

# REPORT ON OIL ENGINE MACHINERY.

No. 121648

Received at London Office

7209 and 7

Receiver: Young Report 11 Jan 1951 When handed in at Local Office 12 Jan 1951 Port of LONDON

Survey held at STAINES MIDOX Date, First Survey 23 NOVEMBER Last Survey 13 DECEMBER 1950 Number of Visits 7th

By whom built "IRISH" Yard No. 136 When built

By whom made J.H. McLAREN Engine No. 480323 When made 12/50

By whom made Boilers No. When made

Port belonging to

Owners Is Electric Light fitted

Is Refrigerating Machinery fitted for cargo purposes

Which vessel is intended

Type of Engines PETER 34 TYPE 4 CYL. VERTICAL 2 or 4 stroke cycle A Single or double acting SINGLE

Pressure in cylinders 1000 lbs/p. Diameter of cylinders 4.33 Length of stroke 4.33 No. of cylinders 4 No. of cranks 4

Rated Pressure 96 lbs/p. Ahead Firing Order in Cylinders 1342 Span of bearings, adjacent to the crank, measured

edge to inner edge 5/8 Is there a bearing between each crank YES Revolutions per minute 1000/1500

Weight 280 lb Moment of inertia of flywheel (lbs.in<sup>2</sup> or Kg.cm<sup>2</sup>) Means of ignition Comp Kind of fuel used DIESEL

dia. of journals 3 Crank pin dia. 3 Crank webs Mid. length breadth 4 1/8 Thickness parallel to axis

Shaft, diameter as per Rule Intermediate Shafts, diameter as fitted Thrust Shaft, diameter at collars as fitted

Screw Shaft, diameter as fitted Is the (tube/screw) shaft fitted with a continuous liner

Thickness between bushes as fitted Is the after end of the liner made watertight in the

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

er 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-

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

connecting rods 6 shaft If so, state type Length of bearing in Stern Bush next to and supporting propeller

Tube shaft dia Pitch No. of blades Material whether moveable Total developed surface sq. feet

down bolts of inertia of propeller (lbs.in<sup>2</sup> or Kg.cm<sup>2</sup>) Kind of damper, if fitted

conditions 27 of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES Means of

on mark FORCED Thickness of cylinder liners 13 Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled

with non-conducting material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned

LL No AS 20 Cooling Water Pumps, No. 3 THERMO SIPHON Is the sea suction provided with an efficient strainer which can be cleared within the vessel

umps 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 How driven

oling water led to the bilges If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

umps, No. and size M.E. Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Independent means arranged for circulating water through the Oil Cooler Suctions, connected to both main bilge pumps and auxiliary

plied with In pump room

umps, No. and size:—In machinery spaces

Norrköping &c. 35, Gothenburg 746.

ident Power Pump Direct Suctions to the engine room bilges, No. and size

he bilge suction pipes in holds and tunnel well fitted with strum-boxes Are the bilge suction pipes in the machinery spaces led from easily

approved plans he mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Attached. sea Connections fitted direct on the skin of the Ship Are they fitted with valves or cocks Are they fixed

torily. tly 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

18 R.P.M. has y 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

fitted on bo pipes pass through the bunkers How are they protected

ipes pass through the deep tanks Have they been tested as per Rule

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

rrangement 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 Is the shaft tunnel watertight Is it fitted with a watertight door worked from

od vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Air Compressors, No. No. of stages diameters stroke driven by

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

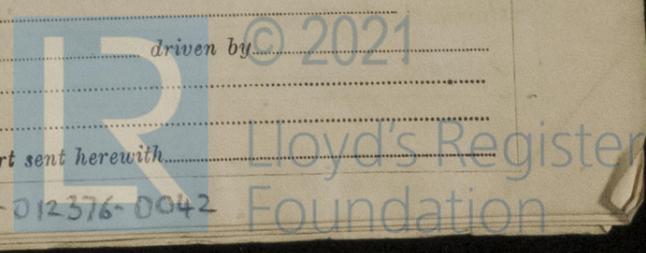
provision is made for first charging the air receivers

ging Air Pumps, No. diameter stroke driven by

ary Engines crank shafts, diameter as per Rule as fitted Position

he auxiliary engines been constructed under special survey Is a report sent herewith

JM  
23/1/51



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AIR RECEIVERS:—Have they been made under survey..... State No. of report or certificate.....

