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REPORT ON OIL ENGINE MACHINERY.

No. 2810 PE
16 JUN 1951

Received at London Office

of writing Report 11/5/51 19 When handed in at Local Office 11/5/51 19 Port of Valparaiso

Survey held at Valparaiso Date, First Survey Last Survey 7/5/51 19

Book. Number of Visits

on the ^{Single} ~~Twin~~ ^{Triple} ~~Quadruple~~ Screw vessel M/V "Amadeo" Tons ^{Gross} 3799 ^{Net} 2160

at Savannah, Ga. By whom built Southeastern S.B. Corp. Yard No. 1502 When built 1945

Completed Norfolk, Va. By whom made Welding Shipyards, Inc. Engine No. 8119 When made

Boilers made at Hamilton, O. By whom made General Machinery Corp. Serial No. Boiler No. 51092 When made 1945

Boilers made at New York By whom made Ames Iron Works

Horse Power 1700 SHP at 180 RPM Owners Cia. Chilena de Nav. Interoceánica Port belonging to Valparaiso

Horse Power as per Rule 498 MN Is Refrigerating Machinery fitted for cargo purposes. yes Is Electric Light fitted. yes

for which vessel is intended General Cargo.

ENGINES, &c. — Type of Engines Heavy oil engine 2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 750 lbs/sq. ins. Diameter of cylinders 21 1/2" Length of stroke 27 1/2" No. of cylinders 6 No. of cranks 6

Indicated Pressure 87 lbs/sq. ins. Flywheel dia. 86" Weight 21,000 lbs Means of ignition Compr. Kind of fuel used Diesel oil

of bearings, adjacent to the crank, measured from inner edge to inner edge 26 1/2" Is there a bearing between each crank. yes

Revolutions per minute 180

Shafts — Solid forged dia. of journals as per Rule 16" Crank pin dia. 1.5" Crank webs Mid. length breadth 18 1/2" Thickness parallel to axis ---

Semi built as fitted 16" Crank webs Mid. length thickness 6 3/4" shrunk Thickness around eye hole ---

All built

Propeller Shaft, diameter as per Rule 16" Intermediate Shafts, diameter as per Rule 9 3/8" Thrust Shaft, diameter at collars as fitted 10 1/4"

Shaft, diameter as per Rule --- Screw Shaft, diameter as per Rule 10.5" Is the ^{tube} ~~screw~~ shaft fitted with a continuous liner { yes

Liners — Thickness in way of bushes as per Rule 11/16" Thickness between bushes as fitted 21/32" Is the after end of the liner made watertight in the stern tube boss. yes

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

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-conductive. ---

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 tube shaft. no

If so, state type. --- Length of bearing in Stern Bush next to and supporting propeller 3'-6 3/16"

Propeller — dia. 11 ft Pitch 6.6 No. of blades 3 Material Bronze whether moveable fixed Total developed surface --- sq. feet

Reversing Engines Compr. air Is a governor or other arrangement fitted to prevent racing of the engine when disengaged. yes Means of operation forced Thickness of cylinder liners 1.62 Are the cylinders fitted with safety valves. yes Are the exhaust pipes and silencers water cooled with non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned to the engine. ---

Cooling Water Pumps — No. FW 2 SW 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel. no

Pumps worked from the Main Engines, No. --- Diameter --- Stroke --- Can one be overhauled while the other is at work. ---

connected to the Main Bilge Line { No. and size (2) 300 SPM How driven Electric motor

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. ---

Oil Pumps — No. and size (1) 300 GPM Power Driven Lubricating Oil Pumps, including spare pump, No. and size (2) 500 GPM

independent means arranged for circulating water through the Oil Cooler. yes Suctions, connected to both main bilge pumps and auxiliary pumps, No. and size: — In machinery spaces (1) — 3" dia. Port & Stbd. (1) — 3" dia. Tunnel well in pump room. ---

Direct Suctions — No. 1 (1) — 3" P & S; No. 2 (1) — 3" P & S; No. 3 (1) — 3" dia. P & S; Refr. Hold drain well (1) — 3"

independent Power Pump Direct Suctions to the engine room bilges, No. and size (1) 4" P & S (1) 8" dia.

Are the bilge suction pipes in holds and tunnel well fitted with strum-boxes. yes Are the bilge suction 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. Mud boxes on main bilge line

Sea Connections fitted direct on the skin of the Ship. yes Are they fitted with valves or cocks. valves Are they fixed readily 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. both

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. ---

Do pipes pass through the bunkers. --- How are they protected. ---

Do pipes pass through the deep tanks. Fore peak tank suction Have they been tested as per Rule. ---

Are pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times. yes

Are arrangements 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 or from one compartment to another. yes Is the shaft tunnel watertight. --- Is it fitted with a watertight door. --- worked from. ---

Air Compressors — No. --- No. of stages --- diameters --- stroke --- driven by ---

Auxiliary Air Compressors, No. 2 No. of stages 2 diameters 5" & 3" stroke 5" driven by elec. motor

Auxiliary Air Compressors, No. 1 No. of stages 2 diameters 4" & 1 1/2" stroke 3 1/2" driven by elec. motor

Provision is made for first charging the air receivers. By the small aux. air compressors. Current supplied from the battery started auxiliary generator.

