

# REPORT ON OIL ENGINE MACHINERY.

No. 10,002.

14 SEP 1936

Received at London Office

4b.

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

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

at Odense By whom built Odense Haalkitsvaerft Yard No. 58 When built 1936  
Lines made at Copenhagen By whom made 2/5 Rimmerist & Wain Engine No. 2376 When made 1936  
Key Boilers made at Copenhagen By whom made 2/5 Rimmerist & Wain Boiler No. 1897 When made 1936  
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  
Use for which vessel is intended carrying oil cargo.

ENGINES, &c. Type of Engines <sup>solid injection</sup> ~~solid~~ Diesel, <sup>with injection</sup> ~~with injection~~ 2 or 4 stroke cycle 4 Single or double acting single  
Indicated Pressure 49 kg/cm<sup>2</sup> Diameter of cylinders 740 mm Length of stroke 1500 mm No. of cylinders 7 No. of cranks 7

Revolutions per minute 110 Wheel dia. 2/36 mm Weight 2 to Means of ignition compression Kind of fuel used <sup>crude oil</sup> ~~crude oil~~

Crank 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 eye hole 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 560 mm as fitted 496 mm

Screw Shaft, diameter as per Rule 391 mm Is the tube screw shaft fitted with a continuous liner Yes  
as fitted 560 mm as fitted 20 mm

Liner 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 stern boss Yes  
as fitted 28-29 mm as fitted 20 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

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  
No liners are fitted, is the shaft lapped or protected between the liners Yes 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

Propeller, dia. 16'-6" Pitch 12'-0" No. of blades 4 Material bronze whether Moveable No Total Developed Surface 111.5 sq. feet

Method of reversing Engines direct reversible Is a governor or other arrangement fitted to prevent racing of the engine when de-clutching Yes Means of lubrication  
oil. Thickness of cylinder liners 5.5 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with  
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 led to sea

1 off 230 x 260 x 250 mm dip. (Steam); 1 off 140 kg/l rotary (oil engine)  
Suction Water Pumps, No. 1 off 210 x 225 mm diaph. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

2 Pumps worked from the Main Engines, No. 1 Diameter 130 mm Stroke 168 mm Can one be overhauled while the other is at work  
Pumps connected to the Main Bilge Line No. and Size 1 off 130 x 168 mm SIMPLE 1 off 230 x 260 x 250 mm dip. 1 off 150 x 150 x 150 mm dip.  
How driven by main engine by steam by steam

Is 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  
arrangements

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 off 100 x 200 x 175 mm DUPL.  
No. and size 1 off 230 x 260 x 250 mm dip. 1 off 210 x 225 mm DUPL. 1 off 140 mm ROTARY.

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
Pumps, No. and size:—In Machinery Spaces 5 off 3" In Pump Rooms 1 off 4"

Direct Suctions to the Engine Room Bilges, No. and size 1 off 5" 1 off 4"  
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces  
from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks valves  
Are 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 above  
Are 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 Yes

Do all pipes pass through the bunkers Yes How are they protected  
Do all pipes pass through the deep tanks Yes 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 of  
the compartments to the other Yes Is the Shaft Tunnel watertight no tunnel Is it fitted with a watertight door worked from

Is the vessel a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork  
No Air Compressors, No. 2 No. of stages 2 Diameters 8 1/4 - 3 1/2 Stroke 7" Driven by steam

Are there Auxiliary Air Compressors, No. 1 No. of stages 1 Diameter 178 mm Stroke 7" Driven by main engine

Are there Charging Air Blowers, No. 1 No. of stages 1 Diameter 178 mm Stroke 7" Driven by main engine

Are there Auxiliary Engines crank shafts, diameter as per Rule No. one  
as fitted ROTTERDAM RPT. No. 24565 Position engine room, port side



002989-002996-0125

**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  $10 + 19.5 = 29.54^3$  Internal diameter  $6'-0", 6'-2"$  thickness  $1" \text{ ends } 1"$   
 Seamless, lap welded or riveted longitudinal joint *rivets.* Material *S. H. steel* Range of tensile strength *ends 28-32 5* Working pressure *ends 26-30 5* Actual *25 4/11*

**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 *1575 35*

**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 fuel valves complete, 2 starting valves complete  
 1 screw shaft with continuous liner & nut, 1 coil iron propeller.*

The foregoing is a correct description.

**DURMEISTER MASKIN-OG SKIBSBYGGERI** Manufacturer.

Dates of Survey while building	During progress of work in shops--	1935: 2/5, 3/5, 18/5, 21/5, 28/5, 11/6, 14/6, 25/6, 29/6, 27/7, 15/8, 16/8, 17/9, 24/9, 10/8, 10/10, 11/10, 10/12, 18/12, 28/12, 30/12, 1936: 7/1, 14/1, 15/1
	During erection on board vessel--	18/2, 12/5, 4/6, 17/6, 20/6, 10/7, 24/7, 30/7, 10/8, 12/8, 21/8, 25/8, 26/8, 27/8, 1936.
	Total No. of visits	65.

Dates of Examination of principal parts—Cylinders	<i>with</i>	Covers	15/4, 19/6	Pistons	16/4	Rods	3/5, 18/7, 15/7, 25/7	connecting rods	17/9, 24/9
Crank shaft	10/3, 18/5, 4/6, 24/6, 7/10, 12/10	Flywheel shaft	✓	Thrust shaft	10/12, 7/1, 28/5	Intermediate shafts	10/12, 10/2, 25/5	Tube shaft	✓
Screw shaft	7/15, 15/7, 28/5, 2/6	Propeller	28/5, 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	25/7, 26/5, 21/8				

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 *'His Majesty's Bank' (year 1936)*  
**General Remarks** (State quality of workmanship, opinions as to class, &c.) *HENNING*

*The machinery herein described has been built and fitted under special survey and accordance with the Society's Rules, the approved plans and the requirements contained in Pambour's letter & dated 7/11/1934, 21/4/19, 12/14, 17/5, 25/6, 27/6, 24/8, 17/9, 18/9, 7/10, 14/10, 1935, 19/1, 27/1, 24/4, 27/6, 1936. The material used for the construction has been examined and tested as per Rules and found good by the engineer or as per Certificate particular, 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 engine was tested and found good. Maximum speed 12.12 kn. at 4410 IHP at 104.4 kts. Recommend the machinery to have notation of +LHC 8-36 OIL ENGINE C.L.*

The amount of Entry Fee	.. £R. 134.40	When applied for,	12.7.1936.
Special	... £ 2320.64	When received,	12.7.1936.
2 STARTING AIR RECEIVERS	... 188.16	£ 200.01 paid 19.9.36	22/9
1 STARTING Donkey Boiler Fee	... £ 300.00	£ 2733.19 paid 16.11.36	22/11
Travelling Expenses (if any)	£ 530.00	Sum 18 Sep 1936	
LATE FEE	... 60.00		
Committee's Minute			
Assigned	+ June 8, 36		
	Oil Engines 2 DB-180 lbs.		

*Chilipp*  
 Engineer Surveyor to Lloyd's Register of Shipping



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