

REPORT ON OIL ENGINE MACHINERY.

No. 22856
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No. in Survey held at Seraing and Hoboken Date, First Survey 1-6-38 Last Survey 13-7-1939

on the ^{Single} ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel M.S. "Baudouinville" Tons ^{Gross} ~~Net~~

Built at Hoboken By whom built Chantier J. Beckereil & Co. Yard No. 675 When built 1939-7

Engines made at Seraing By whom made J. Beckereil Engine No. 640/1 When made 1939

Donkey Boilers made at Grace Parleur. By whom made A. F. Smolders Boiler No. 1351 When made 1939

Brake Horse Power 5820 each total 11640 Owners C. Van Belle (Lloyd Royal) S.A. Port belonging to Antwerp

Nom. Horse Power as per Rule 1938 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes

Trade for which vessel is intended Antwerp - Congo

OIL ENGINES, &c.—Type of Engines Burmeister & Wain 9.45 H.P. 2 or 4 stroke cycle 2 Single or double acting double

Maximum pressure in cylinders 4.9 kg/cm² Diameter of cylinders 450 mm Length of stroke 1200 mm No. of cylinders 18 (total) No. of cranks 9 each total 18

Mean Indicated Pressure 6.75 kg/cm² Flywheel dia. 1907 mm Weight 1820 kg Means of ignition solid ignis Kind of fuel used fuel oil

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 854 mm Is there a bearing between each crank Yes

Revolutions per minute 135 Crank pin dia. 390 mm Crank Webs Mid. length breadth 860 mm Thickness parallel to axis 240 mm

Crank Shaft, ^{Solid forged} ~~semi built~~ ~~All built~~ dia. of journals as per Rule 386 mm as fitted 390 mm Mid. length thickness 200 mm Thickness around eye-hole 210 mm

Flywheel Shaft, diameter as per Rule 385 mm as fitted 390 mm Intermediate Shafts, diameter as per Rule 360 mm as fitted 368 mm Thrust Shaft, diameter at collars as per Rule 376 mm as fitted 390 mm

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 395 mm as fitted 403 mm Is the tube shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 19.7 mm as fitted 23 mm Thickness between bushes as per Rule 14.8 mm as fitted 17 mm Is the after end of the liner made watertight in the propeller boss Yes

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

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

Propeller, dia. 5040 mm Pitch 5.26 No. of blades 3 Material Bronze whether Moveable no. Total Developed Surface 8.74 m²

Method of reversing Engines Compound air Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication forced

Thickness of cylinder liners 3.1 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material lagged

Cooling Water Pumps, No. 3 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. Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size 3 main bilge 100 mm Ballast 300 mm 1 plumed water 22 mm 2 S.O.S. 100 mm How driven electric motors

Is the 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

Ballast Pumps, No. and size 1-300 mm 2-100 mm Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size three 275 mm

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 13x100 mm 3x150 mm 1x130 mm In Pump Room

In Holds, &c. h:1-2x80 mm h:2-2x80 mm h:3-3x85 mm coff. dam 2x80 mm h:4-3x80 mm h:5-2x85 mm

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2x130 mm 3x150 mm

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 yes Are they fitted with Valves or Cocks both

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 below

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 yes Is it fitted with a watertight door yes worked from D. deck

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. two No. of stages two Diameters 120 mm 275 mm Stroke 78 mm Driven by Electric Motors

Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

Small Auxiliary Air Compressors, No. one No. of stages 2 Diameters 42 mm 115 mm Stroke 83 mm Driven by oil Engine

What provision is made for first Charging the Air Receivers the small aux. air compressor driven by oil Engine

Scavenging Air Pumps, No. 2 to each motor. Diameter 819 mm Stroke Rotors Driven by steam drive

Auxiliary Engines crank shafts, diameter as per Rule 174.5 mm as fitted 200 mm No. four Position on Engine Room lower platforms 2 Pt 2 St. side

Have the Auxiliary Engines been constructed under special survey Yes Is a report sent herewith Yes

AIR RECEIVERS:—Have they been made under survey Yes State No. of Report or Certificate N:1298-1299

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

Injection Air Receivers, No. none 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. two Total cubic capacity 64 m³ Internal diameter 1750 mm thickness 37 mm

Seamless, lap welded or riveted longitudinal joint — Material S.M. Steel Range of tensile strength 44/50 kg Working pressure —

IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Yes

Is the donkey boiler intended to be used for domestic purposes only for general purposes

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 no. (see plan N:2862)

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied see separate lists



The foregoing is a correct description.

Heenan

Manufacturer.

Dates of Survey while building	During progress of work in shops	During erection on board vessel	Total No. of visits
1/3/29 - 6/38	1/3/29 - 6/38	3/5/29 - 6/38	85

Dates of Examination of principal parts	Cylinders	Flywheel shaft	Thrust shaft	Intermediate shafts	Engines holding down bolts
3/12/38	2/2/39	3/12/38	2/2/39	16/2/39	23/12/38

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 the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with no

Is this machinery duplicate of a previous case no

General Remarks (State quality of workmanship, opinions as to class, etc.) The machinery of this vessel has been built under special survey at the works of Messrs J. Lockhill of Glasgow and fitted in the vessel in accordance with the requirements of the rules and approved plans. The materials have been tested by the Society's Surveyors. The materials and workmanship are good. The machinery has been tried under working conditions and found satisfactory. The machinery is in good condition and eligible in our opinion to be classed in the Society's Register Book and to have records of S.M.C. 739 T.S. cl. and 27.B. & 2 E.D.B. = W.P. = 6 Kg.

The amount of Entry Fee	£1050
Special Construct.	£25980
Donkey Boiler Fee	£1470
Travelling Expenses (if any)	£5158

J. L. Pabney
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 1 AUG 1939
Assigned L.M.C. 739
408 (NT) 128 lb Steam receiver 85 lb

