

## REPORT ON OIL ENGINE MACHINERY.

No. 6822

Date of writing Report 24 Jan 26 When handed in at Local Office 30th Jan 26 Port of Bilbao Received at London Office 21 Feb 1926  
 No. in Survey held at Bilbao Date, First Survey July 29, 1924 Last Survey Dec. 30, 1925  
 Reg. Book. "C14" Number of Visits 39.15  
 ✓ on the Single Screw vessels. Tons { Gross 39.15 Net 19.23  
 Master Gijon Built at Stockholm By whom built Estilleros de Gijon Yard No. 1316-49 When built 1925  
 Engines made at Stockholm By whom made J. & C. G. Bolinder Engine No. 15196-99 When made 1923  
 Donkey Boilers made at Home By whom made Boiler No. — When made —  
 Brake Horse Power 160 Owners Cia Arrendatária de Tabacos de Espanha Port belonging to Valencia  
 Nom. Horse Power as per Rule 46 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

L ENGINES, &c. Type of Engines Bolinder oil engine 2 stroke cycle Single or double acting Single  
 Maximum pressure in cylinders 129/29 cm No. of cylinders 4 No. of cranks 4 Diameter of cylinders 300 mm  
 Length of stroke 310 mm Revolutions per minute 350 Means of ignition hot bulb Kind of fuel used Grade oil  
 Is there a bearing between each crank Yes Span of bearings (Page 22, Section 2, par. 2 of Rules) 600 mm  
 Distance between centres of main bearings 128 mm Is a flywheel fitted Yes Diameter of crank shaft journals 128 mm as per Rule 121 mm as fitted 128 mm  
 Diameter of crank pins 128 mm Breadth of crank webs 161 mm as per Rule 161 mm Thickness of ditto 68 mm as per Rule 68 mm as fitted 68 mm  
 Diameter of flywheel shaft 100 mm as per Rule 100 mm Diameter of tunnel shaft 116 mm as per Rule 116 mm as fitted 118 mm  
 Diameter of screw shaft 100 mm Is the screw shaft fitted with a continuous liner the whole length of the stern tube No  
 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 No  
 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 No  
 If two liners are fitted, is the shaft lapped or protected between the liners No If without liners, is the shaft arranged to run in oil No  
 Type of outer gland fitted to stern tube guard ring Length of stern bush 490 mm Diameter of propeller 1200 mm  
 Pitch of propeller 1200 mm No. of blades 3 state whether moveable No Total surface 43.4 square feet  
 Method of reversing timing Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Thickness of cylinder liners none  
 Are the cylinders fitted with safety valves No Means of lubrication pump Are the exhaust pipes and silencers water cooled or lagged with led  
 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 led  
 to funnel Yes No. of cooling water pumps 2 Is the sea suction provided with an efficient strainer which can be cleared Yes  
 within the vessel Yes No. of bilge pumps fitted to the main engines one Diameter of ditto 100 mm Stroke 50 mm  
 Can one be overhauled while the other is at work Yes No. of auxiliary pumps connected to the main bilge lines none How driven 1 1/2 dia  
 Sizes of pumps 1 1/2 dia No. and sizes of suctions connected to main bilge pumps 1 1/2 dia In engine room 1 1/2 dia  
 and in holds, etc. 1 1/2 dia No. of ballast pumps none How driven 1 1/2 dia Sizes of pumps 1 1/2 dia  
 Is the ballast pump fitted with a direct suction from the engine room bilges Yes State size 1 1/2 dia Is a separate auxiliary pump suction fitted in Yes  
 Engine Room and size 1 1/2 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 Yes Are all connections with the sea direct on the skin of the ship Yes  
 Are they valves or cocks both 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 Yes  
 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 Yes 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 none fitted No. of stages one Diameters 3 1/2" Stroke 3" Driven by hand wheel  
 No. of auxiliary air compressors one No. of stages one Diameters 3 1/2" Stroke 3" Driven by hand wheel  
 No. of small auxiliary air compressors one No. of stages one Diameters 3 1/2" Stroke 3" Driven by hand wheel  
 No. of scavenging air pumps one Diameter 3 1/2" Stroke 3" Driven by hand wheel  
 Diameter of auxiliary Diesel Engine crank shafts 3 1/2" as per Rule 3 1/2" as fitted 3 1/2" Are the air compressors and their coolers made so as to be easy of access Yes

