

Rpt. 4b

## REPORT ON OIL ENGINE MACHINERY.

No. 18656

Received at London Office

29 APR 1929

Date of writing Report 16 April 1929 When handed in at Local Office

Port of HAMBURG

No. in Survey held at 9536 on the

Date, First Survey 29th AUGUST 1929 Last Survey 4th APRIL 1929

Number of Visits 38

Screw vessel  
Single  
Twin  
Triple  
Quadruple

"CALIFORNIA STANDARD"

Tons Gross 11445  
Net

By whom built FRIED. KRUPP GERMANIA W.F. AG Yard No. 494 When built 1929

By whom made FRIED. KRUPP GERMANIA W.F. AG Engine No. 2223 When made 1929

By whom made FRIED. KRUPP GERMANIA W.F. AG Boiler No. 3748/49 When made 1929

Horse Power 2 x 1800 Owners STANDARD OIL CO. OF CALIFORNIA Port belonging to S. FRANCISCO

Horse Power as per Rule 9985 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

For which vessel is intended CARRYING PETROLEUM IN BULK - PACIFIC

Type of Engines Oil engine - Type Germania (Port scavenging) 2 or 4 stroke cycle 2 Single or double acting single

pressure in cylinders 35 kg Diameter of cylinders 680 mm Length of stroke 1300 mm No. of cylinders 2 x 4 = 8 No. of cranks 2 x 4 = 8

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 95 Flywheel dia. 2300 mm Weight 9000 kg Means of ignition Diesel Engine Kind of fuel used Diesel Oil

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 275 mm

as fitted 440 mm Mid. length thickness 275 mm Thickness around eye-hole 195 mm

Shaft, diameter as per Rule 439.5 mm Intermediate Shafts, diameter as per Rule 328 mm Thrust Shaft, diameter at collars as per Rule 345 mm

as fitted 440 mm as fitted 380 mm as fitted 440 mm

Screw Shaft, diameter as per Rule 360 mm Is the tube shaft fitted with a continuous liner yes

as fitted 405 mm as fitted 18 mm

Liners, thickness in way of bushes as per Rule 29.5 mm Thickness between bushes as per rule 29 mm Is the after end of the liner made watertight in the

Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of 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

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

tube shaft Length of Bearing in Stern Bush next to and supporting propeller 2010 mm

Pitch 4230 mm No. of blades 3 Material Bronze whether Moveable yes Total Developed Surface 6.68 sq. feet

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

Thickness of cylinder liners 50 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with

Insulating 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

Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

connected to the Main Bilge Line No. and Size 2 x 2 1/2 in. 3 A. 170 mm 230 mm 1 of centrifug. type 115 lpm per hour electric driven

How driven 2 x 2 1/2 in. 230 x 216 x 150 mm Steam driven for main propulsion &amp; Foreship (each 1)

Pumps, No. and size 3 x 2 1/2 in. 460 x 380 x 610 mm Lubricating Oil Pumps, including Spare Pump, No. and size 3 of rotary type 30 lpm per hour

Independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

No. and size:—In Machinery Spaces 2 of 90 mm from Gutterway 1 of 50 mm - Bilge Well 1 of 150 mm - Piston Cooling Water Well 1 of 150 mm from Coffers

etc. from Fore Peak 1 of 100 mm - Chain locker 1 of 80 mm - Cargo hold 3 of 80 mm - Fore Pump 1 of 50 mm - Fore Coffer 1 of 150 mm - Main Bilge 2 of 50 mm 1 of 80 mm 1 of 100 mm

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 of 130 mm

Bilge Suction pipes in Hold and Engine Room fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces

easily accessible 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

Raised 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 &amp; below

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

Suctions pass through the bunkers 1 bilge pipe 80 mm i.d. diam. for Cofferdam How are they protected Has been tested, as per Rule at each end of ship

Suctions pass through the cargo tanks main &amp; frame cargo suction lines Have they been tested as per Rule yes

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 spaces, or from one

to another yes Is the Shaft Tunnel watertight machinery aft Is it fitted with a watertight door worked from

vessel, what means are provided to prevent leakage of either fuel oil or lubricating oil from seeping into the woodwork

Compressors, No. 2 - 1 each main Eng. No. of stages 3 Diameters 150/200/710 mm Stroke 700 mm Driven by main Engines

Auxiliary Air Compressors, No. 2 No. of stages 3 Diameters 320/280/80 mm Stroke 300 mm Driven by 2 of 100 mm engines

Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 160/65 mm Stroke 160 mm Driven by 2 of 100 mm engines

