

REPORT ON OIL ENGINE MACHINERY.

No 13245

Received at London Office

Date of writing Report 16.3.49 When handed in at Local Office 24.3.49 Port of TRIESTE

No. in Survey held at Trieste Date, First Survey 24th JANUARY 47 Last Survey 14th MARCH 1949

95603 on the ^{Single} ~~Twin~~ ^{Triple} ~~Quadruple~~ Screw vessel M/V. "Port Said"

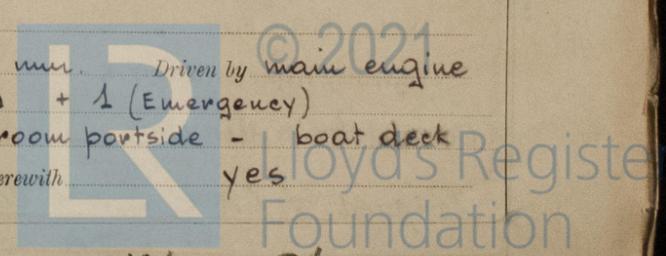
Tons: Gross ✓ Net ✓

Built at Trieste By whom built Cant. Riun. dell' Adriatico Yard No. 1747 When built 1949
Engines made at Trieste By whom made do Engine No. 5494 When made 1949
Donkey Boilers made at Trieste By whom made do Boiler No. 1921 When made 1949
Brake Horse Power 4200 Owners Mistr Navigation Co. Port belonging to Alexandria
Nom. Horse Power as per Rule 842 = MN Is Refrigerating Machinery fitted for cargo purposes yes Is Electric Light fitted yes
Trade for which vessel is intended General cargo - Refrigerated cargo - Passengers

ALL ENGINES, &c. Type of Engines DIESEL - SULZER 6 SD 72 2 or 4 stroke cycle 2 Single or double acting S.A.
Maximum pressure in cylinders 55 kgs/cm² Diameter of cylinders 28 3/8" 49 3/16" Length of stroke 1250 mm No. of cylinders 6 No. of cranks 6
Mean Indicated Pressure 5.95 Flywheel dia. 2423 mm Weight 2194 kgs. Means of ignition compr. Kind of fuel used heavy oil
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 930 mm. Is there a bearing between each crank yes
Revolutions per minute 130 Crank Shaft, { Solid forged as per Rule dia. of journals as fitted 490 mm. Crank pin dia. 490 mm. Crank Webs Mid. length breadth 860 mm. Thickness parallel to axis ✓
Flywheel Shaft, diameter as per Rule as fitted 490 mm. Intermediate Shafts, diameter as per Rule as fitted 335 mm. Thrust Shaft, diameter at collars as per Rule as fitted 490 mm.
Tube Shaft, diameter as per Rule as fitted ✓ Screw Shaft, diameter as per Rule as fitted 370 mm. Is the { tube screw } shaft fitted with a continuous liner { yes
Bronze Liners, thickness in way of bushes as per Rule as fitted 20 mm. Thickness between bushes as per Rule as fitted 15 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 ✓
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 ✓
Propeller, dia. 4940 mm Pitch 3750 mm No. of blades 3 Material bronze whether Moveable no Total Developed Surface 7.69 m. sq. feet
Method of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes
forced Thickness of cylinder liners 43 mm. Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting 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 ✓
Cooling Water Pumps, No. 2 SW - 2 FW 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. 1 Diameter 186 mm. Stroke 160 mm Can one be overhauled while the other is at work ✓
Pumps connected to the Main Bilge Line { No. and Size 3 of 90 Tons/h. - 1 of 60 Tons/h. How driven electric motors main engine
Is the cooling water led to the bilges no If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements ✓
Ballast Pumps, No. and size 1 of 90 Tons/h. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 of 43 - 1 of 35 - 2 of 5 T/h.
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 4 at 80 mm - 1 at 80 mm in tunnel In Pump Room ✓
Holds, &c. No 1 - 2 at 80 mm. - No 2 - 2 at 100 mm. - No 3 - 2 at 80 mm. - No 4 - 2 at 80 mm.
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 at 125 mm S. - 2 at 125 mm P.
Are all the Bilge Suction pipes in Holds and Tunnel Well filled 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
Are all Sea Connections filled direct on the skin of the ship yes Are they filled with Valves or Cocks yes
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 below
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
Do all pipes pass through the bunkers ✓ How are they protected ✓
Do all 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 main deck ✓
On 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 2 Diameters 160 m³ Stroke cap. each Driven by electric motors
Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 23 litres stroke capacity Driven by hand
Is provision made for first Charging the Air Receivers hand compressor
Refrigerating Air Pumps, No. 1 x 2 (tandem) Diameter 1450 mm. Stroke 750 mm. Driven by main engine
Auxiliary Engines crank shafts, diameter as per Rule as fitted 170 mm. - 75 mm. No. 3 + 1 (Emergency) Position Engine room portside - boat deck
Have the Auxiliary Engines been constructed under special survey yes Is a report sent herewith yes

