

# REPORT ON OIL ENGINE MACHINERY.

No.

Received at London Office 1 MAR 1926

of writing Report 25 Feb 1926 When handed in at Local Office 25 Feb 1926 Port of Barcelona

in Survey held at Tarragona Date, First Survey 7 May 1923 Last Survey 25 Feb 1926

Book. Number of Visits 6

on the <sup>Single</sup> ~~Twin~~ <sup>Triple</sup> Screw vessels C. 21 Tons <sup>Gross</sup> 36 <sup>Net</sup> 0

ster Built at Tarragona By whom built Union Naval de Levante Yard No. C. 21 When built 1926

ines made at Stockholm By whom made J.C.F. Bolinder Co 188 Engine No. 99 When made 15196

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

ake Horse Power 160 Owners Cia. Arrendataria de Pobacos Port belonging to Barcelona

m. Horse Power as per Rule 46 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Type of Engines Bolinder oil engine 2 or 4 stroke cycle 2 Single or double acting Single

imum 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 Bull. Kind of fuel used Crude oil

here a bearing between each crank 4 Span of bearings (Page 92, Section 2, par. 7 of Rules) 600 mm

ance between centres of main bearings 600 mm Is a flywheel fitted 4 Diameter of crank shaft journals as per Rule 121 mm as fitted 128 mm

meter of crank pins 128 mm Breadth of crank webs as per Rule 161 mm as fitted 170 mm Thickness of ditto as per Rule 68 mm as fitted 71.5 mm

meter of flywheel shaft as per Rule 100 mm as fitted 100 mm Diameter of tunnel shaft as per Rule 116 mm as fitted 118 mm

meter of screw shaft as per Rule 100 mm as fitted 100 mm Is the screw shaft fitted with a continuous liner the whole length of the stern tube no 3 Separate liners

he after end of the liner made watertight in the propeller boss 4 If the liner is in more than one length are the joints burned

he 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

wo liners are fitted, is the shaft lapped or protected between the liners 4 If without liners, is the shaft arranged to run in oil

ne of outer gland fitted to stern tube 4 Length of stern bush 400 mm Diameter of propeller 1.215 m.

h of propeller 1.50 m. No. of blades 3 state whether moveable no Total surface 370 square feet

hod of reversing Priming Is a governor or other arrangement fitted to prevent racing of the engine when declutched 4 Thickness of cylinder liners

the cylinders fitted with safety valves Means of lubrication Pumps Are the exhaust pipes and silencers water cooled or lagged with

conducting material If the exhaust is led overboard near the waterline, what means are provided to prevent water from being syphoned back to the engine Exhaust

in the vessel 4 No. of cooling water pumps 2 Is the sea suction provided with an efficient strainer which can be cleared

one be overhauled while the other is at work No. of bilge pumps fitted to the main engines 1 Diameter of ditto 100 mm Stroke 50 mm

s of pumps 3 No. of auxiliary pumps connected to the main bilge pumps 5 How driven Hand

in holds, etc. No. of ballast pumps — How driven — Sizes of pumps —

he ballast pump fitted with a direct suction from the engine room bilges State size — Is a separate auxiliary pump suction fitted in

ine Room and size 3 Hand pump Are all the bilge suction pipes fitted with roses 4 Are the roses in Engine Room always accessible 4

the sluices on Engine Room bulkheads always accessible Are all connections with the sea direct on the skin of the ship 4

they valves or cocks Both Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates 4

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 4

all pipes, cocks, valves and pumps in connection with the machinery accessible at all times 4 Are the bilge suction pipes, cocks and valves arranged so as to prevent any

munication between the sea and the bilges 4 Is the screw shaft tunnel watertight Is it fitted with a watertight door

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

of main air compressors none fitted No. of stages — Diameters — Stroke — Driven by —

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

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

ter Capa of scavenging air pumps Diameter — Stroke — Driven by —

meter of auxiliary Diesel Engine crank shafts as per Rule — as fitted — Are the air compressors and their coolers made so as to be easy of access

RECEIVERS:—No. of high pressure air receivers — Internal diameter — Cubic capacity of each —

erial — Seamless, lap welded or riveted longitudinal joint — Range of tensile strength —

ness — working pressure by Rules — No. of starting air receivers 1 Internal diameter 434 mm

15/100 cubic capacity 28 litres Material Sm. Steel Seamless, lap welded or riveted longitudinal joint Lap welded

13/100 of tensile strength 23 kg/cm<sup>2</sup> thickness 8 mm Working pressure by rules 257 lb Is each receiver, which can be isolated,

2/100 with a safety valve as per Rule Can the internal surfaces of the receivers be examined 4 What means are provided for cleaning their

er surfaces Manhole door Is there a drain arrangement fitted at the lowest part of each receiver 4



If so, is a report now forwarded?

| 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 .....           |               |                   |                |          |          |

## SPARE GEAR

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 pumps.

The foregoing is a correct description.

For the installing of the machinery.  
Manufacturer.

|   |  | Inglenro-Director |                                   |
|---|--|-------------------|-----------------------------------|
| Dates<br>of Survey<br>while<br>building | { During progress of<br>work in shops- } |                   |                                   |
|   | { During erection on<br>board vessel- }  | 26/10/25          | 16/11/25 27/11/25 20/1/26 25/2/26 |
|   | {  |                   |                                   |
|   | Total No. of visits                      |                   |                                   |

| Dates of Examination of principal parts— |              | Cylinders                          | Covers       | Pistons                                | Rods        | Connecting rods             |
|--|--------------|------------------------------------|--------------|--|-------------|-----------------------------|
| Crank shaft                              | Thrust shaft | Tunnel shafts                      | Screw shaft  | 5/5/25                                 | Propeller   | 24/11/25                    |
| Engines holding down bolts               | 27/11/25     | Completion of pumping arrangements | 24/11/25     | Engines tried under working conditions | 22/11/26    |                             |
| Completion of fitting sea connections    | 24/12/26     | Stern tube                         | 24/11/25     | Screw shaft and propeller              | 24/11/25    |                             |
| Material of crank shaft                  | S. 2. Steel  | Identification Mark on Do.         | A. I. 6-2-23 | Material of thrust shaft               | S. 2. Steel | Identification Mark on Do.  |
| Material of tunnel shafts                |              | Identification Marks on Do.        |              | Material of screw shafts               | S. 2. 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 & 20.

*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

It is submitted that  
this vessel is eligible for  
THE RECORD + LMC 2.26

Oil Engines, 2SC.5A

4 Cy  $11\frac{13}{16}'' - 12\frac{3}{16}''$  46 NH

|                                |   |        |   |                   |
|--------------------------------|---|--------|---|-------------------|
| The amount of Entry Fee ...    | £ | :      | : | When applied for, |
| Special ...                    | £ | 103/00 | : | 6 Feb. 1926       |
| Donkey Boiler Fee ...          | £ | :      | : | When received,    |
| Travelling Expenses (if any) £ | : | :      | : | 19.4.1926         |

## Committee's Minute

TUES. 2 MAR 1926

*Assigned*

+ LMC 2.26  
Oil Engines

CERTIFICATE WRITTEN

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