

REPORT ON OIL ENGINE MACHINERY.

No. 16429

Received at London Office 20 MAY 1947

Date of writing Report 25/6/47 19 47 When handed in at Local Office 14/51 19 47 Port of GENOA

No. in Survey held at GENOA Reg. Book. Date, First Survey 1/10/46 Last Survey 12/2/1947 Number of Visits 26

Single on the Twin Screw vessel. " KERSTIN " Tons Gross 299.51 Net ✓

Built at GENOA - SESTRI By whom built S.A. ANSALDO - CANTIERI NAVALI Yard No. 857 When built 1947

Engines made at GENOA - SAMPIERDARENA By whom made S.A. ANSALDO - STAB. MECCANICO Engine No. 2656072 When made 1947

Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Brake Horse Power 300 Owners A.B. GLUCKSMANN Port belonging to PANAMA.

Nom. Horse Power as per Rule 63 MN 68 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted YES.

Trade for which vessel is intended FOR COASTING SERVICE IN THE MEDITERRANEAN.

OIL ENGINES, &c. — Type of Engines ANSALDO Q265/6R - SOLID INJECTION 2 or 4 stroke cycle 4 Single or double acting SINGLE

Maximum pressure in cylinders 54 Kg/cm² Mean Indicated Pressure 6.75 Kg/cm² Diameter of cylinders 265 mm Length of stroke 410 mm No. of cylinders 6 No. of cranks 6

Span of bearings, adjacent to the crank, measured from inner edge to inner edge 350 mm Is there a bearing between each crank YES

Revolutions per minute 360 Flywheel dia. 900 mm Weight 355 Kg Means of ignition COMPRESSION Kind of fuel used DIESEL OIL

Crank Shaft, Solid forged dia. of journals as per Rule as approved. Crank pin dia. 165 mm Crank webs Mid. length breadth 270 mm Thickness parallel to axis ✓

Flywheel Shaft, diameter as per Rule as approved. Intermediate Shafts, diameter as per Rule as approved. Thrust Shaft, diameter at collars as fitted 125 mm

Tube Shaft, diameter as per Rule as approved. Screw Shaft, diameter as fitted 130 mm Is the tube shaft fitted with a continuous liner YES

Bronze Liners, thickness in way of bushes as per Rule as approved. Thickness between bushes as fitted 8.5 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 YES

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 tube shaft No

Propeller, dia. 1500 mm Pitch 900 mm No. of blades THREE Material BRONZE whether moveable SOLID Total developed surface 0.7952 sq. m.

Method of reversing Engines DIRECT Is a governor or other arrangement fitted to prevent racing of the engine when disengaged YES Means of lubrication FORCED

Thickness of cylinder liners 24.5 mm Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled

Are the exhaust pipes and silencers 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. TWO 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. ONE Diameter 115 mm Stroke 100 mm Can one be overhauled while the other is at work ✓

Pumps connected to the Main Bilge Line (No. and size ONE DRIVEN BY M.E. : 15 Tons/h. How driven ONE DRIVEN BY AUX. ENGINE : 30 Tons/h. 3.5 stroke per rev. (Old No. 108))

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 ONE : 30 Tons/h. Power Driven Lubricating Oil Pump, including spare pump, No. and size ONE - GEAR TYPE - 3600 lit/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 ONE : 50 mm diam - TWO : 65 mm diam. In pump room ✓

In holds, &c. IN HOLD : TWO 65 mm diam.

Independent Power Pump Direct Suctions to the engine room bilges, No. and size ONE : 65 mm diam.

Are all the bilge suction pipes in holds and tunnel wall 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 YES

Are all 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 platform of the vessel YES Are the blow off cocks fitted with a spigot and brass covering plate ✓

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 ✓ 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. ONE (No. of main engine may be used as compressor) No. of stages ONE diameters 265 mm stroke 410 mm driven by MAIN ENGINE

Auxiliary Air Compressors, No. ONE No. of stages TWO diameters LP 70 mm HP 30 mm stroke 55 mm driven by AUX. ENGINE

Small Auxiliary Air Compressors, No. ✓ No. of stages ✓ diameters ✓ stroke ✓ driven by 2020

What provision is made for first charging the air receivers SMALL AUXILIARY AIR COMPRESSOR Welder eng fitted 8.48

Scavenging Air Pumps, No. ✓ diameter ✓ stroke ✓ driven by ✓

Auxiliary Engines crank shafts, diameter as per Rule as fitted 56 mm No. ONE Position STAB. SIDE OF ENGINE ROOM

Have the auxiliary engines been constructed under special survey No Is a report sent herewith ✓