See 26/4/49



28 MAR 1949

AIR RECEIVERS: - Have they been made under survey yes ✓ State No. of Report or Certificate N° 1157
 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 and cleaned yes ✓ Is a drain fitted at the lowest part of each receiver yes ✓
Injection Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓
 Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules ✓
 Actual 1594 M/M 29 M/M
Starting Air Receivers, No. 2 + 2 bottles Total cubic capacity 24000 litres Internal diameter 1600 M/M thickness 29 M/M
 Seamless, lap welded or riveted longitudinal joint riveted Material steel Range of tensile strength ✓ Working pressure Actual 30 Kgs/cm²
 If so, is a report now forwarded? yes

IS A DONKEY BOILER FITTED? yes ✓ If so, is a report now forwarded? yes
 Is the donkey boiler intended to be used for domestic purposes only no
PLANS. Are approved plans forwarded herewith for Shafting yes Receivers yes Separate Fuel Tanks yes
 (If not, state date of approval)
 Donkey Boilers yes General Pumping Arrangements yes Pumping Arrangements in Machinery Space yes
 Oil Fuel Burning Arrangements yes

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes ✓
 State the principal additional spare gear supplied 1 screw shaft - 1 cylinder liner - miscellaneous small
12/12/48 for 3000

Torsional vibration characteristics approved with Secretary's letter 2.5.47
 Notice plate fitted reading: Main engine not to be run continuously below 40 r.p.m.

The foregoing is a correct description.
 Cantieri Riuniti Dell'Adriatico
 FABBRICA MACCHINE S. ANGELO
 Manufacturer.

Dates of Survey while building
 During progress of work in shops - 1947-JAN: 24, MAR: 11, AUG: 22, 25, 28, 30, SEP: 3, 5, 8, OCT: 1, 11, NOV: 15, 1948 JAN: 16, 20, 26, FEB: 2, MAR: 5, 18, 23, APR: 7, 29, 30, MA
 During erection on board vessel - 1948: SEP: 15, 17, 22, 23, OCT: 1, 4, 6, 12, 13, 15, 22, 23, 26, 27, 30, NOV: 25, DEC: 1, 6, 7, 9, 13, 14, 16, 17, 23, 1949 JAN: 4, 5,
 17, 18, 21, FEB: 3, 4, 7, 23, MAR: 8, 9, 10, 11, 12, 14. -
 Total No. of visits 84.

Dates of Examination of principal parts - Cylinders 23.12.48 Covers 23.12.48 Pistons 23.12.48 Rods ✓ Connecting rods 23.12.48
 Crank shaft 23.12.48 Flywheel shaft 23.12.48 Thrust shaft 23.12.48 Intermediate shafts 16.1.49 Tube shaft ✓
 Screw shaft 6.9.48 Propeller 17.9.48 Stern tube 6.9.48 Engine seatings 6.9.48 Engines holding down bolts 7.2.49
 Completion of fitting sea connections 6.9.48 Completion of pumping arrangements 10.3.49 Engines tried under working conditions 12.3.49
 Crank shaft, Material S.M.S. Identification Mark Lloyd's R {878, 939} A.G. Flywheel shaft, Material S.M.S. Identification Mark Lloyd's R 48 A
 Thrust shaft, Material S.M.S. Identification Mark Lloyd's R 48 A.G. Intermediate shafts, Material S.M.S. Identification Marks Lloyd's F {818-8, 685-8, 768-8}
 Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material S.M.S. Identification Mark Lloyd's F126
 Identification Marks on Air Receivers 725 and bottles 1-83554 & 1-83555
 Lloyd's Test TP 50 Kgs/cm² Lloyd's Test TP 48.5 Kgs/cm² Lloyd's Test TP 60 Kgs/cm²
WP 30 WP 30 WP 30
L.S. 25-8-47 S.C. 9.12.48 G.M. 21.8.47

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 ✓
 Description of fire extinguishing apparatus fitted CO₂ led to engine room - Steam with remote control under boiler.
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo yes (veg. oil) If so, have the requirements of the Rules been complied with yes
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with ✓
 Is this machinery duplicate of a previous case yes If so, state name of vessel "Star of Suez" Yard N° 1742

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The machinery of this vessel has been constructed under special survey in accordance with the Secretary's letters and approved plans. All important forgings and castings were made and inspected in accordance with the Rules, excepting the main engine rods which were made and tested in 1941 by Society's pre-war Surveyors at Dusseldorf and the results shown in their certificates have now confirmed by Briwell tests and the parts found satisfactory.
 The workmanship and materials are good. The machinery was installed on board the vessel in an efficient manner and found satisfactory when tested at sea in full working condition.
 In our opinion, the machinery of this vessel is eligible to be classed with record
 L.M.C. 3-49 Oil Engine - Screw shaft C.L. - 1 D.B. 100

The amount of Entry Fee wire 584.160.- When applied for, 19.-
 Special £ : :
 Donkey Boiler Fee £ : : When received, 19.-
 Travelling Expenses (if any) £ : : 19.-

John M'Gee Engineer Surveyor to Lloyd's Register of Shipping
Sept Belar

Committee's Minute FRI 29 APR 1949
 Assigned + LMC 3,49 Oil Eng.
C.L. DB 100lb.

