

REPORT ON OIL ENGINE MACHINERY.

No. 20158

Received at London Office 14 MAR 1931

Date of writing Report 27-2-1931 When handed in at Local Office 19 Port of Rotterdam
No. in Survey held at Rotterdam Date, First Survey 26-11-1929 Last Survey 27-2-1931
Reg. Book. Number of Visits 48

Single
Twin
Triple
Quadruple

Screw vessel "MIJDRECHT"

Tons Gross
Net

Built at Rotterdam By whom built Pott Droog Ma Yard No. 152 When built 1931
Engines made at Glasgow By whom made Harland & Wolff Engine No. 4265 When made 1930
Donkey Boilers made at Rotterdam By whom made Pott Droog Ma Boiler No. 504 When made 1930
Brake Horse Power 2750 Owners Hoorn Ma De Meas Port belonging to Rotterdam
Nom. Horse Power as per Rule 652 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which vessel is intended Carrying oil in Bulk

OIL ENGINES, &c.—Type of Engines See Glasgow report No 50940 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders ✓ Diameter of cylinders ✓ Length of stroke ✓ No. of cylinders ✓ No. of cranks ✓
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge ✓ Is there a bearing between each crank ✓
Revolutions per minute ✓ Flywheel dia. ✓ Weight ✓ Means of ignition ✓ Kind of fuel used ✓
Crank Shaft, dia. of journals as per Rule ✓ as fitted ✓ Crank pin dia. ✓ Crank Webs Mid. length breadth ✓ Thickness parallel to axis ✓
Mid. length thickness ✓ shrunk Thickness around eye hole ✓
Flywheel Shaft, diameter as per Rule ✓ as fitted ✓ Intermediate Shafts, diameter as per Rule 483 mm ✓ as fitted 483 mm ✓ Thrust Shaft, diameter at collars as per Rule 457 mm ✓ as fitted 457 mm ✓
Tube Shaft, diameter as per Rule ✓ as fitted ✓ Screw Shaft, diameter as per Rule 483 mm ✓ as fitted 483 mm ✓ Is the tube screw shaft fitted with a continuous liner ✓ Yes ✓
Bronze Liners, thickness in way of bushes as per Rule 20 mm ✓ as fitted 20 mm ✓ Thickness between bushes as per Rule 20 mm ✓ as fitted 20 mm ✓ Is the after end of the liner made watertight in the propeller boss ✓
If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length ✓
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 Tight fit ✓
If two 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 shaft ✓

Propeller, dia. 14'0" Pitch 12'-4" No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 1150 sq. feet

Method of reversing Engines Compensated Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-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 In Funnel

Cooling Water Pumps, No. 2 à 3 tons per hour Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. 1 in forehold in 8'2" x 8'2" x 6'6" Can one be overhauled while the other is at work ✓
Pumps connected to the Main Bilge Line No. and Size 3 One 6' x 6' x 6' One 8' x 8'2" x 8' One 3 tons per hour How driven Steam Electric

Ballast Pumps, No. and size ✓ Lubricating Oil Pumps, including Spare Pump, No. and size 2 à 50 tons per hour

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 3 à 3 1/2" 2 à 2 1/2" 2 in dry tanks à 3 1/2"

In Holds, &c. 4 in pump room à 4" 2 in forward cofferdam à 6"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One à 3 1/2"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes. Yes Are the Bilge Suctions in the Machinery Spaces led 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 On cast steel chests 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

What pipes pass through the bunkers. None How are they protected. ✓
What pipes pass through the deep tanks. ✓ 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 compartment to another. Yes Is the Shaft Tunnel watertight. Mach aft Is it fitted with a watertight door. ✓ worked from. ✓

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

Main Air Compressors, No. — No. of stages — Diameters 364 x 510 x 82 Stroke — Driven by —
Auxiliary Air Compressors, No. One No. of stages 3 Diameters 364 x 510 x 82 Stroke 150 Driven by Steam

Small Auxiliary Air Compressors, No. — No. of stages — Diameters — Stroke — Driven by —
Scavenging Air Pumps, No. — Diameter — Stroke — Driven by —

