

REPORT ON OIL ENGINE MACHINERY.

No. 6027
4 - OCT 1926

Received at London Office

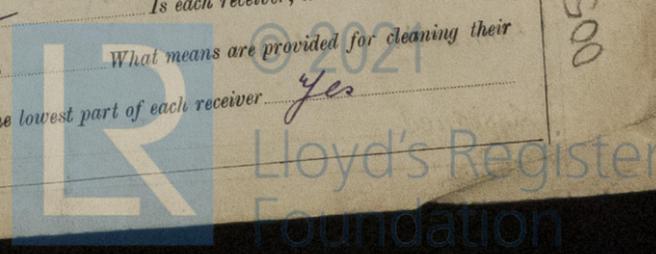
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Writing Report 31/8/26 1926 When handed in at Local Office 1/9 1926 Port of Hongkong
Date, First Survey May 5th 1926 Last Survey Aug 30th 1926
Number of Visits 26
Survey held at Hongkong
Tons { Gross 221.19
Net 114.19
on the ~~Triple~~ Single Screw vessels "ALOHA"
Built at Hongkong By whom built HK & W. Dock Co. Yard No. 628 When built 8-1926
Engines made at Stockholm By whom made A.B. Atlas Diesel Engine No. 50027 When made 1919
Boilers made at None By whom made - Boiler No. - When made -
Horse Power 160 Owners The North Borneo Sugar Co. Ltd Port belonging to Manila, P.I.
Horse Power as per Rule 74 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c. Type of Engines Marine Polar Diesel (Type P-41) or 4 stroke cycle 2 Single or double acting Single
Maximum pressure in cylinders 450 lbs. No. of cylinders 4 No. of cranks 4 Diameter of cylinders 260 m/m.
Length of stroke 370 m/m Revolutions per minute 250 Means of ignition Compression (injecting) Kind of fuel used Fuel oil
Is there a bearing between each crank Yes Span of bearings (Page 92, Section 2, par. 7 of Rules) 365 m/m
Distance between centres of main bearings 515 m/m Is a flywheel fitted Yes Diameter of crank shaft journals as per Rule 156 m/m
Diameter of crank pins 160 m/m Breadth of crank webs as per Rule 208 m/m as fitted 213 m/m Thickness of ditto as per Rule 87.3 m/m
Diameter of flywheel shaft as per Rule 156 m/m as fitted 160 m/m Diameter of tunnel shaft as per Rule 4.1 inches as fitted 5 inches Diameter of thrust shaft as per Rule 112 m/m as fitted 160 m/m
Diameter of screw shaft as per Rule 4.6 inches as fitted 5 1/2 inches Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes
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 joints burned -
If two liners are fitted, is the shaft lapped or protected between the liners - If without liners, is the shaft arranged to run in oil -
Type of outer gland fitted to stern tube None Length of stern bush 24" Diameter of propeller 5'-0" square feet
Pitch of propeller 4'-0" No. of blades 3 state whether moveable fixed Total surface 8 #
Method of reversing Manoeuvring Engine Is a governor or other arrangement fitted to prevent racing of the engine when disengaged Yes Thickness of cylinder liners -
Are the cylinders fitted with safety valves Yes Means of lubrication Forced, with sight feed Are the exhaust pipes and silencers water cooled or lagged with
non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine -
Exhaust led up the funnel No. of cooling water pumps 2 Is the sea suction provided with an efficient strainer which can be cleared
within the vessel Yes No. of bilge pumps fitted to the main engines one Diameter of ditto 120 m/m Stroke 60 m/m
Can one be overhauled while the other is at work - No. of auxiliary pumps connected to the main bilge lines one How driven Auxil. Motor
Sizes of pumps 6" Centrifugal No. and sizes of suctions connected to both main bilge pumps and auxiliary bilge pumps: - In engine room 1-2" Sizes of pumps 6" Centrifugal
and in holds, etc. 1-2 1/2" hold No. of ballast pumps one How driven Auxil. Motor Is a separate auxiliary pump suction fitted in
Is the ballast pump fitted with a direct suction from the engine room bilges Yes State size 3 1/2" Are the roses in Engine Room always accessible Yes
Engine Room and size Yes - 2 1/2" Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine Room always accessible Yes
Are the sluices on Engine Room bulkheads always accessible None Are all connections with the sea direct on the skin of the ship Yes
Are they valves or cocks Valves Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates Yes
Are the discharge pipes 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 all pipes, cocks, valves and pumps in connection with the machinery accessible at all times Yes Are the bilge suction pipes, cocks and valves arranged so as to prevent any
communication between the sea and the bilges Yes Is the screw shaft tunnel watertight None Is it fitted with a watertight door -
worked from - If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -
No. of main air compressors 2 No. of stages 2 Diameters 65 + 200 m/m Stroke 300 m/m Driven by Main Engines
No. of auxiliary air compressors 1 No. of stages 2 Diameters 30 + 80 m/m Stroke 80 m/m Driven by Belt from Auxil.
No. of small auxiliary air compressors can also be driven by hand wheel Driven by motor
No. of scavenging air pumps 2 (Combined Scavenging) Diameter 398 m/m Stroke 300 m/m Driven by Main Engines
Diameter of auxiliary Diesel Engine crank shafts as per Rule Hot bulb motor 5-B.H.P. 350 m/m Stroke 225 Litres
as fitted 240 m/m Cubic capacity of each 25

