

REPORT ON OIL ENGINE MACHINERY.

No. 7596

Date of writing Report

10

When handed in at Local Office

June 24th 1927

Port of

Received at London Office

27 JUN 1927 14 NOV 1927

No. in Survey held at
Reg. Book.

Trieste

Date, First Survey

Apr 17th 1926

Last Survey

June 18th 1927

1927

Number of Visits

141

70372 on the ^{Single} Twin ^{Triple} Screw vessel

"ORAZIO"

Tons ^{Gross}
^{Net}

Built at

Baia

By whom built

Cantieri ed Officine Meridionali

Yard No. 14

When built

1927

Engines made at

Trieste

By whom made

Stabilimento Tecnico Triestino

Engine No. 570 1/2

When made

1927

Donkey Boilers made at

Hamburg

By whom made

Deutsche Werft A. G.

Boilers Nos. 236 & 238

When made

1926

Brake Horse Power

Owners

Navigazione Generale Italiana

Port belonging to

Genoa

Nom. Horse Power as per Rule

1312

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Yes

Trade for which vessel is intended

L ENGINES, &c.—Type of Engines

Burmester & Wain Diesel

2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders

35 Kgs/cm²

Diameter of cylinders

740 mm

Length of stroke

1300 mm

No. of cylinders

16

No. of cranks

16

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

1004 mm

Is there a bearing between each crank

Yes

Revolutions per minute

125

Flywheel dia.

2150 mm

Weight

5600 Kilos

Means of ignition

Compression

Kind of fuel used

Diesel Oil

Crank Shaft, dia. of journals

as per Rule

app^d 487 mm

Crank pin dia.

487 mm

Crank Webs

Mid. length breadth

928 mm

shrink

Thickness parallel to axis

310 mm

Flywheel Shaft, diameter

as per Rule

app^d 343 mm

Intermediate Shafts, diameter

as per Rule

app^d 325 mm

Thrust Shaft, diameter at collars

as per Rule

app^d 343 mm

as fitted

343 mm

Tube Shaft, diameter

as per Rule

—

Screw Shaft, diameter

as per Rule

app^d 375 mm

Is the

tube

shaft fitted with a continuous liner

Yes

Bronze Liners, thickness in way of bushes

as per Rule

app^d 19 mm

Thickness between bushes

as per Rule

14.25 mm

Is the after end of the liner made watertight in the

—

Propeller boss

—

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

One length

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

—

Length of Bearing in Stern Bush next to and supporting propeller

2530 mm

Daphne, Genoa

Propeller, dia.

4540 mm

Pitch

4170 mm

No. of blades

3

Material

Bronze

whether Moveable

Yes

Total Developed Surface

5.90

sq. feet

Method of reversing Engines

Comp. Air

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

Yes

Means of lubrication

Forced

Thickness of cylinder liners

5.8 to 4.1 mm

Are the cylinders fitted with safety valves

Yes

Are the exhaust pipes and silencers water cooled or lagged with

—

—

—

—

—

—

Non-conducting material

Both

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

Cooling Water Pumps, No.

Two centrifugal

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.

Two

Diameter

160 mm

Stroke

270 mm

Can one be overhauled while the other is at work

Yes

—

—

—

—

Pumps connected to the Main Bilge Line

No. and Size

Two duplex

@ 300 x 300 mm

How driven

Electric Motor

Ballast Pumps, No. and size

Two duplex 300 x 300 mm

Lubricating Oil Pumps, including Spare Pump, No. and size

2 @ 65 tons per hour

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

—

—

—

—

—

—

—

—

—

—

—

Holds, &c.

