

Rpt. 4b.

# REPORT ON OIL ENGINE MACHINERY.

No. 13768  
29 SEP 1924

Received at London Office

Date of writing Report 10.9.1924 When handed in at Local Office 10.9.1924 Port of Rotterdam

No. in Survey held at Rotterdam Date, First Survey 5-10-23 Last Survey 10-9-1924  
Reg. Book. Number of Visits 43

on the <sup>Single</sup> ~~Pair~~ <sup>Triples</sup> Screw vessels **SLIEDRECHT** Tons { Gross 4646  
Net 2642

Master Built at Rotterdam By whom built Rott Drogdijk Me Yard No. 92 When built 1924

Engines made at Glasgow By whom made Harland & Wolff Ltd Engine No. 10149 When made 1924

Donkey Boilers made at Rotterdam By whom made Rott Drogdijk Me Boiler No. 200.81 When made 1924

Brake Horse Power 1050 Owners Hoorn Me "De Maas" Port belonging to Rotterdam

Nom. Horse Power as per Rule 409 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Type of Engines See Glasgow report N° 43525 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders No. of cylinders No. of cranks Diameter of cylinders

Length of stroke Revolutions per minute Means of ignition Kind of fuel used

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

Distance between centres of main bearings Is a flywheel fitted Diameter of crank shaft journals as per Rule as fitted

Diameter of crank pins Breadth of crank webs as per Rule as fitted Thickness of ditto as per Rule as fitted

Diameter of flywheel shaft as per Rule as fitted Diameter of tunnel shaft as per Rule as fitted Diameter of thrust shaft as per Rule as fitted

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

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

Does 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-corrosive

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

Type of outer gland fitted to stern tube Length of stern bush 1560 mells Diameter of propeller 18'0" 16'0"

Pitch of propeller 2'13.9" No. of blades 4 state whether moveable No Total surface 2024 square feet

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

Are the cylinders fitted with safety valves Means of lubrication Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

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

No. of cooling water pumps 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

No. of bilge pumps fitted to the main engines None Diameter of ditto Stroke

Can one be overhauled while the other is at work No. of auxiliary pumps connected to the main bilge lines 2 How driven Steam driven

Sizes of pumps 6'x6'x6" One à 6'x6'x6" in pump room No. and sizes of suctions connected to both main bilge pumps and auxiliary bilge pumps:—In engine room 4 à 3 1/2" 2 à 2 1/2"

And in holds, etc. 2 x 3" Peruvian 2 à 2 1/2" No. of ballast pumps How driven Sizes of pumps

Is the ballast pump fitted with a direct suction from the engine room bilges State size Is a separate auxiliary pump suction fitted in Engine Room and size Yes à 3 1/4"

Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine Room always accessible Yes

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

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

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

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

Is the screw shaft tunnel watertight None Is it fitted with a watertight door

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

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

No. of auxiliary air compressors One No. of stages Diameters Stroke Driven by Steam engine

No. of small auxiliary air compressors None No. of stages Diameters Stroke Driven by

No. of scavenging air pumps Diameter Stroke Driven by

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

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

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

thickness working pressure by Rules No. of starting air receivers 2 Internal diameter 6'-0/8"

Total cubic capacity 2 x 15.23 cbb<sup>3</sup> Material S.M. Steel Seamless, lap welded or riveted longitudinal joint Riveted

Range of tensile strength 20-32 tons thickness 1 1/2" Working pressure by rules 377 lbs 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 Yes What means are provided for cleaning their inner surfaces Manholes fitted Is there a drain arrangement fitted at the lowest part of each receiver Yes



IS A DONKEY BOILER FITTED? *2 Donkey boilers* If so, is a report now forwarded? *Yes*

HYDRAULIC TESTS:—

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS .....	—	—	—	—	—
"    "    COVERS .....	—	—	—	—	—
"    "    JACKETS.....	—	—	—	—	—
"    "    PISTON WATER PASSAGES.....	—	—	—	—	—
MAIN COMPRESSORS—1st STAGE.....	—	—	—	—	—
"    2nd " .....	—	—	—	—	—
"    3rd " .....	—	—	—	—	—
AIR RECEIVERS—STARTING .....	—	—	—	—	—
"    INJECTION .....	—	—	—	—	—
AIR PIPES .....	14-6-24	35 1/2 lb	40 1/2 lb	Lloyd's 70K JS-14-6-24	—
FUEL PIPES .....	8-8-24	300 lbs	—	—	—
FUEL PUMPS .....	—	—	—	—	—
SILENCER .....	—	—	—	—	—
"    WATER JACKET .....	—	—	—	—	—
SEPARATE FUEL TANKS .....	10-12-23	—	15 lb	—	—

PLANS. Are approved plans forwarded herewith for shafting *19-9-23*. Receivers *5-9-23* Separate Tanks *19-10-23*  
(If not, state date of approval)

SPARE GEAR *All as per attached lists.*

The foregoing is a correct description,

ROTTERDAMSCHE DROOGDOEK MAATSCHAPPIJ

*N. C. Scholten* DIRECTOR

Manufacturer.

Dates of Survey while building  
 During progress of work in shops— *1923 5/10, 16/11, 24/11, 29/11, 5/12, 9-16-24, 5-6-19, 11/12, 1924, 10-24-16-18-24-29, 30/11, 4-20-29, 5-28/12, 5-11-15-16*  
 During erection on board vessel— *1924 2/3, 17-22-26-28, 1-2-11-15/8, 4-10-12-16/19*  
 Total No. of visits *43*

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓  
 Crank shaft ✓ Thrust shaft *21-5-24* Tunnel shafts *21-5-24* Screw shaft *21-5-24* Propeller *31-5-24* Stern tube *21-5-24* Engine seatings *27-5*  
 Engines holding down bolts *15-8-24* Completion of pumping arrangements *10-9-24* Engines tried under working conditions *10-9-24*  
 Completion of fitting sea connections *29-5-24* Stern tube *29-5-24* Screw shaft and propeller *31-5-24*  
 Material of crank shaft ✓ Identification Mark on Do. ✓ Material of thrust shaft *IM Steel* Identification Mark on Do. ✓  
 Material of ~~tunnel~~ shafts *IM Steel* Identification Marks on Do. ✓ *LLOYD'S EX 215-24* Material of screw shafts *IM Steel* Identification Marks on Do. ✓ *LLOYD'S EX 215-24*  
 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 machinery and donkey boilers have been made and fitted in accordance with the Rules, Secretary's letters and approved plans, material tested as required and workmanship good. The whole was found in a good working condition during a trial trip on the North Sea and I am of opinion that the vessel is eligible to be recorded in the Society's Register Book with **LMC 9.24. CL**. Donkey boilers fitted for burning oil fuel.*

*It is submitted that this vessel is eligible for THE RECORD, + LMC 9.24. CL. Oil Engines. 4 SC. SA. 6 Cy. 29 1/8" - 59" 2 DB. 120 lb. 489 NHP. J. J. Dehuo*  
 Engineer-Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ ...  
 Port Special ... £ 375.00  
 Donkey Boiler Fee on *oil engine* ...  
 Travelling Expenses (if any) £ 43.00

Committee's Minute **FRI. 3 OCT 1924**

Assigned *+ LMC 9.24 CL oil engines*

