

REPORT ON OIL ENGINE MACHINERY.

No. 25461

Received at London Office 5 AUG 1949

Writing Report 28th May 1949 When handed in at Local Office 218 149 Port of ANTWERP
 Survey held at SERAING & ANTWERP Date, First Survey 9-7-45 Last Survey 5-5-1949
 Number of Visits 59
 Single on the Tonnage Triple Quadruple Screw vessel
 Name BELGIAN PRIDE
 By whom built R. A. J. Van der Vliet
 Yard No. 695 When built 1948
 By whom made do do Engine No. 1722/4 When made 1948
 By whom made do do Boiler No. 1722/4 When made 1948
 Owners Belgian Gulf Oil Co Port belonging to Antwerp
 Horse Power 5000 max 4500 net Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 per as per Rule 1028 NHP
 which vessel is intended for general cargo

GINES, &c. — Type of Engine 2-cylinder 2-stroke cycle Single or double acting double
 pressure in cylinders 200 lbs./in² Diameter of cylinders 6.20 Length of stroke 1.55 No. of cylinders 2 No. of cranks 2
 Indicated Pressure 94 lbs./in² Ahead Firing Order in Cylinders 1-4-3-2-5 Span of bearings, adjacent to the crank, measured
 from edge to inner edge 4.164 Is there a bearing between each crank yes Revolutions per minute 107 max
 dia. 2.62 Weight 2.680 Moment of inertia of flywheel (16lbs. in² or Kg. m²) 16.50 Means of ignition Compressed air Kind of fuel used Diesel oil
 Solid forged dia. of journals as per Rule 4.42 Crank pin dia. 4.42 Crank webs Mid. length breadth 1.042 Thickness parallel to axis 4.50
 Semi built as fitted 4.42 with 115 central hole Mid. length thickness 2.50 shrunk Thickness around eyehole 2.50
 All built as per Rule Intermediate Shafts, diameter as per Rule 3.72 Thrust Shaft, diameter at collars as fitted 4.60 with 115 central hole
 as fitted ft, diameter as per Rule Screw Shaft, diameter as fitted 4.42 and 3.90 Is the (tube) shaft fitted with a continuous liner yes
 liners, thickness in way of bushes as per Rule 2.2 Thickness between bushes as fitted 1.8 Is the after end of the liner made watertight in the
 boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner yes
 If two liners are fitted, is the shaft lapped or protected between the liners no Is an approved Oil Gland or other appliance fitted at the after
 shaft no If so, state type Length of bearing in Stern Bush next to and supporting propeller 16.75
 dia. 5.50 Pitch 4.120 No. of blades four Material Bronze whether moveable no Total developed surface 12.14 sq. feet
 Moment of inertia of propeller (16lbs. in² or Kg. m²) 61.800 Kind of damper, if fitted yes
 Reversing Engines Camshaft Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of
 Lock Thickness of cylinder liners 42 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled
 with non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned
 engine Cooling Water Pumps, No. two attached to MM and two independent Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
 Pumps worked from the Main Engines, No. two 60 T/h each Diameter 235 mm Stroke 190 mm Can one be overhauled while the other is at work yes
 connected to the Main Bilge Line No. and size two attached to MM of 60 T/h each One independent of 25 T/h
 How driven two from main engine two independent pumps steam driven
 Bilge 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
 pumps, No. and size two one 50 T/h Power Driven Lubricating Oil Pumps, including spare pump, No. and size one attached 250 T/h
 independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both main bilge pumps and auxiliary
 pumps, No. and size:—In machinery spaces 100 mm dia. 27 in. 70 mm x 2 In pump room 125 mm x 7
 In machinery spaces 70 mm x 2 In pump room 125 mm x 7
 Main Power Pump Direct Suctions to the engine room bilges, No. and size 100 mm x 7 150 mm x 7
 bilge suction pipes in holds and tunnel well fitted with strum-boxes yes Are the bilge suction pipes in the machinery spaces led from easily
 mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes
 Connections fitted direct on the skin of the Ship yes Are they fitted with valves or cocks valves and cocks Are they fixed
 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
 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
 pipes pass through the bunkers one ballast pipe How are they protected without joints welded to bulkheads Solid drawn steel pipe 6 in. dia.
 pipes pass through the deep tanks one ballast pipe Have they been tested as per Rule do do
 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
 from one compartment to another yes Is the shaft tunnel watertight no Is it fitted with a watertight door no worked from no
 vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork no
 Air Compressors, No. two No. of stages two diameters 20/200 stroke 125 driven by steam engine
 Auxiliary Air Compressors, No. one No. of stages one diameters 115 stroke 170 driven by diesel motor
 provision is made for first charging the air receivers Compressor incorporated in hand started diesel motor
 Bilge Air Pumps, No. two diameter 100 stroke 100 driven by main motor
 Engines crank shafts, diameter as per Rule No. three 2.5 inch motor; 1.5 inch steam engine
 as fitted Type C3 110 mm Type A2 80 mm Position Two motor on platform 5.5 m. 2.5 m. 2.5 m.
 auxiliary engines been constructed under special survey no Is a report sent herewith yes

