

REPORT ON OIL ENGINE MACHINERY.

No. 7361
30 NOV 1926

Received at London Office

Date of writing Report Nov 22 1926 When handed in at Local Office Nov 23 1926 Port of Trieste

To. in Survey held at Monfalcone & Trieste Date, First Survey June 15 Last Survey Nov 4 1926
eg. Book. Number of Visits four

9967 on the Single Screw vessel Maria Tons Gross 6338
Twin
Triple
Quadruple Net 4006

Built at Monfalcone By whom built Cantiere Nav. Triestino Yard No. 159 When built 1926
Engines made at Turin By whom made Triat. Ital. Grandi Motori Engine No. 1285 When made 1926

Donkey Boilers made at Lunau By whom made Cochran & Co. Lunau P. Boiler No. 9835 When made 1926
Horse Power 2200 Owners Com. Soc. Triest. di Navig. Port belonging to Trieste

Horse Power as per Rule 610 Is Refrigerating Machinery fitted for cargo purposes yes Is Electric Light fitted yes
for which vessel is intended America

ISO GENOA Report No. 9584 Diemel Triat 2 or 4 stroke cycle 2 Single or double acting single
Type of Engines

Pressure in cylinders 34 Kg. Diameter of cylinders 750 mm Length of stroke 1250 mm No. of cylinders 4 No. of cranks 4
bearings, adjacent to the Crank, measured from inner edge to inner edge 1050 mm Is there a bearing between each crank yes

Revs per minute 95 Flywheel dia. 3973 mm Weight 16500 Kg. Means of ignition Compression Kind of fuel used Diemel oil
Shaft, dia. of journals as per Rule 467 mm Crank pin dia. 480 mm Crank Webs Mid. length breadth 650 mm Thickness parallel to axis -
as fitted 480 mm Mid. length thickness 300 mm shrunk Thickness around eyehole -

Propeller Shaft, diameter as per Rule 467 mm Intermediate Shafts, diameter as per Rule 324 mm Thrust Shaft, diameter at collars as per Rule 332 mm
as fitted 480 mm as fitted 300 mm as fitted 360 mm

Shaft, diameter as per Rule - Screw Shaft, diameter as per Rule 372 mm Is the tube shaft fitted with a continuous liner yes
as fitted - as fitted 375 mm screw

Liners, thickness in way of bushes as per Rule 19.4 mm Thickness between bushes as per Rule 14.6 mm Is the after end of the liner made watertight in the
as fitted 20.2 & 21.5 mm as fitted 17.5 mm

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, welded
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 no space

Oil Glands are fitted, is the shaft lapped or protected between the liners - Is an approved Oil Gland or other appliance fitted at the after
tube shaft - Length of Bearing in Stern Bush next to and supporting propeller 1550 mm

Propeller, dia. 4800 mm Pitch 3850 mm No. of blades 4 Material bronze whether Moveable no Total Developed Surface 7.72 m² sq. feet
of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication

Thickness of cylinder liners 60 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with
ducting material yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine.

Water Pumps, No. Attached one 250 x 200 One 100 F. worked by Electric motor Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
Pumps worked from the Main Engines, No. none Diameter - Stroke - Can one be overhauled while the other is at work -

Engines connected to the Main Bilge Line { No. and Size 3 one 10" x 11" one 9" x 11" one 4" x 4 1/2"
How driven Electric motor One Rotary for Main Eng. One worked by Elec. Motor

Oil Pumps, No. and size One 10" x 11" Lubricating Oil Pumps, including Spare Pump, No. and size One worked by Elec. Motor
independent means arranged for circulating water through the Oil Cooler

No. and size:—In Machinery Spaces Six (Three of which direct) Three 3 1/2" Three 4 3/4"
Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Suctions, &c. Two 3 1/2" in each Hold One 3 1/2" in No. 6 Hold bilge well. Two 3 1/2" in C.P. Cofferdam

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size Three 4 3/4" as above
the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces

Are they easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes
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

How are they protected !
Pipes pass through the bunkers !
Have they been tested as per Rule !

