

REPORT ON OIL ENGINE MACHINERY.

No. 12530
29 JAN 1932

Received at London Office

Date of writing Report 19 Jan 1932 When handed in at Local Office 19 Port of Amsterdam
No. in Survey held at Spaarndam Date, First Survey 17 Oct Last Survey 12 Jan 1932
Reg. Book. Number of Visits 7

on the ^{Single} ^{Twin} ^{Triple} ^{Quadruple} Screw vessel Motor "PRIMA" Tons { Gross 394.90
 Net 212.72
Built at Spaarndam By whom built N.P. Wey Voornis Yard No. 110 When built 1932
Engines made at Mannheim By whom made Motor works Benz Engine No. 3189 When made 1931
Monkey Boilers made at - By whom made - Boiler No. - When made -
Gross Horse Power 320 Owners H. Mulder & A. M. d. Hude Port belonging to Rotterdam
Net Horse Power as per Rule 287 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
Use for which vessel is intended Cooling

ENGINES, &c.—Type of Engines 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
No. 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 Crank pin dia. Crank Webs Mid. length breadth Thickness parallel to axis
 as fitted as fitted Mid. length thickness shrunk Thickness around eye-hole
Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule
 as fitted as fitted as fitted 140 mm as fitted 140 mm
Main Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the { tube } shaft fitted with a continuous liner {
 as fitted as fitted 144 mm as fitted { screw } no
Cylinder Liners, thickness in way of bushes as per Rule Thickness between bushes as per rule Is the after end of the liner made watertight in the
 as fitted as fitted Is the liner in more than one length are the junctions made by fusion through the whole thickness of the liner
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
Cylinder 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
no If so, state type faged lubrication Length of Bearing in Stern Bush next to and supporting propeller 720 mm
Propeller, dia. 1800 Pitch 1200 No. of blades 3 Material Cast Iron whether Moveable no Total Developed Surface sq. feet
Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication
Thickness of cylinder liners Are the cylinders fitted with safety valves 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 funnel
Suctioning Water Pumps, No. See Bore Rept. Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Water Pumps worked from the Main Engines, No. 1 Diameter 140 Stroke 90 Can one be overhauled while the other is at work
Pumps connected to the Main Bilge Line { No. and Size 2 rotary 60 tons per hour
 How driven from main engine by belt + Ballast pump
Fast Pumps, No. and size one rotary 60 tons per hour Lubricating Oil Pumps, including Spare Pump, No. and size. Spare pump complete
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 2 x 2 1/2" / Suctions, No. and size:—In Machinery Spaces 2 x 2 1/2" /
Holds, &c. 2 x 2 1/2" /
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one 2 1/2" /
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 /
All Sea Connections fitted direct on the skin of the ship Yes / Are they fitted with Valves or Cocks Valves
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
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
Pipes pass through the bunkers none How are they protected -
Pipes pass through the deep tanks none 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 /
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 Yes app Is it fitted with a watertight door - worked from -
Wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -
Air Compressors, No. No. of stages Diameters Stroke Driven by
Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
Auxiliary Air Compressors, No. One No. of stages 2 Diameters 80-90 mm Stroke 100 mm Driven by Aux Motor See
Engines Air Pumps, No. Diameter Stroke Driven by
Main Engines crank shafts, diameter as per Rule as fitted 65 mm

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
The internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces
Are there a drain arrangement fitted at the lowest part of each receiver
High Pressure Air Receivers, No. Cubic capacity of each Internal diameter Thickness
Less, lap welded or riveted longitudinal joint 170 litres 203 mm 30 kg/cm²
Working pressure by Rules
Low Pressure Air Receivers, No. 2 Total cubic capacity 250+400 Internal diameter 300-410 mm Thickness 9.5 mm
Less, lap welded or riveted longitudinal joint Seamless Material S.M.S Range of tensile strength 55-60 kg/cm² Working pressure by Rules
Rule 209 mm



IS A DONKEY BOILER FITTED? no

If so, is a report now forwarded? ✓

PLANS. Are approved plans forwarded herewith for Shafting 4.9.31
(If not, state date of approval)

Receivers Blair & Blackwell Ltd Separate Tanks 15.7.31

Donkey Boilers ✓

General Pumping Arrangements F.I.O. 2.31 & 25.7.31

Oil Fuel Burning Arrangements F.I.O. 11.31

SPARE GEAR

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - -
Total No. of visits 7

17 Oct. 14 Nov. 4. 10. 20 Dec. 14 22 = 9. 12.

Dates of Examination of principal parts—Cylinders Covers Pistons Rods Connecting rods

Crank shaft Flywheel shaft Thrust shaft 10 Dec Intermediate shafts 10 Dec Tube shaft ✓

Screw shaft 17 Oct Propeller 17 Oct Stern tube 17 Oct Engine seatings 19 Nov. 20 Dec Engines holding down bolts 10. 20 Dec

Completion of fitting sea connections 17 Oct Completion of pumping arrangements 20 Dec Engines tried under working conditions 9 Jan

Crank shaft, Material Identification Mark Flywheel shaft, Material Identification Mark

Thrust shaft, Material SMS Identification Mark NR 4182 AB. 10. 11. 31 Intermediate shafts, Material SMS Identification Marks NR 4184 A-B 10. 11.

Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material SMS Identification Mark A. B. 24. 9.

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 no If so, have the requirements of the Rules been complied with ✓

Is this machinery duplicate of a previous case no If so, state name of vessel

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

The vessel's Machinery have been placed aboard in a good and efficient manner as per approved plans and Secretary's letter. Tested 40 hp sledge pumps electric light whilst on her trial trip found working good & efficient and she is eligible in my opinion for the approval of the Committee to have notation of T.M.C. 1-32. Drums of both starting air receivers have been fitted as per Bremer report. An auxiliary compressor which does not require compressed air for starting up is fitted for just charging the air receivers.

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 £ 6 - - : When applied for,
Special £ 50 - - : 19
Donkey Boiler Fee £ - - :
Travelling Expenses (if any) £ 29.40 :
105.40 pd. 17.2.32 L.

Committee's Minute
Assigned

FRI 5 FEB 1932

+ L.M.C. 1.32
Oil Eng.

Burgdiffer
Engineer Surveyor to Lloyd's Register of Shipping