AIR RECEIVERS:—No. of high pressure air receivers See First Entry report Internal diameter 3 1/2" Cubic capacity of each —  
 Material Seamless, lap welded or riveted longitudinal joint Range of tensile strength —  
 Thickness — Working pressure by Rules — No. of standing air receivers — Internal diameter —  
 Total cubic capacity — Material Seamless, lap welded or riveted longitudinal joint Is each receiver, which can be isolated, —  
 Range of tensile strength — thickness — Working pressure by rules — What means are provided for cleaning their —  
 fitted with a safety valve as per Rule — Can the internal surfaces of the receivers be examined —  
 Inner surfaces — Is there a drain arrangement fitted at the lowest part of each receiver —

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

HYDRAULIC TESTS:-

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS .....					
" " COVERS .....					
" " JACKETS.....					
" PISTON WATER PASSAGES.....					
MAIN COMPRESSORS—1st STAGE.....					
" 2nd " .....					
" 3rd " .....					
AIR RECEIVERS-STARTING .....					
" INJECTION .....					
AIR PIPES .....					
FUEL PIPES .....					
FUEL PUMPS .....					
SILENCER .....					
" WATER JACKET .....					
SEPARATE FUEL TANKS .....					

See Inst Entry Report on Engines

PLANS. Are approved plans forwarded herewith for shafting

To. 25.6.25

Receivers

Separate Tanks

SPARE GEAR

2 top end bolts and nuts, 2 main bearing studs and nuts, one disc for big pump. 1 one suction valve: 3 studs for ignition valves: one stud for cylinder. One bolt for thrust bearing: one bolt for lubricating apparatus: one bolt for fuel pump eccentric: one bolt for oscillating lever: one governor weight: 2 sup. and two discharge valves for circulating pump and two coupling bolts and nuts.

The foregoing is a correct description.

EL DIRECTOR

Manufacturer.

Dates of Survey while building { During progress of work in shops - 1924.  
During erection on board vessel - 1924: July 29. Aug. 30. 1925: Jan 30. July 6. 7. 8. Aug. 11. Sep. 30. Oct. 20.  
Total No. of visits twelve. Dec. 14. and Dec. 20.

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓  
Crank shaft ✓ Thrust shaft ✓ Tunnel shafts ✓ Screw shaft 29.9.25 Propeller 29.9.25 Stern tube 29.9.25 Engine seatings 11.8  
Engines holding down bolts 30.12.25 Completion of pumping arrangements 30.12.25 Engines tried under working conditions 30.12.25  
Completion of fitting sea connections 5.11.25 Stern tube 5.11.25 Screw shaft and propeller 5.11.25  
Material of crank shaft ✓ Identification Mark on Do. ✓ Material of thrust shaft ✓ Identification Mark on Do. ✓  
Material of tunnel shafts ✓ Identification Marks on Do. ✓ Material of screw shafts ✓ Identification Marks on Do. No. 14 29.9.25

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

"Cy" "Co."

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

The machinery of this vessel has been securely fitted on board in accordance with the approved plans and instructions. The workmanship and materials, and on trial under working conditions, were found satisfactory and eligible in my opinion to be classed in the record of D.S. L.M.C. 12.25.

The amount of Entry Fee ... £ 65/6  
Special /64 ... £ 300/6  
Donkey Boiler Fee ... £  
Travelling Expenses (if any) £ 34/6  
When applied for, 30/11 1926  
When received, 30/11/26

Committee's Minute TUES. 9 FEB 1926

Assigned

+d M.C. 12.25  
Oil Engines

Thomas Miller

Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register Foundation