

REPORT ON OIL ENGINE MACHINERY.

No. 3957

Date of writing Report 12-1-34 When handed in at Local Office 12-1-34 Port of BARCELONA
No. in Survey held at BARCELONA Date, First Survey 13-7-32 Last Survey 3-1-34
Reg. Book. *Single* on the *Twin* *Triple* *Quadruple* Screw vessel M/V "CAMPILO" Number of Visits 63

Built at Valencia By whom built Unión Naval de Levante Yard No. 22 When built
Engines made at Barcelona By whom made La Maquinista Terrestre y Marítima Engine No. 1&2 When made 1933
Donkey Boilers made at Valencia By whom made Unión Naval de Levante Boiler No. When made 1933
Brake Horse Power 1950 Owners C.A.M.P.S.A. Port belonging to
Nom. Horse Power as per Rule 543 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which vessel is intended 2178 3938

IL ENGINES, &c.—Type of Engine Vertical heavy oil engines. air injection cycle 4 Single or double acting Single
Maximum pressure in cylinders 40 Kgs/cm Diameter of cylinders 550 m/m Length of stroke 1000m/m No. of cylinders 2x6 No. of cranks 2x6
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 710 m/m Is there a bearing between each crank Yes
Revolutions per minute 125 Wheel dia. 1362 m/m Weight 850 Kgs Means of ignition Air compression Crude oil flash point above 150°F
Crank Shaft, dia. of journals as per Rule 329 m/m as fitted 345 m/m Crank pin dia. 345 m/m Crank Webs Mid. length breadth 696 m/m Mid. length thickness 195 m/m Thickness parallel to axis 215 m/m Thickness around eyehole 170 m/m
Wheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule 283.7 m/m as fitted 286 m/m Thrust Shaft, diameter at collars as per Rule 298 m/m as fitted 345 m/m
Crank Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 308 m/m as fitted 311 m/m Is the tube screw shaft fitted with a continuous liner Yes
Cylinder Liners, thickness in way of bushes as per Rule 17 m/m as fitted 20m/m & 22m/m Thickness between bushes as per rule 12.75m/m as fitted 14.5m/m Is the after end of the liner made watertight in the
eller boss Yes 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 Fitting
If no liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after
of the tube shaft Wood Length of Bearing in Stern Bush next to and supporting propeller 1.600 m
Propeller, dia. 3506 m/m Pitch 3048m/m No. of blades 3 Material Bronze whether Movable No Total Developed Surface 2.88m² sq. feet
Method of reversing Engine Direct reversible Is a governor or other arrangement fitted to prevent racing of the engine when de-actuated Yes Means of lubrication
Lubrication of cylinder liners 38-30 m/m Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
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
Sinking Water Pumps, No. 2 off centrifugal pumps 150 tons each Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Pumps worked from the Main Engines, No. each engine of trunk 150m/m Stroke 175m/m Can one be overhauled while the other is at work Yes
Pumps connected to the Main Bilge Line No. and Size How Driven
Sinking Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size
No independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Pumps, No. and size:—In Machinery Spaces
Holds, &c.

Dependent Power Pump Direct Suctions to the Engine Room Bilges, No. and size
All the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Spaces
From easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges
All Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks
They fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the Overboard Discharges above or below the deep water line
They each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate
Pipes pass through the bunkers How are they protected
Pipes pass through the deep tanks Have they been tested as per Rule
All Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
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
partment to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from
Wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork
Air Compressors, No. 2 off No. of stages 3 Diameters 600-540-120m/m Stroke 320m/m Driven by main eng.
Auxiliary Air Compressors, No. 2 off No. of stages 3 Diameters 320-280-70m/m Stroke 170m/m Driven by aux.eng.
Auxiliary Air Compressors, No. 1 off No. of stages 2 Diameters 90-36m/m Stroke 120m/m Driven by hand
Sinking Air Pumps, No. Diameter Stroke Driven by
Auxiliary Engines crank shafts, diameter as per Rule 162m/m. Aux. Diesel oil eng. 2 off-3 cyl-4SCSA-150BHP each-Cyl. dia. 310m/m Stroke 350m/m
as fitted 170m/m