—

—

—

—

—

—

—

—

—

—

—

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

—

—

—

—

—

—

—

—

—

—

—

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

—

—

—

—

—

—

—

—

—

—

—

Are they fitted with Valves or Cocks

—

—

—

—

—

—

—

—

—

—

—

Are the Bilge Suctions in the Machinery Spaces

—

—

—

—

—

—

—

—

—

—

—

Are they fitted with Valves or Cocks

—

—

—

—

—

—

—

—

—

—

—

Are the Overboard Discharges above or below the deep water line

—

—

—

—

—

—

—

—

—

—

—

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

—

—

—

—

—

—

—

—

—

—

—

How are they protected

—

—

—

—

—

—

—

—

—

—

—

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

—

—

—

—

—

—

—

—

—

—

—

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

—

—

—

—

—

—

—

—

—

—

—

Is the Shaft Tunnel watertight

—

—

—

—

—

—

—

—

—

—

—

Is it fitted with a watertight door

—

—

—

—

—

—

—

—

—

—

IS A DONKEY BOILER FITTED? *Yes.*

If so, is a report now forwarded? *Ham. Rpt. 170444 forwarded for completion*

PLANS. Are approved plans forwarded herewith for Shafting *Yes.*
(If not, state date of approval)

Receivers *Yes.*

Separate Tanks *Yes.*

Donkey Boilers *No.*

General Pumping Arrangements *At Naples*

Oil Fuel Burning Arrangements *No.*

SPARE GEAR *Remains to be fitted on board at Genoa.*

Stabilimento Tecnico Triestino
The foregoing is a correct description,
Fabbrica macchine S. Andrea - Trieste

Manufacturer.

DUAL CLASS

L.R. & R.I.

Dates of Survey while building
During progress of work in shops -- *1926 Apr 17, July 16, 19, 20, 21 Aug 4, 26, Sep 4, 11, 14, 15, 17, 21, 23 Oct 9, 15, 20, 23 Nov 5, 6, 8, 10, 12, 18, 19, 20, 22, Dec 7, 8, 9, 16, 21, 22, 23, 24, 28, 30, 31, 1927 Jan 3, 4, 5, 7, 11, 13, 18, 19, 20, 21, 24, 25, 26, 27, 28, 29, 31, Feb 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 14, 16, 17, 18, 19, 22, 23, 24, 25, 26, Mar 3, 5, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 24, 25, 26, 28, 29, 30, 31, Apr 1, 2, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, 20, 23, 24, 26, 29, 30, May 2, 3, 4, 5, 7, 9, 9, 10, 11, 12, 13, 14, 16, 19, 20, 21, 26, 27, June 2, 14, 18 --*
During erection on board vessel --
Total No. of visits *One hundred and fortyone*

Dates of Examination of principal parts -- Cylinders *11.9.26 to 14.5.27* Covers *12.8.26 to 31.3.27* Pistons *29.1.27 to 16.4.27* Rods *21.12.26 to 7.3.27* Connecting rods *21.12.26 to 7.3.27*

Crank shaft *25.9.26 to 30.11.26* Flywheel shafts *10.9.26 to 17.9.26* Thrust shaft *10.9.26 to 17.9.26* Intermediate shafts -- Tube shaft --

Screw shaft -- Propeller -- Stern tube -- Engine seatings -- Engines holding down bolts --

Completion of fitting sea connections -- Completion of pumping arrangements -- Engines tried under working conditions --

Crank shaft, Material *S.M.S.* Identification Mark *295 NG 296 NG* Flywheel shaft, Material *S.M.S.* Identification Mark *280 NG 291 NG*

Thrust shaft, Material *S.M.S.* Identification Mark *280 NG 291 NG* Intermediate shafts, Material -- Identification Marks --

Tube shaft, Material -- Identification Mark -- Screw shaft, Material -- Identification Mark --

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

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.)

This machinery has been constructed under Special Survey in accordance with the Rules and Approved Plans; the materials and workmanship are good. The machinery, which has been forwarded to Genoa to be installed on board the vessel at that port, is eligible, in my opinion, for classification, and to have the record L.M.C. (with date) when it has been satisfactorily installed on board the vessel and examined under working conditions.

The amount of Entry Fee ... £ 6 : 0 : 0
Special ... £ 106 : 4 : 0
Donkey Boiler Fee ... £ 8 : 8 : 0
Travelling Expenses (if any) ... £ 260 : 0 : 0
Committee's Minute *FRI. 18 NOV 1927*
Assigned *See Gen. Rpt. attached no 106817*
To be combined with R1
When applied for, *19*
When received, *20/2/28*
S.H. Forster
Engineer Surveyor to Lloyd's Register of Shipping.
© 2019
Lloyd's Register Foundation