Suction Air Pumps, No. 2 x 1 Diameter 780 mm Stroke 1300 mm Driven by main Engines

Engines crank shafts, diameter as per Rule 167 mm as fitted 180 mm

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

Internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces washers, doors, power covers

Drain arrangement fitted at the lowest part of each receiver yes

Pressure Air Receivers, No. 2 Cubic capacity of each 408 liter Internal diameter 410 mm Thickness 17.5 mm

Seamless, lap welded or riveted longitudinal joint riveted Material S.M. Steel Range of tensile strength 36-41 kg Working pressure by Rules 69 kg

Starting Air Receivers, No. 4 Total cubic capacity 4 x 2720 liter Internal diameter 460 mm Thickness 34 mm Working pressure by Rules 66 kg

Seamless, lap welded or riveted longitudinal joint riveted Material S.M. Steel Range of tensile strength 41-47 kg Working pressure by Rules 66 kg



IS A DONKEY BOILER FITTED?

yes

If so, is a report now forwarded?

yes

PLANS. Are approved plans forwarded herewith for Shafting

(If not, state date of approval)

yes

Receivers

yes

Separate Tanks

yes

Donkey Boilers

yes

General Pumping Arrangements

yes

Oil Fuel Burning Arrangements

yes

SPARE GEAR

All spare articles as required per Section 6 - page 117. of the Rules of Construction and Survey of Diesel Engines and their Auxiliaries (1928/29) supplied with.

The foregoing is a correct description,

FRIED. KRUPP  
GERMANIAWERKE

Aktiengesellschaft

Manufacturer.

Dates of Survey while building  
During progress of work in shops - 29/8-2/9-6/9-13/9-16/9-20/9-23/9-27/9-30/9-3/10-5/10-17/10-19/10-24/10-30/10-3/11-9/11-13/11-13/11-25/11-27/12-31/12-28/12/29  
During erection on board vessel - 4/17-16/17-23/17-24/17-3/18-6/18-8/18-19/18-15/18-17/18-20/18-24/18/28  
Total No. of visits 88

Dates of Examination of principal parts - Cylinders 16/1-25/1/28 Covers 25/1-3/2/28 Pistons 30/10/27-24/2/28 Rods 25/1/2-24/2/28 Connecting rods 25/1/2

Crank shaft 23/1-1/6/28 Flywheel shaft 1/6/28 Thrust shaft See Flywheel shaft Intermediate shafts 1/6/28 Tube shaft

Screw shaft 7/12-29/8/28-27/2/29 Propeller 27/12-28/12/28-27/2/29 Stern tube 27/12-28/12/28-27/2/29 Engine seatings 31/8/28 Engines holding down bolts 28/9/28

Completion of fitting sea connections 24/8/28 Completion of pumping arrangements 22/3/29 Engines tried under working conditions 3/4/29

Crank shaft, Material S. M. Steel Identification Mark 3860/61/62 J. L. 28.2.28 Flywheel shaft, Material S. M. Steel Identification Mark 3630 J. L. 28.2.28

Thrust shaft, Material See Flywheel shaft Identification Mark Spare 8241 M. B. 5.10.28 Intermediate shafts, Material S. M. Steel Identification Marks 437, 42, 1066, H. J. 28.2.28

Tube shaft, Material Identification Mark Screw shaft, Material S. M. Steel Identification Mark 436, H. J. 28.2.28 1067, H. J. 28.2.28

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

"VICTROLITE" (MAIN ENG. only)

General Remarks (State quality of workmanship, opinions as to class, &c.) Material and workmanship of this machinery

all of good quality and the outfit is ample. The materials used in the construction are all of the best quality and the workmanship is of the highest standard. The machinery has been constructed under the supervision of the Surveyor in accordance with the requirements of the Rules. The machinery has been constructed under the supervision of the Surveyor in accordance with the requirements of the Rules. I attended to a 12 hour trial when the machinery has given full satisfaction under full working and reversing conditions. This machinery is eligible in my opinion for notation "L.M.C.-4.29" Oil Engines. "T. S. H. C.L."

The amount of Entry Fee ... £ 6 : - : When applied for  
Special ... £ 124 : 18 : 12.4.1929  
Donkey Boiler Fee ... £ 16 : 16 :  
5 Air Receivers ... £ 10 : 10 :  
Travelling Expenses (if any) £ 25 : 14 : 14.5.29

Committee's Minute

FRI. 3 MAY 1929

Assigned

L.M.C.-4.29  
Oil Engines

C.L.

Engineer/Surveyor to Lloyd's Register of Shipping



© 2020

Lloyd's Register  
Foundation

CERTIFICATE WRITTEN.