AIR RECEIVERS: - No. of high pressure air receivers 2 Range of tensile strength See Note
material Steel Seamless, lap welded or riveted longitudinal joint See Note No. of starting air receivers one Internal diameter 649 m/m
thickness See Note working pressure by Rules - Seamless, lap welded or riveted longitudinal joint See Note
Total cubic capacity 635 Litres Material Steel Working pressure by rules - Is each receiver, which can be isolated,
Range of tensile strength See Note thickness See Note Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their
fitted with a safety valve as per Rule Yes inner surfaces Doors & manholes, steam from Is there a drain arrangement fitted at the lowest part of each receiver Yes
outside source can be connected.

005695-005708-0030



IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded?

HYDRAULIC TESTS:-

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	-	-	-	LLOYD'S TEST	-
" " COVERS	24-6-26	-	30 lbs.	30 lbs.	Good
" " JACKETS.....	24-6-26	-	" "	" "	"
" PISTON WATER PASSAGES.....	-	-	-	-	-
MAIN COMPRESSORS—1st STAGE.....	-	-	-	-	-
" 2nd	-	-	-	-	-
" 3rd	-	-	-	-	-
AIR RECEIVERS—STARTING	24-6-26	13 kg/cm ²	26 kg/cm ²	LLOYD'S TEST 26 kg/cm ²	Good
" INJECTION	24-6-26	70 kg/cm ²	140 kg/cm ²	WP 13 kg/cm ² 140 kg/cm ²	Good
AIR PIPES	17-8-26	- do -	2000 lbs	WP 70 kg/cm ²	Good
FUEL PIPES	17-8-26	- do -	- do -	- do -	Good
FUEL PUMPS	-	-	-	-	-
SILENCER	-	-	-	-	-
" WATER JACKET	-	-	-	-	-
SEPARATE FUEL TANKS	29/7/26	maximum 3 ft head.	8 ft head.	LLOYD'S TEST 8 ft head.	Good

PLANS. Are approved plans forwarded herewith for shafting *Inter. & Tail shafts* *Tube 20/5/26* Receivers *See Note* Separate Tanks *16/7/26, Tube,*
(If not, state date of approval)
 SPARE GEAR *See attached list.*

The foregoing is a correct description.

R. H. Dunn Manufacturer.
Chief Engineer

Dates of Survey while building
 During progress of work in shops - *May 5, 10, 12, 17, June 2, 5, 18, 19, 22, 24, July 2, 8, 14, 16, 23, 26, 27, 29, 31, 1926.*
 During erection on board vessel - *Aug. 2, 7, 12, 17, 23, 26, 30, 1926.*
 Total No. of visits *26*

Dates of Examination of principal parts—Cylinders *24/6/26* Covers *24/6/26* Pistons *19/6/26* Rods *-* Connecting rods *19/6/26*
 Crank shaft *19/6/26* Thrust shaft *19/6/26* Tunnel shafts *31/7/26* Screw shaft *23/7/26* Propeller *23/7/26* Stern tube *16/7/26* Engine seatings *5/6/26*
 Engines holding down bolts *12/8/26* Completion of pumping arrangements *26/8/26* Engines tried under working conditions *26/8/26*
 Completion of fitting sea connections *27/7/26* Stern tube *23/7/26* Screw shaft and propeller *27/7/26*
 Material of crank shaft *Steel* Identification Mark on Do. *LLOYD'S N° 2180 & 2181* Material of thrust shaft *Steel* Identification Mark on Do. *N° 1250 SHM*
 Material of tunnel shafts *Steel* Identification Marks on Do. *LLOYD'S N° 270* Material of screw shafts *Steel* Identification Marks on Do. *LLOYD'S N° 270*
T.S.M. 31-7-26 *T.S.M. 23/7/26*

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, &c.) *The materials have been tested by the Surveyors to this Society & the workmanship is good. Prior to machinery being installed in the vessel, it was opened up & all working parts examined & found satisfactory. Air receivers, cylinder water jackets & water passages of cylinder covers etc. were tested in accordance with the rules (See London letter to Stockholm Surveyor dated 2nd March 1926) & found satisfactory. The machinery has been installed in accordance with the rules & it is recommended that the vessel be classed with Lloyd's Machinery Certificate & the record of L.M.C. 8-26 be made in the Register Book.*

NOTE:- *The makers state that the plans for the shafting of this type of engine, also for air receivers, have been approved by the London Office. Full power trials were run over measured course speed of vessel 8 knots @ 250 revs. lowest revs. for manoeuvring purposes 145 per min. Astern revs. 240 per min.*

The amount of Entry Fee ... *£ 43-00*
 Special SURVEY ... *£ 314-00*
 Donkey Boiler Fee ... *£ 79-00*
 Fitting on Board ... *£ 45-00*
 Travelling Expenses (if any) ... *£ 45-00*

When applied for, *Aug. 31st 1926*

When received, *29.9.26*

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation

Committee's Minute

Assigned

+ Lmc 8.26
Oil Engines cl

CERTIFICATE VALID

Certificate (if required) to be sent to
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)