

Rpt. 4b

REPORT ON OIL ENGINE MACHINERY.

No. 4787.
8 APR 1925

Received at London Office

Date of writing Report 3rd March 1925 When handed in at Local Office 19 Port of Kobe
No. in Survey held at Kobe Date, First Survey Feb 19th 1924 Last Survey Feb 27th 1925
Reg. Book. on the Single Twin Triple Screw vessels "FLORIDA MARU" Number of Visits 47
Master Kanjo Yehara Built at Kobe By whom built Kawasaki Dockyard Co Yard No. 484 When built 1925-2
Engines made at Glasgow (Clydebank) By whom made John Brown & Co Ltd Engine No. 502A When made 1925-2
Donkey Boiler made at Kobe By whom made Kawasaki Dockyard Co Ltd Boiler No. 484 When made 1925-2
Brake Horse Power 2,500 Owners Kawasaki Dockyard Co Ltd Port belonging to Kobe
Nom. Horse Power as per Rule 593 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

OIL ENGINES, &c.—Type of Engines Cammell and Lullagar See also Glasgow Report No 43296
Maximum pressure in cylinders 500 lb No. of cylinders 6 No. of cranks 6 Diameter of cylinders 22"
Length of stroke 33 x 2 66" Revolutions per minute 98 Means of ignition Heat of Compression Kind of fuel used Diesel oil fuel
Is there a bearing between each crank Yes Span of bearings (Page 92, Section 2, par. 7 of Rules) 6'-0 15/16"
Distance between centres of main bearings 7'-7" Is a flywheel fitted Yes Diameter of crank shaft journals as per Rule 15-6
Diameter of crank pins 16 1/2" Breadth of crank webs as per Rule 2 1/4" built as fitted 32" Thickness of ditto as per Rule 9"
Diameter of flywheel shaft as per Rule 15-6" as fitted 16-0" Diameter of tunnel shaft as per Rule 13" as fitted 14" Diameter of thrust shaft as per Rule 13-5 under collar
Diameter of screw shaft as per Rule 14-22 as fitted 15" 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 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 If without liners, is the shaft arranged to run in oil Yes
Type of outer gland fitted to stern tube Yes Length of stern bush 70 3/4" Diameter of propeller 16'-3"
Pitch of propeller 15'-3" to 16'-3" No. of blades 4 state whether moveable Yes (moveable) Total surface Develop 85 sq square feet
Method of reversing Compressed Air Is a governor or other arrangement fitted to prevent racing of the engine when decoupled Yes Thickness of cylinder liners 2 1/2" at Centre
Are the cylinders fitted with safety valves Yes Means of lubrication Forced 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 Yes
Exhaust led into silencer in funnel. Yes No. of cooling water pumps Two pumps, cooling pumps 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 None Diameter of ditto Yes Stroke Yes
Can one be overhauled while the other is at work Yes No. of auxiliary pumps connected to the main bilge lines 3 incl. Ball pump How driven E. Motor
Sizes of pumps 2 @ 100 Tons/Hr. Capacity No. and sizes of suctions connected to both main bilge pumps and auxiliary bilge pumps:—In engine room 2 @ 2 1/2" 4 @ 3 1/2" DIA
and in holds, etc. 2 each, 3 1/2" DIA: in N^o 1, 3 & 4 holds, 2 @ 4" DIA: in N^o 2 H^o No. of ballast pumps one How driven E. Motor Sizes of pumps 200 Tons/Hr. Capacity
Is the ballast pump fitted with a direct suction from the engine room bilges Yes State size 7" DIA Is a separate auxiliary pump suction fitted in Engine Room and size Yes 5" DIA 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 fitted Are all connections with the sea direct on the skin of the ship Yes
Are they valves or cocks Valves & Cocks 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 Yes Is it fitted with a watertight door Yes
worked from Top platform If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork Yes
No. of main air compressors 2 No. of stages 4 each Diameters 25 1/2"-2 1/2"-7 1/4"-4 5/8" Stroke 19" Driven by crank shaft
No. of auxiliary air compressors 2 No. of stages 3 Diameters 13-7 1/4"-3 5/8" Stroke 8" Driven by E. motor
No. of small auxiliary air compressors 1 No. of stages 2 Diameters 5"-1 1/16" Stroke 4" Driven by steam
No. of scavenging air pumps 6 Diameter 56 1/2" x 23 1/2" RECTANGULAR Stroke 33" Driven by oblique rods from Cranks
Diameter of auxiliary Diesel Engine crank shafts as per Rule 170 mm as fitted Yes Are the air compressors and their coolers made so as to be easy of access Yes

