

REPORT ON OIL ENGINE MACHINERY.

No.

Date of writing Report 25th Feb 1926 When handed in at Local Office 25th Feb 1926 Port of BARCELONA Received at London Office 1 MAR 1926

To. in Survey held at PARRAGONA Date, First Survey 7th May 1923 Last Survey 25th Feb 1926

eg. Book. C. 20 Number of Visits 6

on the Single Screw vessels C. 20 Tons Gross 36
Twin
Triple Net 0

Master Built at PARRAGONA By whom built Marin Naval de Levante Yard No. C. 20 When built 1925

Engines made at STOCKHOLM By whom made J. C. Bolinder C^o Ltd. Engine No. 15180 83 When made 1923

Monkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Indicated Horse Power 160 Owners Cia Arrendataria de Tabacos Port belonging to BARCELONA

Consumption Horse Power as per Rule 46 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

MAIN ENGINES, &c.—Type of Engines BOLINDER OIL ENGINE 2 or 4 stroke cycle 2 Single or double acting SINGLE

Maximum pressure in cylinders 17 1/2 lb. Cu. ✓ No. of cylinders 4 ✓ No. of cranks 4 ✓ Diameter of cylinders 300 1/2 ✓

Length of stroke 310 1/2 ✓ 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 1/2 ✓

Distance between centres of main bearings 600 1/2 ✓ Is a flywheel fitted YES ✓ Diameter of crank shaft journals as per Rule 121 1/2 ✓
as fitted 128 1/2 ✓

Diameter of crank pins 128 1/2 ✓ Breadth of crank webs as per Rule 161 1/2 ✓
as fitted 170 ✓ Thickness of ditto as per Rule 68 1/2 ✓
as fitted 71.5 ✓

Diameter of flywheel shaft as per Rule FLYWHEEL FITTED AT ✓ Diameter of tunnel shaft as per Rule Diameter of thrust shaft as per Rule 116 1/2 ✓
as fitted FORE END CRANKSHAFT. as fitted as fitted 118 1/2 ✓

Diameter of screw shaft as per Rule 100 1/2 ✓ Is the screw shaft fitted with a continuous liner the whole length of the stern tube No. 3 Separate liners ✓
as fitted 100 1/2 ✓

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 ✓

Does the liner do 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 fitted, is the shaft lapped or protected between the liners Yes ✓ If without liners, is the shaft arranged to run in oil ✓

Type of outer gland fitted to stern tube house Legumin bitoe Length of stern bush 400 1/2 ✓ Diameter of propeller 1.215 m = 48" ✓

Pitch of propeller 1.50 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 ✓ 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 ✓

Thin the vessel Yes ✓ No. of bilge pumps fitted to the main engines 1 ✓ Diameter of ditto 100 1/2 ✓ Stroke 50 1/2 ✓

Can one be overhauled while the other is at work ✓ No. of auxiliary pumps connected to the main bilges 5 ✓ How driven hand ✓

Number of pumps 3 ✓ No. and sizes of suction connected to both main bilge pumps and auxiliary bilge pumps:—In engine room

Is a 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 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 communication between the sea and the bilges Yes ✓ Is the screw shaft tunnel watertight ✓ Is it fitted with a watertight door ✓

Is the vessel checked from ✓ If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork ✓

Number of main air compressors None fitted ✓ No. of stages — Diameters — Stroke — Driven by —

Number of auxiliary air compressors — No. of stages — Diameters — Stroke — Driven by —

Number of small auxiliary air compressors — No. of stages — Diameters — Stroke — Driven by —

Number 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 —

AIR 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 —

Thickness — working pressure by Rules — No. of starting air receivers 1 ✓ Internal diameter 434 1/2 ✓

Is each receiver, which can be isolated, ✓

Is the receiver provided with a safety valve as per Rule ✓ Can the internal surfaces of the receivers be examined Yes ✓ What means are provided for cleaning their surfaces Manhole door ✓

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					

See Stockholm Report 2293.

PLANS. Are approved plans forwarded herewith for shafting Stockholm Rpt. Receivers Separate Tanks
(If not, state date of approval)

SPARE GEAR

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

The foregoing is a correct description,
ASTILLEROS DE TARRAGONA

Amirant

For the installing of the machinery.
Manufacturer.

Dates of Survey while building
 During progress of work in shops - - Ingeniero-Director
 During erection on board vessel - - 23/10/25, 16/11/25, 27/11/25, 20/1/26, 25/2/26
 Total No. of visits

Dates of Examination of principal parts—Cylinders Stockholm Covers _____ Pistons _____ Rods _____ Connecting rods _____
 Crank shaft _____ Thrust shaft _____ Tunnel shafts _____ Screw shaft 5/5/25 Propeller 16/11/25 Stern tube 23/10/25 Engine seatings 23/10/25
 Engines holding down bolts 16/11/25 Completion of pumping arrangements 27/11/25 Engines tried under working conditions 20/1/26
 Completion of fitting sea connections 27/11/25 Stern tube 27/11/25 Screw shaft and propeller 16/11/25
 Material of crank shaft Stockholm Identification Mark on Do. _____ Material of thrust shaft _____ Identification Mark on Do. _____
 Material of tunnel shafts _____ Identification Marks on Do. _____ Material of screw shafts Steel Identification Marks on Do. _____

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 & 19

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 make 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. 4Cy. 11 13/16" - 12 3/16" 46.H.P.

The amount of Entry Fee ... £ : : When applied for, _____
 Special ... £ 103/00 : : 16/76 1926
 Donkey Boiler Fee ... £ : : _____
 Travelling Expenses (if any) £ : : 19.4. 26

J. H. Dowling
 2/3/26
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 2 MAR 1926

Assigned + L.M.C. 2.26 Oil engines



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

CERTIFICATE WRITTEN