

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 9640

15 JUL 1932

Date of writing Report

19

When handed in at Local Office

11th July 1932 Port of TRIESTE

Received at London Office

No. in Survey held at

Monfalcone

Date, First Survey

14th October 1931

Last Survey

6th July 1932

Reg. Book.

42078

on the
Single
Twin
Triple
Quadruple

Screw vessel

R. L. Hague

Number of Visits

40

Tons

Gross 12425

Net 7096

Built at Monfalcone

By whom built Cantieri Riuniti dell'Adriatico Yard No. 249 When built 1932

Engines made at Turin

By whom made Fiat Fab. Gr. Mot. Engine No. 1801 When made 1932

Donkey Boilers made at Newcastle

By whom made R. & F. Hawthorn Leslie & Co. Boiler No. 9548 When made 1932

Brake Horse Power 4500

Owners Harco T. K. Schiff & Co. Port belonging to Sanzig

Nom. Horse Power as per Rule 4167

Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which vessel is intended carrying Petroleum in Bulk

IL ENGINES, &c. Type of Engines Fiat 45606 6-cylinder 2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 49 kg Diameter of cylinders 600 mm Length of stroke 1100 mm No. of cylinders 6 x 2 No. of cranks 6 x 2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 820 mm Is there a bearing between each crank yes

Revolutions per minute 120 Flywheel dia. 2560 mm Weight 7600 kg Means of ignition Compress. Kind of fuel used Diesel Oil

Crank Shaft, dia. of journals as per Rule 377 mm Crank pin dia. 400 mm Crank Webs Mid. length breadth 550 mm Thickness parallel to axis -

as fitted 400 mm Mid. length thickness 225 mm Thickness around eye-hole -

Flywheel Shaft, diameter as per Rule 377 mm Intermediate Shafts, diameter as per Rule 273 mm Thrust Shaft, diameter at collars as per Rule 287 mm

as fitted 400 mm as fitted 315 mm as fitted 400 mm

Tube Shaft, diameter as per Rule - Screw Shaft, diameter as per Rule 305 mm Is the tube shaft fitted with a continuous liner yes

as fitted - as fitted 398 mm as fitted 13 mm Is the after end of the liner made watertight in the

Bronze Liners, thickness in way of bushes as per Rule 17 mm Thickness between bushes as per Rule 18 mm

as fitted 23 1/2 & 22 1/2 mm as fitted 18 mm

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 no If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 1971 mm

Propeller, dia. 4250 mm Pitch 3720 mm No. of blades 3 Material Bronze whether Moveable yes Total Developed Surface 4.39 sq. ft

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 53 1/2 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 3 Barrels 215 x 200 As the sea suction provided with an efficient strainer which can be cleared within the vessel yes

What special arrangements are made for dealing with cooling water if discharged into bilges discharge overboard

Bilge Pumps worked from the Main Engines, No. 2 Diameter 215 mm Stroke 200 mm Can one be overhauled while the other is at work yes

Pumps connected to the Main Bilge Line No. and Size 2 180 x 210 230 x 180 In Main pump space 1 320 x 220

How driven Steam In Forward pump space 1 320 x 220

Ballast Pumps, No. and size 2 230 x 180 320 x 220 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size One 350

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 6 at 3 1/2"; Loffendamm under Eng. 6 at 2" Boiler space 1 at 3" In Pump Room 3 at 3 1/4"

In Holds, &c. 2 at 3"; Chain locker 1 at 3"; Fore Peak 1 at 3"; Forward Pump space 1 at 3"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size To Bilge Pump 1 at 1 1/2" To Cond. Lin. Pump 1 at 200 mm

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 & cocks

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 none Is it fitted with a watertight door - worked from -

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. none No. of stages - Diameters - Stroke - Driven by -

Auxiliary Air Compressors, No. One No. of stages Two Diameters 310 x 270 mm Stroke 350 mm Driven by Steam Eng.

Small Auxiliary Air Compressors, No. One No. of stages Two Diameters 180 x 160 mm Stroke 160 mm Driven by Steam Eng.

Scavenging Air Pumps, No. One on each Eng. Diameter 2 Cyl. Tandem 920 Stroke 980 mm Driven by Main Eng.