8 HP Redli engine driving General Service pump fitted 9.49



AIR RECEIVERS:—Have they been made under survey... YES ✓ State No. of report or certificate HEREWITH ATTACHED.
 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. THREE ✓ Total cubic capacity... 480 litres. Internal diameter... 303 mm thickness... 7.5 mm Actual... ✓
 Seamless, lap welded or riveted longitudinal joint... SEAMLESS ✓ Material... STEEL Range of tensile strength... 55-65 Working pressure... by Rules... 50 Kg/cm² Actual... 30 Kg/cm² ✓
IS A DONKEY BOILER FITTED... ✓ If so, is a report now forwarded... ✓
 Is the donkey boiler intended to be used for domestic purposes only... ✓
PLANS. Are approved plans forwarded herewith for shafting... 25/11/46 ✓ Receivers... 21/11/46 ✓ Separate fuel tanks... ✓
 (If not, state date of approval)
 Donkey boilers... ✓ General pumping arrangements... 1/10/46 ✓ Pumping arrangements in machinery space... 1/10/46 ✓
 Oil fuel buring arrangements... ✓
 Has the spare gear required by the Rules been supplied... YES ✓
 State the principal additional spare gear supplied: Two cylinder covers.

ANSALDO S. A. STABILIMENTO MECCANICO
 The foregoing is a correct description, and the particulars of the installation are as approved for torsional vibration Manufacturer. characteristics.

Dates of Survey while building
 During progress of work in shops - - 1946: Oct. 1-21-23-25-28. Nov. 13-15-20-25-27-30 DEC. 2-5-7-9-16-23-30 1947 JAN 7-11
 During erection on board vessel - - 1946 DEC. 30-1947 JAN. 7-24-27-31- FEB. 12
 Total No. of visits 26
 Dates of examination of principal parts—Cylinders... 21/10/46 ✓ Covers... 15/11/46 ✓ Pistons... 20/11/46 ✓ Rods... 5/12/46 ✓ Connecting rods... 11/1/47 ✓
 Crank shaft... 25/11/46 Flywheel shaft... 25/11/46 Thrust shaft... 11/1/47 Intermediate shafts... 17/1/47 Tube shaft... ✓
 Screw shaft... 25/11/46 Propeller... 5/11/46 Stern tube... 30/12/46 Engine seatings... 30/12/46 Engine holding down bolts... 7/1/47 ✓
 Completion of fitting sea connections... 30/12/46 Completion of pumping arrangements... 27/11/47 Engines tried under working conditions... 24/1/47 ✓
 Crank shaft, material... STEEL Identification mark... GS 25-11-46 Flywheel shaft, material... STEEL Identification mark... ✓
 Thrust shaft, material... STEEL Identification mark... GS 11-1-47 Intermediate shafts, material... STEEL Identification marks... GS. 17-1-47 ✓
 Tube shaft, material... ✓ Identification mark... ✓ Screw shaft, material... STEEL Identification mark... GS. 25-11-46 ✓
 Identification marks on air receivers: N° 1-70511 N° 1-70512 N° 1-70515
LLOYD'S TEST LLOYD'S TEST LLOYD'S TEST
100 Kg/cm² 100 Kg/cm² 100 Kg/cm²
N.P. 50 Kg/cm² N.P. 50 Kg/cm² N.P. 50 Kg/cm²
AG. 19-12-46 AG. 19-12-46 AG. 19-12-46
 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... THREE FOAM EXTINGUISHERS OF 12 LITRES EACH. ONE CO₂ CONTAINER OF 5 KG. FIRE HOSES.
 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... ✓
 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 OF TESTED MATERIALS AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS. THE TORSIONAL VIBRATION CHARACTERISTICS OF THE COMPLETE DYNAMIC SYSTEM HAVE BEEN APPROVED FOR A SERVICE SPEED OF 360 R.P.M., WITH THE PROVISION THAT THE ENGINE SHOULD NOT TO BE RUN CONTINUOUSLY BETWEEN 250 AND 290 R.P.M. THE MATERIALS AND WORKMANSHIP ARE GOOD AND THE COMPLETE INSTALLATION WHEN TRIED UNDER WORKING CONDITION AT FULL POWER WAS FOUND SATISFACTORY. THE MACHINERY OF THIS VESSEL IS ELIGIBLE TO BE CLASSED IN THE SOCIETY'S REGISTER BOOK WITH THE NOTATION: + L.M.C. 2-47. OIL ENGINE.

The amount of Entry Fee... ✓
 Special Survey... Lit. 30,000.-
 Hydraulic tests... " 5,000.-
 Donkey Boiler Fee... " 2,550.-
 CAR EXPENSES... Lit. 1,700.-
 Travelling Expenses (if any) ✓
 When applied for... 25/2/47 ✓
 When received... 28/4/47 ✓

[Signature]
 Fourth Engineer Surveyor of Lloyd's Register of Shipping.

Committee's Minute... FRI. 20 JUN 1947
 Assigned... + L.M.C. 2,47 Oil Eng. C.L.

