

REPORT ON OIL ENGINE MACHINERY.

No. 8952

6 OCT 1930

Date of writing Report

19

When handed in at Local Office

2/10/19

19

Port of Trieste

No. in Survey held at

Turin & Monfalcone

Reg. Book.

65178

Single

Triple

Quadruple

Screw vessel

Barbarigo

Date, First Survey

18th Dec 1929

Last Survey

10th Sept 1930

Number of Visits

20

Tons

Gross 7023

Net 4250

Built at Monfalcone

By whom built Iankiere Nav. Triest.

Yard No. 221 When built 1930

Engines made at Turin

By whom made Fiat Stab. Grandi Mot.

Engine No. 1638 When made 1930

Donkey Boilers made at Annan

By whom made Lochran & Co. Rd.

Boiler No. 11630 When made 1930

Brake Horse Power 4400

Owners Soc. Veneriana di N. a V.

Port belonging to Venice

Nom. Horse Power as per Rule 4220

Is Refrigerating Machinery fitted for cargo purposes no

Is Electric Light fitted yes

Trade for which vessel is intended India

See also Genoa Report No. 11457

OIL ENGINES, &c.—Type of Engines Fiat L 758

2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 35 Kg.

Diameter of cylinders 750 mm

Length of stroke 1250 mm

No. of cylinders 8

No. of cranks 8

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 1050 mm

Is there a bearing between each crank yes

Revolutions per minute 100

Flywheel dia. 3400 mm

Weight 15 tons

Means of ignition Compres.

Kind of fuel used Diesel oil

Crank Shaft, dia. of journals as per Rule 467.4 mm

as fitted 500 mm

Crank pin dia. 500 mm

Crank Webs

Mid. length breadth 800 mm

shrunk

Thickness parallel to axis 313 mm

Flywheel Shaft, diameter as per Rule 362 mm

as fitted 390 mm

Intermediate Shafts, diameter as per Rule 396.9 mm

as fitted 430 mm

Thrust Shaft, diameter at collars as per Rule 380.9 mm

as fitted 440 mm

Tube Shaft, diameter as per Rule —

as fitted —

Screw Shaft, diameter as per Rule 396.9 mm

as fitted 430 mm

Is the shaft fitted with a continuous liner yes

screw

Is the after end of the liner made watertight in the propeller boss yes

Bronze Liners, thickness in way of bushes as per Rule 19.7 mm

as fitted 22 mm

Thickness between bushes as per rule 14.3 mm

as fitted 17 mm

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 junctions made by fusion through the whole thickness of the liner 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 —

If two liners are fitted, is the shaft lapped or protected between the liners —

Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft no

Length of Bearing in Stern Bush next to and supporting propeller 1730 mm

Propeller, dia. 5000 mm

Pitch 4700 mm

No. of blades 4

Material bronze whether Moveable no

Total Developed Surface 8.3 sq. feet

Method of reversing Engines Direct

Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes

Means of lubrication forced

Thickness of cylinder liners 55 mm

Are the cylinders fitted with safety valves yes

Are the exhaust pipes and silencers water cooled or lagged with non-conducting material lagged

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine —

Cooling Water Pumps, No. Two 255 x 246 mm

One spare 120 mm

Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Bilge Pumps worked from the Main Engines, No. —

Diameter —

Stroke —

Can one be overhauled while the other is at work —

Pumps connected to the Main Bilge Line

No. and Size Two 50 Tons One 150 Tons

How driven Electric motors

Ballast Pumps, No. and size one 150 Tons

Lubricating Oil Pumps, including Spare Pump, No. and size Two gear pump on Main E. One independent 50 Tons

Are two independent means arranged for circulating water through the Oil Cooler yes

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces 5 23" one in Tunnel Well 23"

In Holds, &c. No. 1, 2 23"—No. 2, 2 23"—No. 3, 2 23"—No. 4, 2 23"—No. 5, 2 23"—No. 6, 3 23"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 4 2 4 3/4"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes

Are the Bilge Suctions in the Machinery Spaces led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes

Are all Sea Connections fitted direct on the skin of the ship yes

Are they fitted with Valves or Cocks valves

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates yes

Are the Overboard Discharges 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 the Blow Off Cocks fitted with a spigot and brass covering plate yes

What pipes pass through the bunkers —

How are they protected —

What pipes pass through the deep tanks —

Have they been tested as per Rule —

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes

Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another yes

Is the Shaft Tunnel watertight yes

Is it fitted with a watertight door yes

worked from top of eyeinder

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

Main Air Compressors, No. 2

No. of stages 3

Diameters 690-610-135

Stroke 720 mm

Driven by Main Engine

Auxiliary Air Compressors, No. 2

No. of stages 3

Diameters 310-270-65

Stroke 360 mm

Driven by Diesel Engine

Small Auxiliary Air Compressors, No. 1

No. of stages 3

Diameters 185-165-42

Stroke 140 mm

Driven by Hot salt Motor

Scavenging Air Pumps, No. 2

Diameter 1320

Stroke 1100

Driven by Main Engine

Auxiliary Engines crank shafts, diameter as per Rule 153 mm

as fitted 165 mm

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Can the internal surfaces of the receivers be examined no

What means are provided for cleaning their inner surfaces plugs at both ends

Is there a drain arrangement fitted at the lowest part of each receiver yes

High Pressure Air Receivers, No. 2

Cubic capacity of each 200 litres

Internal diameter 313 mm

thickness 14 mm

Seamless, lap welded or riveted longitudinal joint Seamless

Material steel

Range of tensile strength 44-50 kg

Working pressure by Rules 85.4 kg/cm

Starting Air Receivers, No. 36

{ 20 at 500 Lit. 16 " 300 " }

Total cubic capacity 14800 litres

Internal diameter { 20 at 313 mm 16 " 400 " }

thickness { 14 mm 17 " }

Working pressure by Rules 85.4 kg/cm

Seamless, lap welded or riveted longitudinal joint Seamless

Material steel

Range of tensile strength 44-50 kg

Working pressure by Rules 84 " "

0, 28, 22

25.27

3.