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
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
segment to another yes Is the Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from top of cylinder

On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork !
Air Compressors, No. One No. of stages 3 Diameters 140 x 350-130 x 560-350 x 560-140 Stroke 750 mm Driven by Main Motor

Auxiliary Air Compressors, No. One No. of stages 3 Diameters 70 x 270 x 310 Stroke 250 mm Driven by Electric Motor

Auxiliary Air Compressors, No. One No. of stages 3 Diameters 42 x 65 x 185 Stroke 140 mm Driven by Hot bulb Motor
Hand Compressor

Engines crank shafts, diameter as per Rule 147 & 87.5 mm Driven by Main Motor
as fitted 157 & 105 mm

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes
The internal surfaces of the receivers be examined yes by lamp What means are provided for cleaning their inner surfaces openings at ends
Is there a drain arrangement fitted at the lowest part of each receiver yes

Pressure Air Receivers, No. 2 Cubic capacity of each 190 litres Internal diameter 291 mm thickness 12.5 mm
Material Steel Range of tensile strength 45 Kg/cm² Working pressure by Rules 82.5 Kg/cm²
Are they lap welded or riveted longitudinal joint seamless

IS A DONKEY BOILER FITTED? *yes*

If so, is a report now forwarded? *yes*

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

Receivers *yes*

Separate Tanks *yes*

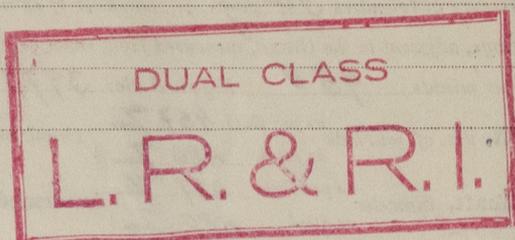
Donkey Boilers *yes*

General Pumping Arrangements *yes*

Oil Fuel Burning Arrangements

SPARE GEAR *See attached list*

The nuts for main bearings bolts and for the crank and coupling bolts have not been supplied; the builders state that these nuts will be placed on board at Marseilles when the vessel is now bound for. Surveyors advised.
See Nap. Rpt 2664.



The foregoing is a correct description,

Manufacturer.

See also Genos Report No 9584

Dates of Survey while building
During progress of work in shops --
During erection on board vessel -- *1926 June 15, 18, 23, July 6, Aug 9, Sep 15, 17, 27, 30, Oct 7, 8, 9, 13, 16, 19, 22, 25, 26, 29, Nov 1, 2, 3, 4*
Total No. of visits *Twenty four*

Dates of Examination of principal parts—Cylinders *15.9.26* Covers *27.9.26* Pistons *27.9.26* Rods *27.9.26* Connecting rods *9.10.26*
Crank shaft *9.10.26* Flywheel shaft *9.10.26* Thrust shaft *9.10.26* Intermediate shafts *23.6.26* Tube shaft —
Screw shaft *23.6.26* Propeller *22.10.26* Stern tube *15.6.26* Engine seatings *17.9.26* Engines holding down bolts *9.10.26*
Completion of fitting sea connections *18.6.26* Completion of pumping arrangements *29.10.26* Engines tried under working conditions *4.11.26*
Crank shaft, Material *Steel* Identification Mark *1, 2, 116 CNS* Flywheel shaft, Material *Steel* Identification Mark *207 CNS*
Thrust shaft, Material *Steel* Identification Mark *207 CNS* Intermediate shafts, Material *Steel* Identification Marks *183, 189, CNS*
Tube shaft, Material — Identification Mark — Screw shaft, Material *Steel* Identification Mark *184 CNS*

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. *(Genos Report)*) This oil engine machinery has been constructed under special survey, in accordance with the approved plans, the Secretary letters and the requirements of the Rules. Materials and workmanship are good. In my opinion the machinery, which has been taken to Trieste for fitting on board is such as may be fitted in a vessel building to the Society's class.

The engine has been placed on board at the Cantine Navale di Torino, Monfalcone, fitted under special survey, examined and tested under full working condition and found in order. In my opinion the machinery is eligible for the notation of + LMC H. 26 (subject to the main engine spare gear being completed.) *Placed on board See Nap Rpt*

Trieste Office

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

The amount of Entry Fee ... £ *681.-* When applied for, *27.11.1926*
1/5 Special ... £ *2395.-*
Donkey Boiler Fee *Chgo. at Glasgow* : When received, *11/27/26*
Travelling Expenses (if any) £ *685.-*
Special Fees, Sun. & Holiday Rate £ *840.-*
Committee's Minute **FRI. 3 DEC 1926**

Assigned *+ L.M.C. 11.26 Ch. Oil Engines*

