

Installation of

Rpt. 4b

REPORT ON OIL ENGINE MACHINERY.

No. 6679

Date of writing Report 31/3/20 When handed in at Local Office 19 Port of Hong Kong
No. in Survey held at Hong Kong Date, First Survey 19 Aug 1920 Last Survey 20 March 1921
Reg. Book. Number of Visits

on the Single "KANLAON" Screw vessel
Built at Hong Kong By whom built Hong Kong Shipyard Ltd. Yard No. 687 When built 1931
Engines made at Stockholm By whom made Artieb. Atlas Diesel Engine No. 85153 When made 1930
Donkey Boilers made at ✓ By whom made ✓ Boiler No. — When made —
Brake Horse Power 750 each engine Owners Lt. E. J. Popen Port belonging to Hoils. S. I.
Nom. Horse Power as per Rule 116 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
Trade for which vessel is intended Philippine Island Coastwise Service 22/16

OIL ENGINES, &c.—Type of Engines Solar Diesel Oil 13 1/8 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 35 kg/cm² Diameter of cylinders 340 mm Length of stroke 570 mm No. of cylinders 6 each engine 6 No. of cranks 6

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

Revolutions per minute SEE STOCKHOLM REPORTS Nos. 3356 & 3357 Means of ignition DEC. 1930 Is there a bearing between each crank ✓

Crank Shaft, dia. of journals as per Rule Flywheel dia. as fitted Weight as fitted Kind of fuel used Heavy oil

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as fitted Crank Webs as per Rule Kind of fuel used Heavy oil

Tube Shaft, diameter as per Rule Screw Shaft, diameter as fitted Thrust Shaft, diameter at collars as fitted

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

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 2'-6"

Propeller, dia. 7'-3" Pitch 8'-6" No. of blades 3 Material Brass whether Moveable no Total Developed Surface 16 sq. feet

Method of reversing Engines see Stockholm Rpt. Is governor or other arrangement fitted to prevent racing of the engine when declutched ✓ Means of lubrication

Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ 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. 1 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. 1 Can one be overhauled while the other is at work ✓

Pumps connected to the Main Bilge Line No. and size two main engine + one Duplex (S. pump) 4 1/2" dia x 2 1/2" stroke, D.A.

Ballast Pumps, No. and size S. pump described above Lubricating Oil Pumps, including Spare Pump, No. and size Electrically driven

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 one 2 1/2" and one 2 3/4" in S.P. one 2 1/2" in tunnel well.

In Holds, &c. In Hold, one 2 1/2"; After Hold, one 2 1/2"; Hand pumps 1 1/2" tail pipes, also fitted

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one 2 3/4"

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 yes

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 at L.L.

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 —

What pipes pass through the bunkers ✓ 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 upper deck level.

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. See Stockholm Rpt. Diameters — Stroke — Driven by main engines

Auxiliary Air Compressors, No. one No. of stages 200 Diameters 2 3/4" + 5 1/2" Stroke 5 3/4" Driven by Electric motor

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

Scavenging Air Pumps, No. See Stockholm Rpt. Diameter — Stroke — Driven by —

Auxiliary Engines crank shafts, diameter as per Rule See Stockholm Rpt. 10. dated 28/11/30

AIR RECEIVERS:—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 ✓ What means are provided for cleaning their inner surfaces See Stockholm Rpt. 24/88

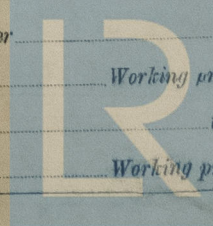
Is there a drain arrangement fitted at the lowest part of each receiver ✓

High Pressure Air Receivers, No. — Cubic capacity of each — Internal diameter — thickness —

Seamless, lap welded or riveted longitudinal joint — Range of tensile strength — Working pressure by Rules —

Starting Air Receivers, No. — Total cubic capacity — Internal diameter — thickness —

Seamless, lap welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure by Rules —



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IS A DONKEY BOILER FITTED? *ho*

PLANS. Are approved plans forwarded herewith for Shifting (If not, state date of approval)

Plans approved Kite, Copies in London Office

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR *Is Rule Requirements, except Spare Lubricating oil pump which was not delivered from Europe in time, & has, it was stated been dispatched direct to Oslo to be fitted into the vessel at that port.*

The foregoing is a correct description,

P. H. Dwyer

Manufacturer

Shipbuilders

Dates of Survey while building
During progress of work in shops -- *Aug 19, 28; Sept 10, 12; Nov 8, 18, 20; Dec 3, 4, 10, 12, 17; Jan 3, 10, 13, 13, 23, 26, 28, 29; Feb 3, 9, 23, 27; Mar 5, 10, 12, 17, 18, 20, 21, 23, 24, 25, 30*
During erection on board vessel --
Total No. of visits *36*

Dates of Examination of principal parts—Cylinders *✓* Covers *✓* Pistons *✓* Rods *✓* Connecting rods *✓*
10/12/1930
Crank shaft *✓* Flywheel shaft *✓* Thrust shaft *✓* Intermediate shafts *29/1/31* Tube shaft *✓*
3-12-31
Screw shaft *26/29/1/31* Propeller *3-1-31* Stern tube *3-1-31* Engine seatings *3-2-31* Engines holding down bolts *23/3/31*
3-2-31

Completion of fitting sea connections *26-2-31* Completion of pumping arrangements *23/3/31* Engines tried under working conditions *23/3/31*

Crank shaft, Material *✓* Identification Mark *✓* Flywheel shaft, Material *✓* Identification Mark *✓*
Thrust shaft, Material *✓* Identification Mark *✓* Intermediate shafts, Material *O.H. Imp. Steel* Identification Marks *LLoyds No. 426 4427 Q.P. 29-1-31*
Tube shaft, Material *✓* Identification Mark *✓* Screw shafts Material *O.H. Imp. Steel* Identification Mark *LLoyds No. 426 4427 Q.P. 29-1-31*

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 *ho* If so, have the requirements of the Rules been complied with *✓*

Is this machinery duplicate of a previous case *ho* If so, state name of vessel *✓*

General Remarks (State quality of workmanship, opinions as to class, etc.)

The main & auxiliary machinery & air receivers have been identified with Stockholm & Göteborg reports & certificates, and, together with the remainder of the installation, have been satisfactorily fitted into the vessel & tried under working conditions.

The revolutions at full power & dead slow, ^{respectively} were as follows: Ahead 320, Astern 220, Ahead 60, Astern 63. The requisite number of starts was made by each engine without recharging air receivers.

All work has been carried out in accordance with the Rule Requirements, & in my opinion, the material & workmanship are sound & fit & the machinery eligible for classification with the record & L.M.C. 3, 31. Subject to the Spare Lubricating oil pump being installed on arrival at Oslo & the station T.S.(C.L.).

The amount of Entry Fee ... *\$198.00*
Installation fee ... *\$1073.00*
Donkey Boiler Fee ... *£*
Travelling Expenses (if any) ... *£50.00*

When applied for,

30/3/1931

When received,

11.5.1931

Committee's Minute

Assigned

FRI. 1 MAY 1931

+ L.M.C. 3, 31

Oil Eng. C.L.

S. Siering
Engineer Surveyor to Lloyd's Register of Shipping.



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