

REPORT ON OIL ENGINE MACHINERY.

No.

Received at London Office 1 MAY 1926
 Date of writing Report 23 Feb. 1926 When handed in at Local Office 25 Feb. 1926 Port of BARCELONA
 Date, First Survey 7 MAY. 1923 Last Survey 25 Feb. 1926
 Number of Visits 7

o. in Survey held at TARRAGONA
 g. Book: Single } Screw vessels C. 19
 on the Triple }
 Master Built at TARRAGONA By whom built Union Naval Yard No. C. 19 When built 1925
 Engines made at STOCKHOLM By whom made J.C.F. Bolinder Co. Ltd. Engine No. 15192 When made 1923
 Monkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
 Brake Horse Power 160 Owners Cia ARRENDATARIA DE TOBACOS Port belonging to BARCELONA
 Com. Horse Power as per Rule 46 ✓ Is Refrigerating Machinery fitted for cargo purposes NO. ✓ Is Electric Light fitted NO. ✓

L ENGINES, 3c.—Type of Engines BOLINDER OIL ENGINE 2 or 4 stroke cycle 2 Single or double acting SINGLE
 Maximum pressure in cylinders 17 ^{kg}/sq. 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 CRUDE OIL ✓
 Is there a bearing between each crank YES ✓ Span of bearings (Page 92, Section 2, par. 7 of Rules) 600 mm. ✓
 Distance between centres of main bearings 600 mm. ✓ Is a flywheel fitted YES ✓ Diameter of crank shaft journals as per Rule 121 mm. ✓
 Diameter of crank pins 128 mm. ✓ Breadth of crank webs as per Rule 161 mm. ✓ Thickness of ditto as per Rule 68 mm. ✓
 Diameter of flywheel shaft as per Rule FLYWHEEL FITTED AT FORE END CRANKSHAFT. Diameter of tunnel shaft as per Rule 116 mm. ✓
 Diameter of screw shaft as per Rule 100 mm. ✓ Is the screw shaft fitted with a continuous liner the whole length of the stern tube NO. 3 SEPARATE LINERS
 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 ✓
 Is 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 ✓
 Are 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. HENOM VITAE Length of stern bush 400 mm. ✓ Diameter of propeller 1.215 m. = 48" ✓
 Pitch of propeller 1.500 m. ✓ No. of blades 3 ✓ state whether moveable NO. ✓ Total surface .370 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 ✓
 Are the cylinders fitted with safety valves NO ✓ Means of lubrication PUMPS ✓ Are the exhaust pipes and silencers water cooled or lagged with ✓
 Non-conducting material NO. ✓ If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine EXHAUST
 TO 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 1 ✓ Diameter of ditto 100 mm. ✓ Stroke 50 mm. ✓
 Can one be overhauled while the other is at work ✓ No. of auxiliary pumps connected to the main bilge lines 5 ✓ How driven HAND ✓
 Sizes of pumps 3" ✓ No. and sizes of suctions connected to both main bilge pumps and auxiliary bilge pumps:—In engine room —
 Is in holds, etc. — No. of ballast pumps — How driven — Sizes of pumps —
 Is the ballast pump fitted with a direct suction from the engine room bilges — State size — Is a separate auxiliary pump suction fitted in ✓
 Engine Room and size 3" HAND PUMP ✓ 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 ✓ 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 ✓
 Is communication between the sea and the bilges YES ✓ Is the screw shaft tunnel watertight ✓ Is it fitted with a watertight door ✓
 Is 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 NONE FITTED ✓ No. of stages — Diameters — Stroke — Driven by —
 No. of auxiliary air compressors — No. of stages — Diameters — Stroke — Driven by —
 No. of small auxiliary air compressors — No. of stages — Diameters — Stroke — Driven by —
 No. of scavenging air pumps — Diameter — Stroke — Driven by —
 Diameter of auxiliary Diesel Engine crank shafts as per Rule — Are the air compressors and their coolers made so as to be easy of access —
 as fitted —

R RECEIVERS:—No of high pressure air receivers — Internal diameter — Cubic capacity of each —
 Material — Seamless, lap welded or riveted longitudinal joint — Range of tensile strength — 17" ✓
 Thickness — working pressure by Rules — No. of starting air receivers 1 ✓ Internal diameter 434 mm. ✓
 Total cubic capacity 280 litres Material S.M. STEEL ✓ Seamless, lap welded or riveted longitudinal joint LAPWELDED ✓
 Range of tensile strength min. 23 ^{kg}/sq. cm. thickness 8 mm. ✓ Working pressure by rules 257 lb. ✓ Is each receiver, which can be isolated, ✓
 Is fitted with a safety valve as per Rule Can the internal surfaces of the receivers be examined ✓ What means are provided for cleaning their ✓
 Inner surfaces manhole done ✓ Is there a drain arrangement fitted at the lowest part of each receiver YES ✓

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					

PLANS. Are approved plans forwarded herewith for shafting *Stockholm Rpt.* Receivers

Separate Tanks.

SPARE GEAR

valves, valve seats & springs, piston rings, bottom end and main bearings, bolts & nuts, Coupling bolts, fuel pump & one set of valves for circulating & bilge pump.

The foregoing is a correct description,

ASTILLEROS DE TARRAGONA

Amisand

For installation of machinery.
Manufacturer.

Dates of Survey while building { During progress of work in shops -- } *Stockholm Rpt.*
{ During erection on board vessel -- } 4/9/25, 22/9/25, 2/10/25, 14/10/25, 26/10/25, 16/11/25
Total No. of visits 6.

Dates of Examination of principal parts—Cylinders Covers 213 J.L. Pistons Rods Connecting rods
Crank shaft Thrust shaft Tunnel shafts Screw shaft 24: 4-25 Propeller 26/10/25 Stern tube 2/10/25 Engine seatings 4/umps
Engines holding down bolts 22/9/25 Completion of pumping arrangements 16/11/25 Engines tried under working conditions 20/11/25, etc.
Completion of fitting sea connections 26/10/25 Stern tube 14/10/25 Screw shaft and propeller 26/10/25
Material of crank shaft *Steel* Identification Mark on Do. Material of thrust shaft Identification Mark on Do.
Material of tunnel shafts Identification Marks on Do. Material of screw shafts *S. & Steel* Identification Marks on Do. 24-

Is the flash point of the oil to be used over 150° F.

Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *C. 17 & 18.*

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

The workmanship being good and the machinery being well constructed and installed in accordance with the approved plans and under special survey is in my opinion eligible for Classification with notation of *L.M.C. 2-26*

It is submitted that this vessel is eligible for THE RECORD. + LMC 2-26.

Oil Engines 25C.SA.
4 Cy 11¹³/₁₆ - 12³/₁₆. 46 H.P.

The amount of Entry Fee ... £ 103/00 : When applied for,
Special ... £ : 5/2/26.19
Donkey Boiler Fee ... £ : When received,
Travelling Expenses (if any) £ : 19.4. 1926

Committee's Minute

Assigned

TUES. 2 MAR 1926

+ L.M.C. 2-26
Oil Engines

CERTIFICATE WRITTEN



© 2020

Lloyd's Register Foundation