85

007430-007437-0097

If so, is a report now forwarded? yes

Donkey Boilers *yes*

General Pumping Arrangements. *yes*

Oil Fuel Burning Arrangements.....

SPARE GEAR See List attached

See also Gmoa Report No 11457
The foregoing is a correct description,

Manufacturer.

Dates of Survey while building	During progress of work in shops - - During erection on board vessel - - Total No. of visits	1929 Dec 18, 1930 Feb 17, Apr 26, May 1, 27, June 1, 14, 17, 30, July 5, 14, 18, 21, 31, Aug 4, 11, 20, Sep 9, 10.																					
		Twenty																					
Dates of Examination of principal parts—Cylinders <table border="0"> <tr> <td>7-2-30</td> <td>4-2-30</td> <td>12-11-29</td> <td>15-10-29</td> </tr> <tr> <td>14-2-30</td> <td>30-6-30</td> <td>31-1-30</td> <td>4-2-30</td> </tr> <tr> <td>30-6-30</td> <td>30-6-30</td> <td>30-6-30</td> <td>30-6-30</td> </tr> </table>												7-2-30	4-2-30	12-11-29	15-10-29	14-2-30	30-6-30	31-1-30	4-2-30	30-6-30	30-6-30	30-6-30	30-6-30
7-2-30	4-2-30	12-11-29	15-10-29																				
14-2-30	30-6-30	31-1-30	4-2-30																				
30-6-30	30-6-30	30-6-30	30-6-30																				
Covers <table border="0"> <tr> <td>4-2-30</td> <td>12-11-29</td> <td>15-10-29</td> </tr> <tr> <td>30-6-30</td> <td>31-1-30</td> <td>4-2-30</td> </tr> <tr> <td>30-6-30</td> <td>30-6-30</td> <td>30-6-30</td> </tr> </table>												4-2-30	12-11-29	15-10-29	30-6-30	31-1-30	4-2-30	30-6-30	30-6-30	30-6-30			
4-2-30	12-11-29	15-10-29																					
30-6-30	31-1-30	4-2-30																					
30-6-30	30-6-30	30-6-30																					
Pistons <table border="0"> <tr> <td>12-11-29</td> <td>15-10-29</td> </tr> <tr> <td>31-1-30</td> <td>4-2-30</td> </tr> <tr> <td>30-6-30</td> <td>30-6-30</td> </tr> </table>												12-11-29	15-10-29	31-1-30	4-2-30	30-6-30	30-6-30						
12-11-29	15-10-29																						
31-1-30	4-2-30																						
30-6-30	30-6-30																						
Rods <table border="0"> <tr> <td>15-10-29</td> <td>4-2-30</td> </tr> <tr> <td>30-6-30</td> <td>30-6-30</td> </tr> </table>												15-10-29	4-2-30	30-6-30	30-6-30								
15-10-29	4-2-30																						
30-6-30	30-6-30																						
Connecting rods 14-2-30																							
Crank shaft 5-6-30, 14-7-30 Flywheel shaft — Thrust shaft 21-7-30 Intermediate shafts 21-7-30 Tube shaft —																							
Screw shaft 25-3-30, 16-5-30 Propeller 16-5-30 Stern tube 26-4-30, 1-5-30 Engine seatings 17-2-30 Engines holding down bolts 21-7-30																							
Completion of fitting sea connections 1-5-30 Completion of pumping arrangements 20-8-30 Engines tried under working conditions 10-9-30																							
Crank shaft, Material <i>Steel</i> Identification Mark GB 94-18-1-30 Flywheel shaft, Material — Identification Mark —																							
Thrust shaft, Material <i>Steel</i> Identification Mark GB 535-24-6-30 Intermediate shafts, Material <i>Steel</i> Identification Marks 124-84-130, 131-88 GB 2																							
Tube shaft, Material — Identification Mark — Screw shaft, Material <i>Steel</i> Identification Mark GB 79-25																							

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

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with yes

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo no If so, have the requirements of the Rules been complied with no

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 been constructed at Turin and fitted on board at Monfalcone under special survey, in accordance with the Rules and approved plans. It has been tested under full working condition and found satisfactory.

It is submitted the machinery of this vessel is eligible for the notation of + LMC 9-30

It is submitted that
this vessel is eligible for
THE RECORD. + Lm

0.1 Engines 2 S.C.S.A. 89.29 $\frac{1}{2}$ "-49.
1219 N.H.P. DB 100 $\frac{1}{16}$.

7/10/30

The amount of Entry Fee ... *£* 2427 -
 1/5 Special ... *see page 50295* -
 Donkey Boiler Fee ... *£* 520 -
 Travelling Expenses (if any) ... *£* 520 -

When applied for,

When received,

Committee's Minute

FRI. 17 OCT 1930

Assigned

+ L. M.C. 9.30

C. L.

Oil Eng. D.R. 10026.

Alphonso
~~Engineer Surgeon to U.S. Navy~~ of Shipping.

© 2020

Lloyd's Register
Foundation