 3738/39 When made 1927

Monkey Boilers made at -

By whom made - Boiler No. - When made -

Horse Power 15

Owners Anglo-Ecuadorian Oilfields, Ltd. Port belonging to -

Horse Power as per Rule 4

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

For which vessel is intended -

Type of Engines 2 Kromhout oil engines 2 or 4 stroke cycle Single or double acting

pressure in cylinders 18 kg. Diameter of cylinders 196 mm. Length of stroke 205 mm. No. of cylinders 1 No. of cranks 1

Bearings, adjacent to the Crank, measured from inner edge to inner edge 216 mm. Is there a bearing between each crank One crank

Revolutions per minute 500 Flywheel dia. 950 mm. Weight 450 kg. Means of ignition Ignition plates Kind of fuel used Crude oil

Shaft, dia. of journals as per Rule 45 mm. Crank pin dia. 45 mm. Crank Webs Mid. length breadth 110 mm. Thickness parallel to axis Solid

as fitted 45 mm. Mid. length thickness 44 mm. Thickness around eyehole

Main Shaft, diameter as per Rule 4 Intermediate Shafts, diameter as per Rule 4 Thrust Shaft, diameter at collars as per Rule 4

as fitted 70 mm. as fitted 4 as fitted 4

Screw Shaft, diameter as per Rule 4 Is the tube screw shaft fitted with a continuous liner 4

as fitted 4 as fitted 4

Liners, thickness in way of bushes as per Rule 4 Thickness between bushes as per rule 4 Is the after end of the liner made watertight in the

boss 4 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner 4

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 4

Liners are fitted, is the shaft lapped or protected between the liners 4 Is an approved Oil Gland or other appliance fitted at the after

tube shaft 4 Length of Bearing in Stern Bush next to and supporting propeller 4

Pitch 4 No. of blades 4 Material 4 whether Moveable 4 Total Developed Surface 4 sq. feet

of reversing Engines Not reversible Is a governor or other arrangement fitted to prevent racing of the engine when declutched 4 Means of lubrication

Thickness of cylinder liners 4 Are the cylinders fitted with safety valves 4 Are the exhaust pipes and silencers water cooled or lagged with

Insulating material 4 If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine 4

Water Pumps, No. 4 Is the sea suction provided with an efficient strainer which can be cleared within the vessel 4

Pumps worked from the Main Engines, No. 4 Diameter 4 Stroke 4 Can one be overhauled while the other is at work 4

connected to the Main Bilge Line { No. and Size 4 How driven 4

Lubricating Oil Pumps, including Spare Pump, No. and size 4

independent means arranged for circulating water through the Oil Cooler 4 Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

No. and size:—In Machinery Spaces 4

Is, &c. 4

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 4

the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes 4 Are the Bilge Suctions in the Machinery Spaces

easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges 4

Sea Connections fitted direct on the skin of the ship 4 Are they fitted with Valves or Cocks 4

fixed sufficiently high on the ship's side to be seen without lifting the platform plates 4 Are the Overboard Discharges above or below the deep water line 4

each fitted with a Discharge Valve always accessible on the plating of the vessel 4 Are the Blow Off Cocks fitted with a spigot and brass covering plate 4

pipes pass through the bunkers 4 How are they protected 4

pipes pass through the deep tanks 4 Have they been tested as per Rule 4

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times 4

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

partment to another 4 Is the Shaft Tunnel watertight 4 Is it fitted with a watertight door 4 worked from 4

wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork 4

Air Compressors, No. 4 No. of stages 4 Diameters 4 Stroke 4 Driven by 4

Auxiliary Air Compressors, No. 4 No. of stages 4 Diameters 4 Stroke 4 Driven by 4

