

28 MAR 1928

Rpt. 4b

REPORT ON OIL ENGINE MACHINERY

No. 11957

12 DEC 1927

Received at London Office

Date of writing Report 8th Dec. 27 When handed in at Local Office 10 Port of HAMBURGNo. in Survey held at KIEL Date, First Survey 25th FEBRUARY Last Survey 24th DECEMBER 1927

Reg. Book. Single on the Twin Triple Screw vessel No. 517 T.S.M.V. VICTOLITE Tons Gross 11409 Net 6711

Built at LINTHOUSE-GOWAN By whom built F. STEPHEN & SONS LTD. Yard No. 517 When built 1928.3

Engines made at KIEL By whom made FRIED. TRUPP & CO. GERMANY Engine No. 20442 When made 1927

Donkey Boilers made at KIEL By whom made FRIED. TRUPP & CO. GERMANY Boiler No. 23839 When made 1927

Brake Horse Power 2 x 1750 Owners Impresbit Oil Co. Ltd. Port belonging to Gt. Britain

Nom. Horse Power as per Rule 298⁵ Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended TANKER

IL ENGINES, &c. Type of Engines 20 Engines Type Knapp Germania 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 50 lb 35 kg Diameter of cylinders 680 mm Length of stroke 1000 mm No. of cylinders 2 x 4 = 8 No. of cranks 2 x 4 = 8

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 1010 mm Is there a bearing between each crank Yes

Revolutions per minute 90 Flywheel dia. 1300 mm Weight 10000 kg Means of ignition Spark plug Kind of fuel used Diesel Gas oil

Crank Shaft, dia. of journals as per Rule 439.5 mm Crank pin dia. 440 mm Crank Webs Mid. length breadth 685 mm Thickness parallel to axis 375 mm

Flywheel Shaft, diameter as per Rule 439.5 mm Intermediate Shafts, diameter as per Rule 440 mm Thrust Shaft, diameter at collars as per Rule 440 mm

Tube Shaft, diameter as per Rule 440 mm Screw Shaft, diameter as per Rule 440 mm Is the tube screw shaft fitted with a continuous liner No

Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per rule as fitted 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

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 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 declutched Yes Means of lubrication

forced. Thickness of cylinder liners 50 mm 1/4 in Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with

non-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 Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No. 2 2.7 Diameter 200 mm Stroke 218 mm Can one be overhauled while the other is at work Yes

Pumps connected to the Main Bilge Line No. and Size How driven

Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump No. and size 2 of rotary type each 220 mm per hour

Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size:—In Machinery Spaces

in Holds, &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

and 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

That pipes pass through the bunkers How are they protected

That 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

compartment 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

Main Air Compressors, No. 2/each main engine No. of stages 3 Diameters 150-610-710 Stroke 700 mm Driven by main engine

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

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

Savenging Air Pumps, No. 2 x 2 Diameter 780 mm Stroke 1300 mm Driven by main engine

Auxiliary Engines crank shafts, diameter as per Rule as fitted

RE RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes with exception of the two small bottles

Are the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces machined and ground over

Is there a drain arrangement fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. 2 Cubic capacity of each 408 litres Internal diameter 410 mm thickness 17.5 mm

Unless, lap welded or riveted longitudinal joint standard Material A. Steel Range of tensile strength 36-44 kg Working pressure by Rules 69 kg/cm²

Starting Air Receivers, No. 3 Total cubic capacity 8 x 2730 litres Internal diameter 1000 mm thickness 24 mm

Unless, lap welded or riveted longitudinal joint riveted Material A. Steel Range of tensile strength 44-47 kg Working pressure by Rules 66 kg/cm²

W134-0021

IS A DONKEY BOILER FITTED? *Yes. See page 100* If so, is a report now forwarded? *Yes*

PLANS. Are approved plans forwarded herewith for Shafting of crank-shaft. Receivers. *Yes* Separate Tanks. *Yes*
(If not, state date of approval)

Donkey Boilers. *Yes* General Pumping Arrangements. *Yes* Oil Fuel Burning Arrangements. *Yes*

SPARE GEAR

With regard to main engine all spare articles required by the Rules for the Construction and Survey of Diesel engines (1926/27) Section 6 have been supplied.

The foregoing is a correct description,

FRIED. KRUPP
GERMANIAWERKE

Aktiengesellschaft

Manufacturer.

Dates of Survey while building
During progress of work in shops -- *25/2-1/3-24/3-25/3-29/3-12/4-24/4-2/5-6/5-10/5-24/5-27/5-3/6-8/6-14/6-24/6-28/6-6/7-3/8-5/8-10/8-13/8-26/8-1/9*
During erection on board vessel -- *29/3-2/4-6/4-13/4-20/4-23/4-29/4-5/5-10/5-17/5-19/5-24/5-28/5-3/6-24/6-7/6-9/6-14/6-23/6-28/6-7/12/27*
Total No. of visits *in shops. 107*

Dates of Examination of principal parts—Cylinders *25/2-29/3/27* Covers *10/5-29/8/27* Pistons *3/6-23/10/27* Rods *4/4/27-24/4/27* Connecting rods *23/4-19/8/27*

Crank shaft *10/6-16/8/27* Flywheel shaft Thrust shaft *28/6/27-23/9/27* 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 *See entry 14/10*

Crank shaft, Material *Steel* Identification Mark *3059.94/12/13 44.7.176.17* Flywheel shaft, Material *Steel* Identification Mark *627/688*

Thrust shaft, Material *See flywheel shaft* Identification Mark 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 *No* If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, etc. *Material & workmanship of these main*

engine and air receiver are of good quality. The materials used in the

construction are made at works recognized by the Committee and tested by the

Society's Surveyors. Main engine and receiver have been built under Special

Survey in conformity with the approved plans. The Secretary's letters and other

in accordance with the requirements of the Rules are eligible in my

opinion for ratification. L.H.C. Oil engine with dates subject to satisfactory

long installation on board and examination under full working and

manoeuvring conditions; also fitting of safety valves to the two flat bottom

Engines and receiver have now been shipped to Glasgow.

The amount of Entry Fee ... £ 6. : 0 :
Special ... £ 124 : 18 :
Donkey Boiler Fee ... £ 16 : 16 :
Travelling Expenses (if any) £ 13 : 18 :
When applied for, *10th Dec. 1927*
When received, *30th Dec. 1927*
Committee's Minute **GLASGOW 27 MAR 1928**
Assigned *See G.L. Rpt. No. 47740*
Friedrich
Engineer Surveyor to Lloyd's Register of Shipping.
Lloyd's Register
Foundation