Is each receiver, which can be isolated, fitted with a safety valve as per Rule.....
Can the internal surfaces of the receivers be examined and cleaned..... Is a drain fitted at the lowest part of each receiver.....
Injection Air Receivers, No..... Cubic capacity of each..... Internal diameter..... thickness.....
Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....
Starting Air Receivers, No..... Total cubic capacity..... Internal diameter..... thickness.....
Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....

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 24.2.50. GENERAL APPROVAL Receivers..... Separate fuel tanks.....
Donkey boilers..... General pumping arrangements..... Pumping arrangements in machinery space.....
Oil fuel burning arrangements.....
Have Torsional Vibration characteristics been approved..... Date of approval.....

SPARE GEAR.

Has the spare gear required by the Rules been supplied YES.....
State the principal additional spare gear supplied 2 EXH. VALVES. 2 INLET VALVES. 4 VALVE COLLETS. 1 SET SCRAPERS.
2 INJECTION NOZZLES. 2 MAIN BEARINGS. 3 INTER. BEARINGS. A BIG END BEARINGS. 1 SET PISTON RINGS.
6 CYL HEAD STUDS. 2 MAIN BRG STUDS. 1 FUEL PUMP. 1 PISTON PIN. 1 SMALL END BUSH. 1 SET VALVE SPRINGS.

The foregoing is a correct description.
H. H. Melander Ltd. Manufacturer.

Dates of Survey while building
During progress of work in shops - - 23.1.50. 13.12.50.
During erection on board vessel - - -
Total No. of visits 2 (2 shops)

Dates of examination of principal parts—Cylinders 23.11.50. Covers 23.11.50. Pistons 23.11.50. Rods..... Connecting rods 23.11.50.
Crank shaft 23.11.50. Flywheel shaft..... Thrust shaft..... Intermediate shafts..... Tube shaft.....
Screw shaft..... Propeller..... Stern tube..... Engine seatings..... Engine holding down bolts.....
Completion of fitting sea connections..... Completion of pumping arrangements..... Engines tried under working conditions.....
Crank shaft, material S.M. STEEL. Identification mark S.382. Flywheel shaft, material..... Identification mark.....
Thrust shaft, material..... Identification mark..... Intermediate shafts, material..... Identification marks.....
Tube shaft, material..... Identification mark..... Screw shaft, material..... Identification mark.....
Identification marks on air receivers.....

Welded receivers, state Makers' Name.....
Is the flash point of the oil to be used over 150°F.....
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with.....
Description of fire extinguishing apparatus fitted.....
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo..... 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..... If so, state name of vessel.....

General Remarks (State quality of workmanship, opinions as to class, &c.....)
This Engine has been built under survey in accordance with approved plans and the requirements of the Rules. Steel used in manufacture has been made at Works approved by the Committee and tested in the presence of the Society's Surveyors. The Engine was tested at the maker's Works on full load and overload with satisfactory results. The workmanship is satisfactory and the Engine is in my opinion suitable for the purpose intended.

Engine made to the order of Messrs J. B. King & Co. Vasa, Sweden.
Stockholm, Sweden. Order No. 110 435.

The amount of Entry Fee ... £ : :
Special ... £ 4.0.0 : : When applied for 15 JAN 1951
Donkey Boiler Fee... £ : : When received 19
Travelling Expenses (if any) £ 5.0

TUES. 29 JAN 1952

Assigned Su F. E. Melby, rpt

J. P. Green
B. Small, A. C. Evans
Engineer Surveyor to Lloyd's Register of Shipping



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