AIR RECEIVERS:—No. of high pressure air receivers Working 1 Stand by Internal diameter 11 3/4" & 17 3/8" Cubic capacity of each 5.3 cu & 18.35 cu
Material Steel Seamless, lap welded or riveted longitudinal joint Seamless Range of tensile strength 28/32 tons
Thickness Working 5/8" Stand by 4/8" Working pressure by Rules 1100 lbs No. of starting air receivers Three Internal diameter 60"
Total cubic capacity 260 cu each Material Steel Seamless, lap welded or riveted longitudinal joint riveted
Range of tensile strength 28/32 tons thickness 1 3/8" Working pressure by rules 600 lbs 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 Yes What means are provided for cleaning their inner surfaces manhole Is there a drain arrangement fitted at the lowest part of each receiver Yes

8420-64600-040600

IS A DONKEY BOILER FITTED?

Yes ✓

If so, is a report now forwarded?

Yes ✓

HYDRAULIC TESTS:—

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS					
" " COVERS					
" " JACKETS	See Glasgow Report N° 43296				
" " PISTON WATER PASSAGES	"	"	"		
MAIN COMPRESSORS—1st STAGE	"	"	"		
" 2nd "	"	"	"		
" 3rd "	"	"	"		
AIR RECEIVERS—STARTING	See Glasgow Report N° 43856				
" INJECTION	"	"	"		
AIR PIPES	"	"	"		
FUEL PIPES	"	"	"		
FUEL PUMPS					
SILENCER					
" WATER JACKET	See Glasgow Report N° 43296.			DB R	
SEPARATE FUEL TANKS					

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

Yes

Receivers

✓

Separate Tanks

Yes

SPARE GEAR See attached sheet.

The foregoing is a correct description,
Kawasaki Dockyard Co., Ltd.,

Manufacturers.

Per. Director.

1924 Feb 19, Mar 4, 7, 11, 13, 17, 18, 22, Apr 2, 5, May 6-12
June 14, Sept 1926
Oct 1, 11, 14, 20, 22, 27. Nov. 13, 14, 6, 12, Dec. 3, 4, 9, 12, 19, 26, 30, 1925 Jan. 7-9-20-23-27-30 Feb. 3-7-10-12
[19-2

Dates of Survey while building

During progress of work in shops --

During erection on board vessel --

Total No. of visits 47.

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓

Crank shaft ✓ Thrust shaft 14-6-24 Tunnel shafts 12-5-24 Screw shaft 19-5-24 Propeller 7-6-24 Stern tube 10-4-24 Engine seatings 19-9-24

Engines holding down bolts 21-11-24 Completion of pumping arrangements 3-2-25. Engines tried under working conditions 7-2-25.

Completion of fitting sea connections 20-10-24 Stern tube 7-6-24 Screw shaft and propeller 18-10-24.

Material of crank shaft See GL. Rpt N° 43296 Identification Mark on Do. do Material of thrust shaft O.H. Steel Identification Mark on Do. L.R. N° 297 A.

Material of tunnel shafts O.H. Steel Identification Marks on Do. LLOYDS N° 295 & 296 A.W. Material of screw shafts O.H. Steel Identification Marks on Do. LLOYDS N° 294. A.W.

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 machinery of this vessel has now been efficiently installed on board in accordance with the Requirements of the Rules & approved plans. Section 35 of Rules Materials & workmanship are sound & good. The machinery was tried under full working conditions with satisfactory results, & is eligible in my opinion to have the word "L.M.C. 2-25" & notation "Fitter for oil fuel" 2-25 in Register Book. F.P. above 150° F.

Approved plans of shafting & oil settling tanks forwarded herewith, also shafting certificate

The amount of Entry Fee ... £ 72.00 When applied for, 3-3-1925

Special ... £ 380.00

Donkey Boiler Fee ... £ 76.00 When received, Mar. 11th 1925

Travelling Expenses (if any) SEE HULL RPT.

Committee's Minute

Assigned

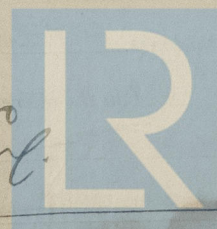
CERTIFICATE WRITTEN

WED. 15 APR 1925

+ Lmb 2.25 Cf. Oil Eng. DB-120th

H.D. Buchanany.

Engineer Surveyor to Lloyd's Register of Shipping.



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Foundation