Air Pumps — No. 1 diameter 16" x 42" Rotary stroke --- driven by Main engines

Engine crank shafts, diameter as per Rule 8 1/2" Position Port side engine room

Have auxiliary engines been constructed under special survey. American Bureau Survey Is a report sent herewith. no

2220-410410-0222
014004-01400410

Lloyd's Register Foundation

AIR RECEIVERS:—Have they been made under survey American Bureau Survey State No. of report or certificate AB tested 7/28/47

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
Starting Air Receivers, No. 4 Total cubic capacity (3) 210 Internal diameter (3) 3' thickness 3/4" Actual --
 Seamless, lap welded or riveted longitudinal joint welded Material steel Range of tensile strength -- Working pressure 3/8" Actual 350

IS A DONKEY BOILER FITTED yes If so, is a report now forwarded See Vpo Report No 2654 dated 11/1/50
 Is the donkey boiler intended to be used for domestic purposes only yes

PLANS. Are approved plans forwarded herewith for shafting -- Receivers -- Separate fuel tanks --
 (If not, state date of approval)
 Donkey boilers -- General pumping arrangements -- Pumping arrangements in machinery space --
 Oil fuel burning arrangements --

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes
 State the principal additional spare gear supplied 1 set main bearings 1 overspeed governor
2 top end pins (thrust shaft) 2 spare shoes
1 fuel pump complete
5 fuel valves
2 starting valves

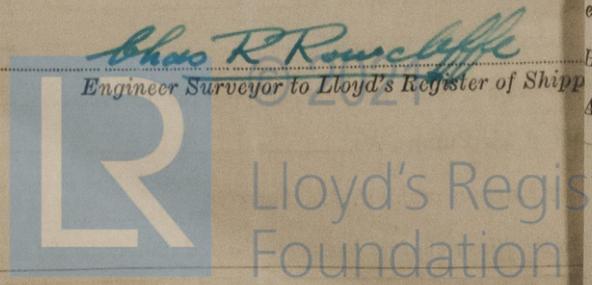
The foregoing is a correct description, Manufacturer.

Dates of Survey while building	During progress of work in shops - -	WLD PV No484
		ST 3/8 SD 24
	During erection on board vessel - -	Surge Tank TS 55000 CLBGR 5121
Total No. of visits		TP 550 SWP 275
		MTL STL USOC RIW
Dates of examination of principal parts—Cylinders <u>7/5/51</u> Covers <u>7/5/51</u> Pistons <u>7/5/51</u> Rods <u>--</u> Connecting rods <u>7/5/51</u>		
Crank shaft <u>--</u>	Flywheel shaft <u>--</u>	Thrust shaft <u>--</u>
Screw shaft <u>4/1/51</u>	Propeller <u>4/1/51</u>	Stern tube <u>4/1/51</u>
Completion of fitting sea connections <u>--</u>		Completion of pumping arrangements <u>--</u>
Crank shaft, material <u>--</u>	Identification mark <u>--</u>	Flywheel shaft, material, <u>--</u>
Thrust shaft, material <u>--</u>	Identification mark <u>--</u>	Intermediate shafts, material <u>--</u>
Tube shaft, material <u>--</u>	Identification mark <u>--</u>	Screw shaft, material <u>--</u>
Identification marks on air receivers		Identification mark <u>--</u>
PENNA RANGE BOILER Co. PENNA RANGE BOILER Co. PENNA RANGE BOILER Co. PAST-L 1882 MAX WP 350 PAST-L 1882 MAX WP 350 PAST-L 1882 MAX WP 350 ASME CODE MAX TEMP 700 ASME CODE MAX TEMP 700 ASME CODE MAX TEMP 700 SERIAL NO 4365 SERIAL NO 4364 SERIAL NO 4073 Starboard PAR U69 BUILT 1946 Port PAR U69 BUILT 1946 Centre PAR U69 BUILT 1946 PHILA PENNA PHILA PENNA PHILA PENNA TESTED 7/28/47 TESTED 7/28/47 TESTED 7/28/47		
Is the flash point of the oil to be used over 150°F <u>yes</u>		

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with yes
 Description of fire extinguishing apparatus fitted 2 water hoses 1 1/2" dia. & 2 1/2" dia. (5) CO2 bottles 15 lbs. each. (2) 1/2" hose reels from (2) 50 lbs. CO2
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo no 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 no
 Is this machinery duplicate of a previous case yes If so, state name of vessel M/V "Almagro"

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel was original built under the special supervision of the Surveyors to the American Bureau of Shipping and Classification with that Society but has now been part surveyed by me for Classification with this Society. The condition and standard of workmanship, as now seen, is considered to be good and satisfactory. The machinery of this vessel is eligible in my opinion to be classed in the Society Register Book with the notation of L.M.C. with date when the survey has been completed.

The amount of Entry Fee ... £ : :
 To be collected when hull survey Special ... carried out. : : When applied for 19
 Donkey Boiler Fee. ... £ : : When received 19
 Travelling Expenses (if any) £ : :
 Committee's Minute TUES. 24 JUL 1951
 Assigned See Santos 270



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