

## REPORT ON OIL ENGINE MACHINERY.

No. 20623

Received at London Office

16 JAN 1933

Date of writing Report 9-1-33 19 When handed in at Local Office

Port of Hamburg

No. in Survey held at Kiel  
Reg. Book.

Date, First Survey 7-10-1931

Last Survey 3-1-33 19

Number of Visits 76

62818 on the Single  
Twin  
Triple  
Quadruple  
Screw vessel

"Geo. W. McKnight"

Tons { Gross 12442  
Net 7097

Built at Kiel

By whom built Fried. Krupp Germania-Werft A.G. Yard No. 517 When built 1933

Engines made at Kiel

By whom made ditto

Engine No. 4141 When made 1933

Donkey Boilers made at Kiel

By whom made ditto

Boiler No. 3803/4 When made 1933

Brake Horse Power 4500

Owners Balt. Amerik. Petrol. Import Co.

Port belonging to Danzig

Nom. Horse Power as per Rule 1165

Is Refrigerating Machinery fitted for cargo purposes no

Is Electric Light fitted yes

Trade for which vessel is intended Tanker Service

L ENGINES, &amp;c.—Type of Engines Krupp, solid injection 2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 41 kg/cm<sup>2</sup> Diameter of cylinders 600 mm Length of stroke 1150 mm No. of cylinders 2\*6 No. of cranks 6 each

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 1015 mm Is there a bearing between each crank yes

Revolutions per minute 118 Flywheel dia. 2300 mm Weight 7905 kgs Means of ignition Diesel system Kind of fuel used Diesel oil

Crank Shaft, dia. of journals as per Rule 385 mm as fitted 410 mm Crank pin dia. 400 mm with 120 mm cent. hole Crank Webs Mid. length breadth 245 mm Thickness parallel to axis 250 mm Mid. length thickness 250 mm Thickness around eye-hole 180 mm

Flywheel Shaft, diameter as per Rule 385 mm as fitted 400 mm Intermediate Shafts, diameter as per Rule 276 mm as fitted 330 mm Thrust Shaft, diameter at collars as per Rule 290 mm as fitted 400 mm

Tube Shaft, diameter as per Rule as fitted none Screw Shaft, diameter as per Rule 306 mm as fitted 398 mm Is the shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule 20 mm as fitted 23.5 - 22.8 mm Thickness between bushes as per rule 18 mm as fitted 18 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 yes

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 yes

If two liners are fitted, is the shaft lapped or protected between the liners yes Is an approved Oil Gland or other appliance fitted at the after

end of the tube shaft no Length of Bearing in Stern Bush next to and supporting propeller 1971 mm

Propeller, dia. 4250 mm Pitch 3720 mm No. of blades 3 Material Bronze whether Moveable yes Total Developed Surface 4.39 sq. m

Method of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication

bread Thickness of cylinder liners 55 mm tapered to 37.5 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and oilways 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 yes

Cooling Water Pumps, No. 8, each of 50 cm<sup>3</sup>, 1 spare of 230 cm<sup>3</sup> 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. 2 Diameter 215 mm Stroke 200 mm Can one be overhauled while the other is at work yes

Pumps connected to the Main Bilge Line No. and Size 2 main 1 aux. 180 x 210 mm 100 cm<sup>3</sup> How driven in shaft by wheel gear steam 300 1 spare: 34 cm<sup>3</sup>, 170 x 200 625 steam 100Stripper pump: 310 x 220 mm 580 360 x 40 x 380 470 cm<sup>3</sup> Lubricating Oil Pumps, including Spare Pump, No. and size 2 rotary cog wheel 18 cm<sup>3</sup> each

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 4 of 90 mm φ, 1 of 125 mm φ Chain locker: 1 x 70 mm φ, form store room: 1 x 20 mm φ

in Holds, &amp;c. Cofferdam 1 x 125 φ, pump room 3 x 80 mm φ, form pump room: 1 x 70 mm φ, cargo hold: 2 x 70 mm φ

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 x 125 mm φ

Are all the Bilge Suction pipes in Holds and Tunnel Wall fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces

d 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 valves &amp; cocks

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 above

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

That pipes pass through the bunkers heating coils, Bilge Line Cofferdam How are they protected

That pipes pass through the deep tanks cargo lines only Have they been tested as per Rule yes

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 mach. aft 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 yes

Main Air Compressors, No. solid injection No. of stages 1 Diameters 1 Stroke 1 Driven by 1

Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 280/240 mm Stroke 330 mm Driven by steam engine

Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 70/130 mm Stroke 120 mm Driven by steam engine

Scavenging Air Pumps, No. 3 each engine Diameter 690 mm Stroke 1150 mm Driven by 1-3-5 cross

Auxiliary Engines crank shafts, diameter as per Rule Deutsche Werk's Standard type (Steam engine) Heads to brackets as fitted 25-85 mm

R RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes

Are the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces manholes &amp; doors

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

Whistle Air Receivers, No. 1 Cubic capacity of each 1.5 m<sup>3</sup> Internal diameter 800 mm thickness 8 mmSeamless, lap welded or riveted longitudinal joint yes Material O.H. Steel Range of tensile strength 35-41 kg/mm<sup>2</sup> Working pressure by Rules 14 kg/mm<sup>2</sup>Starting Air Receivers, No. 2 Total cubic capacity 36 m<sup>3</sup> Internal diameter 1950 mm outside thickness 26 mmSeamless, lap welded or riveted longitudinal joint yes Material O.H. Steel Range of tensile strength 42-53 kg/mm<sup>2</sup> Working pressure by Rules 25 kg/mm<sup>2</sup>

002385-002400-0170

pt. 5:

## te of veri

No. in  
Book.

ULT

manufact

*thickness*

Material

insile s

ten 0)

# Highway

tch of

...him -

ameter

er

1