Auxiliary Engines crank shafts, diameter as per Rule - Position -

AIR 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 and cleaned yes Is a drain fitted at the lowest part of each receiver yes

High Pressure Air Receivers, No. None Cubic capacity of each - Internal diameter - thickness -

Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -

Starting Air Receivers, No. Two Total cubic capacity 17800 litres Internal diameter 1949 mm thickness 25 mm

Seamless, lap welded or riveted longitudinal joint riveted Material S.M.P. Range of tensile strength 47-53 kg Working pressure by Rules 24.62 kg

Actual 24.5 kg

010355-010361-0190

IS A DONKEY BOILER FITTED? ^{2 Cylindrical and 2 Clarkson waste heat boilers} If so, is a report now forwarded? ^{yes Newcastle Rep. No 8818 for Cyl. Boilers}

Is the donkey boiler intended to be used for domestic purposes only

PLANS. Are approved plans forwarded herewith for Shafting ^(If not, state date of approval) 28.7.31 Receivers 16.6.31 Separate Tanks 1.7.31
Donkey Boilers ☒ General Pumping Arrangements 3.7 & 14.7.31 Oil Fuel Burning Arrangements 16.7.31 & 28.6.32

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes

State the principal additional spare gear supplied One propeller Box. 4 Propeller blades. 1 Propeller shaft. One Piston complete with rod etc. 2 piston heads. 1 Cylinder liner. 1 Cylinder cover. One fuel pump complete. One bottom end bearing. One complete set of valves for one cylinder cover. 10 Telescopic pipes. 2 sets of top end bearings. One set of main bearings. Various spare pieces for fuel pump, cam shafts, lubricating arrangement etc. One set of main bearing for compressor, one set of bottom end bearing. One complete compressor piston. One compressor cylinder & suction & delivery valve. One cylinder cover. 2 complete set of valves of various sizes. One complete set of pads for thrust block. Complete spare of valves, springs etc. for each pump or other aux. on board.

The foregoing is a correct description.

Manufacturer.

Dates of Survey while building { During progress of work in shops - Please see Genoa Report No 12429 ^{1931 Dec 19, 1932 Jan 19, 23, Feb 8, 17, Mar 1, Apr 5, May 7}
{ During erection on board vessel - 1931 Oct 14, Nov 24, 30 Dec 10, 1932 Jan 8, 13, 16, 18, 26, Feb 4, 17, Apr 14, 16, 18, May 3, 9, 12, 18, 25, June 3, 6, 8, 10, 13, 17, 21, 24, 27, July 1, 1932
{ Total No. of visits forty two

Dates of Examination of principal parts—Cylinders 16.4 & 12.5.32 Covers 16.4 & 12.5.32 Pistons 16.4 & 12.5.32 Rods 16.4 & 12.5.32 Connecting rods 16.4 & 12.5.

Crank shaft 14.4 & 3.5.32 Flywheel shaft 14.4 & 3.5.32 Thrust shaft 14.4 & 3.5.32 Intermediate shafts 26.1.32 Tube shaft —

Screw shaft 13.1.32 Propeller 16.1.32 Stern tube 13 & 16.1.32 Engine seatings 30.11.31 Engines holding down bolts 3.5.32 & 12.5.

Completion of fitting sea connections 13.1.32 Completion of pumping arrangements 6.6.32 Engines tried under working conditions 27-7.32

Crank shaft, Material S.M.S. Identification Mark 4034 MK 13.2.31 Flywheel shaft, Material S.M.S. Identification Mark see thrust

Thrust shaft, Material S.M.S. Identification Mark 4035 MK 13.2.31 Intermediate shafts, Material S.M.S. Identification Marks 491-492

Tube shaft, Material — Identification Mark 4036 MK 13.2.31 Screw shaft, Material Steel Identification Mark 2524 FK 17.9

Is the flash point of the oil to be used over 150° F. yes Spare 2531 FK 30.9

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

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 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 under special survey at Turin and fitted on board at Moulon. It has been examined during erection and tested satisfactorily in working condition and in my opinion is eligible to have the notation of + L M C 7.32

The two Clarkson Boilers have been satisfactorily fitted on board and their safety valves were adjusted to blow at 100 lbs. (See Genoa Rep. No 17944)

The amount of Entry Fee .. £ : : When applied for, 19
Special ... £ 25 : 16 8.
Donkey/Boiler Fee ... £ 9 : 1 0.
Travelling Expenses (if any) £ 8 : 8 0.
When received, 79 1932

Committee's Minute TUE 19 JUL 1932

Assigned + L.M.C. 7.32
2 O.B. (a) 200 lb. Oil Eng.
2 O.B. (b) 100 lb. C.L.

R. H. Sparrow
Engineer Surveyor to Lloyd's Register of Shipping.