SW 1/9/49

AIR RECEIVERS:—Have they been made under survey. Yes State No. of report or certificate. 694
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, welded or riveted longitudinal joint. - Material. - Range of tensile strength. - Working pressure. -
Starting Air Receivers, No. two Total cubic capacity. 20.6 m³ Internal diameter. 14.00 thickness. 2.1
Seamless, welded or riveted longitudinal joint. riveted Material. S.M. steel Range of tensile strength. 44,55,66 Working pressure. Actual 2.5

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. no

PLANS. Are approved plans forwarded herewith for shafting. Yes Receivers. Yes Separate fuel tanks. Yes
(If not, state date of approval)
Donkey boilers. Yes General pumping arrangements. Yes Pumping arrangements in machinery space. Yes
Oil fuel burning arrangements. Yes
Have Torsional Vibration characteristics been approved. Yes Date of approval. 24-8-45

SPARE GEAR.

Has the spare gear required by the Rules been supplied. Yes
State the principal additional spare gear supplied.

The foregoing is a correct description,

Manufacturer.

S. A. JOHN COCKERILL
SERAING

Dates of Survey while building
During progress of work in shops - 1945 July 9, 1946 July 30, 1948 Mar 23, 26, Apr 6, 13, May 7, June 1, 4, 8, 25, 29, July 16,
During erection on board vessel - 1948 Jan 12, Feb 2, Mar 4, 5, 18, April 2, 3, Aug 17, 25, Sept 4, 22, 27, Oct 12, 29, Nov 8, Dec 19,
1949 Jan 6, 21, Feb 9, 16, Mar 4, 12, 13, 14, 22, 23, 28, 29, Apr 1, 5, 6, 7, 9, 11, 12, 14, 15, 21, 26, 28, 30 May 2, 4, 4, 5
Total No. of visits. 59

Dates of examination of principal parts—Cylinders. 1. 4.8-3.58 Covers. 11. 4.8-3.58 Pistons. 1. 4.8-3.58 Rods. 3. 4.8-3.58 Connecting rods. 4. 4.8-3.58
Crank shaft. 16-3-48 Flywheel shaft. - Thrust shaft. 19-3-48 Intermediate shafts. 6-7-78 Tube shaft. -
Screw shaft. 6-4-48 Propeller. 25-3-46 Stern tube. 28-1-48 Engine seatings. 2, 4.9 Engine holding down bolts. 4, 4.9
Completion of fitting sea connections. 4. 4.9 Completion of pumping arrangements. 3, 4.9 Engines tried under working conditions. 28-4-49
Crank shaft, material. S.M. steel Identification mark. C.L. Cent. Flywheel shaft, material. - Identification mark. C.L. Cent.
Thrust shaft, material. S.M. steel Identification mark. No 151 Intermediate shafts, material. S.M. steel Identification marks. No 15
Tube shaft, material. - Identification mark. - Screw shaft, material. S.M. steel Identification mark. No 196

Identification marks on air receivers. 694
Welded receivers, state Makers' Name. W.A. TEST
W.A. 4000
C.V. 2500
DATE

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
Description of fire extinguishing apparatus fitted. Through out vessel. 20 CO₂ foam app. to 10 lit. 22 fire hose connection
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. -
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. no If so, state name of vessel. -

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been constructed under the survey of the Germanischer Lloyd's and the Society's surveyors and installed in the vessel under the supervision of the Society's surveyors to the approved plans and the Decree of the Society's surveyors. The machinery parts not constructed under the survey of the Society's surveyors have been examined and found to be in good condition and in accordance with the approved plans. On completion of the installation a full power sea trial was carried out with satisfactory results.
The machinery of this vessel is eligible, in my opinion, for the record in the Register Book of LMC 549; 20 170 lbs. p.p. in and 7.5

The amount of Entry Fee ... £ :
Special ... 2,736.20.- When applied for. 218 1949
air receivers 2. 4240.- When received. 19
Donkey Boiler Fee... 2. 1800.-
late alt. 2. 10500.-
Travelling Expenses (if any) 2. 10500.-

Committee's Minute FRI. 9 SEP 1948
Assigned LMC 549

