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# REPORT ON OIL ENGINE MACHINERY.

No. 10,002.

14 SEP 1936

Received at London Office

Writing Report 2/9 1936 When handed in at Local Office 19 Port of Copenhagen  
 in Survey held at Copenhagen & Odense Date, First Survey 22/3 1935 Last Survey 27/8 1936  
 Book. Number of Visits 65

2/ on the <sup>Single</sup> ~~Twin~~ <sup>Triple</sup> ~~Quadruple~~ Screw vessel "LOOSDRECHT" Tons Gross 7313.51 Net 5591.95

at Odense By whom built Odense Haaskibsværft Yard No. 58 When built 1936  
 nes made at Copenhagen By whom made? Rasmussen & Wain Engine No. 2376 When made 1936  
 key Boilers made at Copenhagen By whom made? Rasmussen & Wain Boiler No. 1896 When made 1936  
 ce Horse Power 3800 Owners The van Ommen Scheepvaartbedrijf Port belonging to Rotterdam  
 . Horse Power as per Rule 572 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 le for which vessel is intended carrying oil cargo.

ENGINES, &c. Type of Engines <sup>solid</sup> ~~valve~~ <sup>injection</sup> ~~with injection~~ 2 or 4 stroke cycle 4 Single or double acting single  
 num pressure in cylinders 49 kg/cm<sup>2</sup> Diameter of cylinders 740 mm Length of stroke 1800 mm No. of cylinders 7 No. of cranks 7  
 Indicated Pressure 8.51 kg/cm<sup>2</sup> of bearings, adjacent to the Crank, measured from inner edge to inner edge 990 mm Is there a bearing between each crank Yes  
 utions per minute 110 TURN Flywheel dia. 2136 mm Weight 2 t Means of ignition compression Kind of fuel used <sup>crude</sup> ~~oil~~  
 k Shaft, dia. of journals as per Rule 501 mm Crank pin dia. 525 mm Crank Webs Mid. length breadth 1000 mm Thickness parallel to axis 310 mm  
 as fitted 525 mm (170 mm CENT. HOLE) Mid. length thickness 290 mm Thickness around eyehole 280 mm  
 wheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule 356 mm Thrust Shaft, diameter at collars as per Rule 374 mm  
 as fitted Screw Shaft, diameter as per Rule 391 mm Is the tube screw shaft fitted with a continuous liner Yes  
 e Shaft, diameter as per Rule as fitted 560 mm

ize Liners, thickness in way of bushes as per Rule 19 mm Thickness between bushes as per rule 14.3 mm Is the after end of the liner made watertight in the  
 as fitted 28-29 mm If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner in one length Yes  
 ller boss 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  
 e 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  
 o 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 tube  
 If so, state type Length of Bearing in Stern Bush next to and supporting propeller 1750 mm

eller, dia. 16'-6" Pitch 12'-0" No. of blades 4 Material bronze whether Moveable No Total Developed Surface 111.5 sq. feet  
 od of reversing Engines direct reversible Is a governor or other arrangement fitted to prevent racing of the engine when decelerated Yes Means of lubrication  
 ed Thickness of cylinder liners 53.5 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with  
 onducting 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 1 off 230x260x250 mm dip. (Steam); 1 off 140 kg/h rotary (oil engine)  
 ing Water Pumps, No. 1 off 210x225 mm dip. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes  
 e Pumps worked from the Main Engines, No. 1 Diameter 130 mm Stroke 68 mm Can one be overhauled while the other is at work

ps connected to the Main Bilge Line No. and Size 1 off 130x165 mm SIMPLEX 1 off 230x260x250 mm dip. 1 off 150x150x150 mm dip.  
 How driven by main engine by steam by steam  
 e 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 pumping  
 gements  
 ast Pumps, No. and size 1 off 230x260x250 mm dip. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 off 210x225 mm DUPL. 1 off 140 T/W ROTARY.  
 two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
 ps, No. and size:—In Machinery Spaces 5 off 3" In Pump Rooms 1 off 4"

olds, &c. FORE HOLD: 2 off 3", AFT COFF: 1 off 4", FORW. COFF: 1 off 4", FORW. PUMP ROOM: 1 off 3"  
 ependent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 off 5" 1 off 4"  
 all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces  
 rom easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes  
 all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks valves  
 hey 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 above  
 hey 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 Yes  
 t pipes pass through the bunkers How are they protected  
 t pipes pass through the deep tanks Have they been tested as per Rule

all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes  
 e 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 of  
 443 artments to another Yes Is the Shaft Tunnel watertight no tunnel Is it fitted with a watertight door worked from  
 137 wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork  
 n Air Compressors, No. No. of stages Diameters Stroke Driven by  
 NEUVERING 2 No. of stages 2 Diameters 8 1/4" - 3 1/2" Stroke 7" Driven by steam  
 liary Air Compressors, No. No. of stages Diameters Stroke Driven by  
 ll Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by  
 ERCHARGING AIR BLOWER 1 ROTARY Diameter 178 mm Stroke Driven by main engine

liary Engines crank shafts, diameter as per Rule No. ONE  
 as fitted ROTTERDAM RPT. N° 24565 Position engine room, port side



