

Belongs to Rotterdam Rep N 19106

REPORT ON OIL ENGINE MACHINERY.

Rpt. 4b No. 92
 Date of writing Report 21st Dec. 1928 When handed in at Local Office 21st Dec. 1928 Port of Wintertur Received at London Office 24 DEC 1928 17 JAN 1930

No. in Survey held at Wintertur Date, First Survey 26th August, 1927 Last Survey 4th Dec. 1928
 Name of Vessel "POELAU BRAS" Tons ^{Gross} _____ _{Net} _____
 Type of Vessel Single Screw vessel
 Name of Builders Messrs. De Schelde Yard No. 184 When built 1929
 Name of Engine Makers Messrs. Sulzer Bros. Engine No. 5724 When made 1929
 Name of Boiler Makers _____ Boiler No. _____ When made _____
 Indicated Horse Power 7040 Owners Messrs. The Nederland S.S. Co. Port belonging to Amsterdam
 Registered Horse Power as per Rule 1450 Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____
 Name of vessel for which intended _____

ENGINES, &c.—Type of Engines Sulzer Diesel Engines 2 or 4 stroke cycle 2 Single or double acting single
 Maximum pressure in cylinders 550 lbs. Diameter of cylinders 820 mm. Length of stroke 1440 mm. No. of cylinders 8 No. of cranks 8
 Distance between bearings, adjacent to the Crank, measured from inner edge to inner edge 1230 mm. Is there a bearing between each crank Yes
 Revolutions per minute 100 Flywheel dia. 2840 mm. Weight 4600 Kg. Means of ignition Temperature due to compression Kind of fuel used heavy fuel oil
 Main Shaft, dia. of journals as per Rule 560 mm. Crank pin dia. 580 mm. Crank Webs Mid. length breadth 1040 mm. Thickness parallel to axis 390 mm.
 as fitted 580 Mid. length thickness 360 Thickness around eyehole 310
 Propeller Shaft, diameter as per Rule 560 Intermediate Shafts, diameter as per Rule 440 mm. Thrust Shaft, diameter at collars as per Rule 560
 as fitted 580 as fitted _____ as fitted _____
 Main Shaft, diameter as per Rule _____ as fitted _____ Is the { tube } shaft fitted with a continuous liner { screw }
 Bronze 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 _____
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner _____
 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 _____
 When 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 _____ Length of Bearing in Stern Bush next to and supporting propeller _____

Propeller, dia. _____ Pitch _____ No. of blades _____ Material _____ whether Moveable _____ Total Developed Surface _____ sq. feet
 Method of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine when declatched Yes Means of lubrication
 used _____ Thickness of cylinder liners 60 mm. Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
 conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine _____
 Cooling Water Pumps, No. 2 Combined piston & Cyl. cooling Is the sea suction provided with an efficient strainer which can be cleared within the vessel _____
 Bilge Pumps worked from the Main Engines, No. 1 Diameter 170 mm. Stroke 150 mm. Can one be overhauled while the other is at work _____

Pumps connected to the Main Bilge Line { No. and Size _____ How driven _____ }
 Main Pumps, No. and size _____ Lubricating Oil Pumps, including Spare Pump, No. and size 2 Combined bearing & crosshead pumps
 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 _____
 Valves, &c. _____

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size _____
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes _____ 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 _____
 Are all Sea Connections fitted direct on the skin of the ship _____ Are they fitted with Valves or Cocks _____
 Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates _____ Are the Overboard Discharges above or below the deep water line _____
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel _____ Are the Blow Off Cocks fitted with a spigot and brass covering plate _____
 Are pipes pass through the bunkers _____ How are they protected _____
 Are 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 _____
 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
 department to another _____ Is the Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____
 On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork _____

Air Compressors, No. 2 No. of stages 3 Diameters 570/480/150 Stroke 720 mm. Driven by Crank shaft
 Auxiliary Air Compressors, No. 1 (4 cyles) No. of stages 3 Diameters 310/270/70 Stroke 180 Driven by Aux Engine
 Small Auxiliary Air Compressors, No. 1 (1 cyle) No. of stages 2 Diameters 110/35 Stroke 120 Driven by Hot Bull. Eng.
 Scavenging Air Pumps, No. 1 Double DC. motor driven Scavenging turbo blower intake Stroke 950 mm. per min. Driven by Electric motors
 Auxiliary Engines crank shafts, diameter as per Rule 199 mm. 150 mm.
 as fitted 215 160

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 _____
 Is there a drain arrangement fitted at the lowest part of each receiver Yes
 High Pressure Air Receivers, No. 1 Injection Cubic capacity of each 250 litres Internal diameter 366 mm thickness 12 mm.
18 starting seamless Material S.M. Steel Range of tensile strength 55 to 61.6 Kg/mm² Working pressure by Rules 76.61 kg/cm²
 Starting Air Receivers, No. 2 Total cubic capacity 22 cub. metres Internal diameter 1400 mm thickness 23.5 mm
Riveted Material S.M. Steel Range of tensile strength 28 to 32 Tons Working pressure by Rules 427 lbs

W1067-0219

Checked 31/12/28

Register
Foundation

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

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

28-7-27

Receivers 3-5-27, 11-5-27, 22-9-27 Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

The foregoing is a correct description,

M. Kilhamann *Photo*

Manufacturer.

Dates of Survey while building	During progress of work in shops--	26-8-27, 7-9-27, 16-9-27, 29-9-27, 4-10-27, 11-10-27, 3-11-27, 7-11-27, 30-11-27, 19-12-27, 6-1-28, 11-1-28, 19-1-28
	During erection on board vessel--	26-1-28, 1-2-28, 6-2-28, 7-2-28, 9-2-28, 2-3-28, 13-3-28, 20-3-28, 27-3-28, 2-4-28, 3-4-28, 17-4-28, 19-4-28
	Total No. of visits	21-9-28, 25-9-28, 26-9-28, 16-10-28, 5-11-28, 4-12-28

Dates of Examination of principal parts—Cylinders 4-9-28 Covers 4-9-28 Pistons 4-9-28 Rods 4-9-28 Connecting rods 4-9-28

Crank shaft 19-9-28 Flywheel shaft 19-9-28 Thrust shaft 19-9-28 Intermediate shafts Tube shaft

Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions

Crank shaft, Material Ann. S. M. Ing. steel Identification Mark Lloyd's J 27397, 9-3-28 Flywheel shaft, Material Ann. S. M. Ing. steel Identification Mark Lloyd's K H. 1320

Thrust shaft, Material -do- Identification Mark see flywheel shaft Intermediate shafts, Material Identification Marks

Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

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 *"Poelau Lovet", and "Poelau Roebiah".*

General Remarks (State quality of workmanship, opinions as to class, &c.) *This machinery has been constructed under special survey in accordance with the requirements of the Rules, the Secretary's letters and the approved plans. Materials and workmanship good. The machinery has been dispatched to Flushing where the trials will be run when it is installed in the vessel.*

The amount of Entry Fee	£ 6-0-0	When applied for,	19 th Dec. 1928
Special	£ 136-5-0	When received,	20 th Dec. 1928
Donkey Boiler Fee	£ :		
Travelling Expenses (if any)	£ :		

W.S. Vallis
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
Assigned *See Ref. J.C. 19106*