Auxiliary Engines crank shafts, diameter as per Rule — as fitted — also one for dynamo oil pump. See report No 147239

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. Yes What means are provided for cleaning their inner surfaces. Doors

Is there a drain arrangement fitted at the lowest part of each receiver. Yes
High Pressure Air Receivers, No. 2 Cubic capacity of each 400 liters Internal diameter — thickness —
Seamless, lap welded or riveted longitudinal joint. ✓ Material — Range of tensile strength — Working pressure by Rules —

Starting Air Receivers, No. Two Total cubic capacity 2 x 19.8 cbs Internal diameter 8'-4 1/2" thickness 1/2" Working pressure by Rules 25 kg.
Seamless, lap welded or riveted longitudinal joint. Riveted Material L.M. Steel Range of tensile strength 28-32 tons Working pressure by Rules 25 kg.

IS A DONKEY BOILER FITTED? *One Donkey boiler* *One M. W. boiler* If so, is a report now forwarded? *Yes. Spencer Donkey boiler*

PLANS. Are approved plans forwarded herewith for Shafting *10-1-30* Receivers *5-9-29* Separate Tanks *19-7-30*
(If not, state date of approval)
Donkey Boilers *11-11-29* General Pumping Arrangements *17-4-30* Oil Fuel Burning Arrangements *18-9-30*

SPARE GEAR *Verified and found as per Society's requirements and as per owners specification.*

The foregoing is a correct description.

ROTTERDAMSCHЕ DROOGBOEK MAATSCHAPPIJ

Spencer

Manufacturer.

Dates of Survey while building	During progress of work in shops - -	1929	20/11	1930	7/14	13/13	14/14	14/14	14/14	18/14	20/14	6/16	7/16	10/17	10/17	18/18	18/18	18/19	19/19	19/19	29/30	1/8	12/12	20/20		
		During erection on board vessel - - -	1930	5/11	15/11	18/11	19/11	1/12	3/12	30/12	1931	5/11	6/11	9/11	12/11	16/11	16/11	30/11	5/12	10/12	11/12	16/12	18/12	24/12		
Total No. of visits		48																								

Dates of Examination of principal parts—Cylinders Covers Pistons Rods Connecting rods
 Crank shaft Flywheel shaft Thrust shaft *30-4-30* Intermediate shafts *30-4-30* Tube shaft
 Screw shaft *30-4-30* Propeller *30-4-30* Stern tube *3-5-30* Engine seatings *5-11-30* Engines holding down bolts *30-12-30*
 Completion of fitting sea connections *1-12-30* Completion of pumping arrangements *10-2-31* Engines tried under working conditions *18-2-31*
 Crank shaft, Material Identification Mark Flywheel shaft, Material Identification Mark
 Thrust shaft, Material *S.M. Steel* Identification Mark *LL 0408* Intermediate shafts, Material *S.M. Steel* Identification Marks *LL 0408*
 Tube shaft, Material Identification Mark Screw shaft, Material *S.M. Steel* Identification Mark *LL 0408*

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 *M.V. MOORDRECHT*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery has been made and fitted in accordance with the approved plans, Secretary's letter and the Society's Rules. The whole was found in a good working condition during a trial trip on the North Sea and I am of opinion that this vessel is eligible to be recorded in the Society's Register Book with + L.M.C. 2.31. OIL. ENG.*

Rotterdam Surveyors

1. Amvels	£ 100.00	When applied for,	<i>AMV</i>
The amount of Entry Fee	£ 260.00	1/2	19.87
1/2 Special	£ :	When received,	
Donkey Boiler Fee	£ 52.00	21/3/31	19.87
Travelling Expenses (if any)	£ :		

Committee's Minute *TUE. 24 MAR 1931*
Assigned *+ L.M.C. 2.31*
2 L.B. 142 lb. Oil Eng.

Y. Y. Oelroos
Engineer Surveyor to Lloyd's Register of Shipping.



CERTIFICATE WRITTEN

TUE. 6 OCT 1931

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