Auxiliary Air Compressors, No. 4 No. of stages 4 Diameters 4 Stroke 4 Driven by 4

enging Air Pumps, No. 4 Diameter 4 Stroke 4 Driven by 4

Auxiliary Engines crank shafts, diameter as per Rule 4 as fitted 4

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule 4

the internal surfaces of the receivers be examined 4 What means are provided for cleaning their inner surfaces 4

ere a drain arrangement fitted at the lowest part of each receiver 4

Pressure Air Receivers, No. 4 Cubic capacity of each 4 Internal diameter 4 thickness 4

less, lap welded or riveted longitudinal joint 4 Material 4 Range of tensile strength 4 Working pressure by Rules 4

ting Air Receivers, No. 1 each Total cubic capacity 40 L Internal diameter 203 mm thickness 4 mm

less, lap welded or riveted longitudinal joint 4 Material Steel Range of tensile strength 28/5 tons Working pressure by Rules 16 kg/cm²

IS A DONKEY BOILER FITTED? \angle

If so, is a report now forwarded? C

PLANS. Are approved plans forwarded herewith for Shafting *Returned* Receivers *to London* Separate Tanks *Office*
(If not, state date of approval) *Forwarded letter 14 July 1921*
Donkey Boilers *C* General Pumping Arrangements *C* Oil Fuel Burning Arrangements

SPARE GEAR

One gudgeon pin and Lob. 2 bottom end bones, bolts, 2 main screws, these
and nuts, 1 set of con. pin. bolts, one piston and spring, a quantity of assorted
bolts and nuts, one fuel pump complete, lengths of pipe for air and fuel.

Plon Sie further list attached.

The foregoing is a correct description,
N.V. KROMHOUT MOTOREN FABRIEK
D. GOEDKOOP Jr.

Manufacturer.

Dates	{ During progress of work in shops - - }	14/8.	23/8.	14/9.	23/10.	2/11.	12/11.	2/12.	3/12.	9/12.	11/2.	
of Survey while building	{ During erection on board vessel - - }	✓										
	Total No. of visits	10										

Dates of Examination of principal parts—Cylinders $14/8$ - $9/12$ Covers $14/8$ - $2/12$ Pistons $14/8$ - $12/11$ Rods \leftarrow Connecting rods $14/8$ - $2/12$
Crank shaft $13/8$ - $2/12$ Flywheel shaft $13/8$ - $2/12$ Thrust shaft \leftarrow Intermediate shafts \leftarrow Tube shaft \leftarrow
Screw shaft \leftarrow Propeller \leftarrow Stern tube \leftarrow Engine seatings \leftarrow Engines holding down bolts \leftarrow

Completion of fitting sea connections	Completion of pumping arrangements	Engines tried under working conditions
Crank shaft, Material <i>Steel</i>	Identification Mark <i>Lloyd's 190 3.12.26</i>	Flywheel shaft, Material <i>Steel</i>
Thrust shaft, Material <i>Steel</i>	Identification Mark <i>N 298 3.12.26</i>	Intermediate shafts, Material <i>Steel</i>
Tube shaft, Material <i>Steel</i>	Identification Mark <i>Lloyd's 186 3.12.26</i>	Screw shaft, Material <i>Steel</i>

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

Is this machinery duplicate of a previous case Yes If so, state name of vessel Engine on S.S. Carrot Rep. no. 9452

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

The engines have been constructed under Special Survey in accordance with the plans, Rules and Secretary's letter, workmanship good. Some have been tried on test bench under full engine condition and good.

The auxiliary oil engines have been installed under special survey, in accordance with the requirements of the Rules and afterwards tested under working conditions and found to be efficient.

Certificate (if required) to be sent to

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

The amount of Entry Fee	...	£	:	:	When applied for, 19
Special	...	£	:	:	
Donkey Boiler Fee	...	£	:	:	When received, 11/3/19
Travelling Expenses (if any)	...	£	:	:	

Committee's Minute

Assigned

F. V. Beaman ✓
Engineer Surveyor to Lloyd's Register of Shipping.

H. K. Garnett

Lloyd's Register
Foundation