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces
Is there a drain arrangement fitted at the lowest part of each receiver Yes
High Pressure Air Receivers, No. 2 off (working) Working 150 litres each 318m/m 12.5m/m
2 off (reserved) Reserve 300 " Internal diameter 448m/m 17.5m/m
Seamless, lap welded or riveted longitudinal joint Seamless Material SM Steel Range of tensile strength 45.4/46.4 Working pressure by Rule 74.5Kgs/cm² (Actual 77.4Kgs/cm² (65ATM)
Starting Air Receivers, No. 2 Total cubic capacity 20 cub. metres Internal diameter 1544m/m Thickness 22m/m
Seamless, lap welded or riveted longitudinal joint Rivetted DB Serial SM Steel Range of tensile strength 44/50Kgs Working pressure by Rule 25.4Kg/cm (Actual 25Kg/cm²)

IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Previously forwarded
PLANS. Are approved plans forwarded herewith for Shafting 11-11-32 Receivers 11-11-32 Separate Tanks
Donkey Boilers General Pumping Arrangements Oil Fuel Burning Arrangements
SPARE GEAR Spare gear as required by the Rules has been supplied.
A complete list of spare gear supplied is shown on the accompanying list.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops - 1932 July 13 Aug 2.9 Sept 7.16.26 Oct 7.8.18 Nov 4.17.22 Dec 7.21 1933 Jan 5.12.30 Feb 4.11.21 Mar 10 April 14.8.16
During erection on board vessel - June 8.10.13.17.21.29 July 4.13.25.26 Aug 2.8.12.21.26 Sept 2.15 Oct 3.9.16.14.21.26.30 Nov 6.10.20.23.25.29 Dec 7 1934
Total No. of visits

Dates of Examination of principal parts - Cylinders 12-8-33 Covers 12-8-33 Pistons 12-8-33 Rods 15-5-33 Connecting rods 12-5-33
Crank shaft S.26-7-33 Flywheel shaft Thrust shafts 26-7-33 & 28-8-33 Intermediate shafts 28-8-33 Tube shaft
Screw shaft Propeller Stern tubes 12-5-33 & 15-5-33 Engine seatings Engines holding down bolts in shop S.10-11-33
Completion of fitting sea connections Completion of pumping arrangements S.26-7-33.GJT Engines tried under working conditions P.14-12-33
Crank shaft, Material SM Ingot steel Identification Mark P.28-8-33.GJT Flywheel shaft, Material Identification Mark S.28-8-33
Thrust shaft, Material SM Ingot steel Identification Mark S.26-7-33.GJT Intermediate shafts, Material SM Ingot steel Identification Marks P.28-8-33
Tube shaft, Material Identification Mark Screw shaft, Material SM Ingot steel Identification Mark

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

If so, have the requirements of the Rules been complied with

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo

If so, state name of vessel

Is this machinery duplicate of a previous case

This machinery has been constructed

General Remarks (State quality of workmanship, opinions as to class, &c.)

under Special Survey in accordance with the Society's Rules and approved plans and the materials and workmanship are good. The machinery has been finally examined under full working conditions on the test bed and found, as far as can be seen, to be satisfactory in every respect.

The material used in the construction of the engines and air receivers has been tested as required by the Rules, the corresponding certificates being attached herewith.

Recommended the vessel's machinery to have notation of +LMC with date and "OIL ENGINE" when machinery has been fitted onboard and tested to the satisfaction of the Surveyors to this Society.

The amount of Entry Fee ... £ 8 : - : When applied for, 24.1.34 from Lon.
Special Air Receivers ... £ 155 : - :
Donkey Boiler Fee ... £ 12 : - :
Travelling Expenses (if any) £ 1 : 10/- : 10.3.34 W

Committee's Minute

Assigned

See Val. 300

FRI, 20 JUL 1934

Engineer Surveyor to Lloyd's Register of Shipping



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