**AIR RECEIVERS:**—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.*  
**High Pressure 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 *10+19.5 = 29.54<sup>3</sup>* Internal diameter *6'-0", 6'-2"* thickness *1"*  
Seamless, lap welded or riveted longitudinal joint *✓* Material *S. H. steel* Range of tensile strength *28-32.5* Working pressure *25*

**IS A DONKEY BOILER FITTED?** *yes* *2* *OFF* *✓* If so, is a report now forwarded? *yes.*  
Is the donkey boiler intended to be used for domestic purposes only *No*

**PLANS.** Are approved plans forwarded herewith for Shafting *yes.* Receivers *yes.* Separate Fuel Tanks *yes.*  
Donkey Boilers *yes.* General Pumping Arrangements *yes.* Pumping Arrangements in Machinery Space *yes.*  
Oil Fuel Burning Arrangements *175 SS*

### SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes.*

State the principal additional spare gear supplied

*1 cylinder complete with liner and water jacket, 7 exhaust valves complete,  
2 air inlet valves complete, 1 piston with rod & rings, 2 1/2 crank pin bolts,  
2 1/2 main bearing brasses, 10 fine valves complete, 2 starting valves complete,  
1 screw shaft with continuous liner & nut, 1 cast iron propeller.*

The foregoing is a correct description,

*BURMEISTER & WAINSKIN-OG SKIBSBYGGERI*

Manufacturer.

Dates of Survey while building  
During progress of work in shops--  
During erection on board vessel--  
Total No. of visits *65.*

Dates of Examination of principal parts—Cylinders *with* Covers *174-196* Pistons *16/4* Rods *3/5-187-7-157-257* Connecting rods *179-249*  
Crank shaft *3/5-187-4-24-10-7-10-1/2* Flywheel shaft *✓* Thrust shaft *10/12-7-1-28/5* Intermediate shafts *10/12-25/5* Tube shaft *✓*  
Screw shaft *7-157-187-287-2/6* Propeller *287-17/6* Stern tube *7/5* Engine seatings *12/5* Engines holding down bolts *16/7*  
Completion of fitting sea connections *12/5* Completion of pumping arrangements *30/7* Engines tried under working conditions *257-26-2/18*  
Crank shaft, Material *S. H. steel* Identification Mark *BN 7-2-36* Flywheel shaft, Material *✓* Identification Mark *✓*  
Thrust shaft, Material *S. H. steel* Identification Mark *✓* Intermediate shafts, Material *S. H. steel* Identification Mark *✓*  
Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *S. H. steel* Identification Mark *✓*

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 *yes, oil tanker.* If so, have the requirements of the Rules been complied with *yes.*

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 *“Hanning Bank” (year 1934)*

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

*The machinery herein described has been built and fitted under special survey and  
compliance with the Society's Rules, the approved plans and the requirements contained in  
Punching's letter & dated 7/4-1934, 2/1-1935, 19/2-1935, 17/5-257, 27/6-24/8, 17/9-18/9, 7/10-14/10, 1935, 19/1-27/2, 24/4-27/6, 1936.  
The material used for the construction has been examined and tested as per Rules and found good  
by the undersigned or as per Certificate periodical, and the workmanship is good.*

*On completion the whole of the main & auxiliary machinery was tested under full  
working conditions and found satisfactory, and on the trial trip the manoeuvring of the  
engines was tested and found good. Maximum speed 12.12 kn. at 4410 IHP & 104.4 kts.*

*Recommend the machinery to have notation of **+LHC 8-36 OIL ENGINE***

*C. L.*

The amount of Entry Fee .. *NR 134.40:* When applied for, *12-7-1936.*

Special ... *2320.64:*

2 STARTING AIR RECEIVERS ... *188.16*

FITTING Donkey Boiler Fee ... *300.00:*

Travelling Expenses (if any) *530.00*

LATE FEE ... *60.00*

Committee's Minute

Assigned *+LHC 8-36*

*Oil Engines 2 DB-180 lbs.*

*Chilipp.*

Engineer Surveyor to Lloyd's Register of Shipping



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