

REPORT ON OIL ENGINE MACHINERY.

No. 126975

Received at London Office

5 MAY 1948

LIVERPOOL

of writing Report 18.3.48 19 When handed in at Local Office 19.4.48 19 Port of LIVERPOOL
in Survey held at Northwich Date, First Survey 4/9/47 Last Survey 9/3/48
Book. Number of Visits 9

Single on the Twin Triple Quadruple Screw vessel M.V. "MOEARA"
Tons Gross
At Northwich By whom built Isaac Priblott & Sons Ltd Yard No. 674 When built 1948
Lines made at Keighley By whom made H. Widdop & Co Engine No. 4749 When made 1947
Key Boilers made at None By whom made Boiler No. - When made -
Horse Power 150 Owners Anglo Saxon Petroleum Co Port belonging to
Power as per Rule 64 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Use for which vessel is intended

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

Minimum pressure in cylinders..... Diameter of cylinders..... 226..... Length of stroke..... No. of cylinders..... No. of cranks.....
Indicated Pressure..... Ahead Firing Order in Cylinders..... Span of bearings, adjacent to the crank, measured
inner edge to inner edge..... Is there a bearing between each crank..... Revolutions per minute.....

Wheel dia..... Weight..... Moment of inertia of flywheel (16lbs. in² or Kg.cm.²)..... Means of ignition..... Kind of fuel used.....
Crank pin dia..... Crank webs..... Mid. length breadth..... Thickness parallel to axis.....
Mid. length thickness..... shrunk Thickness around eyehole.....

Wheel Shaft, diameter as per Rule..... as fitted..... Intermediate Shafts, diameter as per Rule..... as fitted..... Thrust Shaft, diameter at collars as fitted.....
Screw Shaft, diameter as per Rule..... as fitted..... Is the (tube screw) shaft fitted with a continuous liner {

Liner thickness in way of bushes as per Rule..... as fitted..... Thickness between bushes as per Rule..... as fitted..... Is the after end of the liner made watertight in the
peller boss..... If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner.....

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
of tube shaft..... If so, state type..... Length of bearing in Stern Bush next to and supporting propeller 19 1/2 ✓

Propeller, dia 47 ✓ Pitch 33 1/2 No. of blades 3 Material Bronze whether moveable No Total developed surface 5.55 sq. feet
Moment of inertia of propeller (16lbs. in² or Kg.cm.²)..... Kind of damper, if fitted.....

Method of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes ✓ Means of
reversing..... Thickness of cylinder liners..... Are the cylinders fitted with safety valves..... Are the exhaust pipes and silencers water cooled
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
to the engine.....

Cooling Water Pumps, No. One 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 3 3/4 Stroke 1.875" Can one be overhauled while the other is at work. ✓
Pumps connected to the Main Bilge Line { No. and size. One M.E. 3 3/4 x 1.875. One G.S. Pentagonal, 90 gall/min 240' head
How driven. Main engine ✓ Aux 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.....

Oil Pumps, No. and size. One Centrifugal 90 g.p.m. Power Driven Lubricating Oil Pumps, including spare pump, No. and size. see Leeds Rpt
Two independent means arranged for circulating water through the Oil Cooler. No ✓ Suctions, connected to both main bilge pumps and auxiliary
oil pumps, No. and size:—In machinery spaces 2 - 2" ✓ In pump room.....

Oil Suctions, &c. 1 - 2" ✓ Independent Power Pump Direct Suctions to the engine room bilges, No. and size. One - 2 1/2" ✓ G.S. pump.

Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes. Yes ✓ Are the bilge suction pipes 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 On Kipton Are they fitted with valves or cocks. Both ✓ 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. ✓
Do all pipes pass through the bunkers. None ✓ How are they protected.....
Do all pipes pass through the deep tanks. None ✓ Have they been tested as per Rule.....

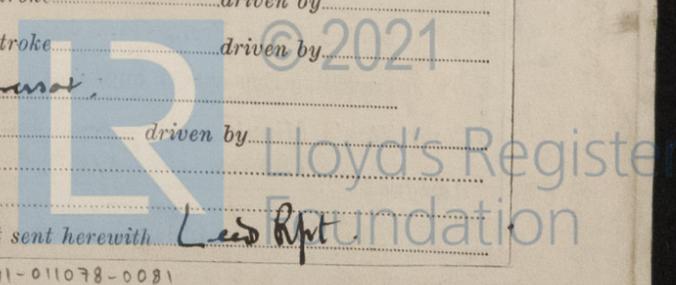
Are all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times. Yes ✓
Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery
spaces, or from one compartment to another. Yes ✓ Is the shaft tunnel watertight. None ✓ Is it fitted with a watertight door. ✓ worked from. ✓

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

Are there any Air Compressors, No. Auxiliary Air Compressors, No. All Auxiliary Air Compressors, No. ✓
No. of stages..... diameters..... stroke..... driven by.....
Is any provision made for first charging the air receivers. Hand Start Aux engine with compressor ✓
Are there any Ventilating Air Pumps, No. ✓ diameter..... stroke..... driven by.....

Are there any Auxiliary Engines crank shafts, diameter as per Rule..... as fitted..... No. Position.....
Have the auxiliary engines been constructed under special survey. Yes ✓ Is a report sent herewith. Leeds Rpt

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AIR RECEIVERS:—Have they been made under survey... *Yes* ✓ State No. of report or certificate... *Notttingham 7: C. 6605 66063*
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule... *on each compressor*
 Can the internal surfaces of the receivers be examined and cleaned... ✓ Is a drain fitted at the lowest part of each receiver... *Yes*
Injection Air Receivers, No. *None* ✓ Cubic capacity of each... Internal diameter... thickness...
 Seamless, welded or riveted longitudinal joint... ✓ Material... Range of tensile strength... Working pressure...
Starting Air Receivers, No. *2* ✓ Total cubic capacity... Internal diameter... *10 1/2* thickness... Working pressure...
 Seamless, welded or riveted longitudinal joint... ✓ Material... Range of tensile strength... Working pressure...
 by Rules... Actual...
 by Rules... Actual...

IS A DONKEY BOILER FITTED *No* ✓ 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... *20-1-47* Receivers... *39 B. 748* Separate fuel tanks... *12*
 (If not, state date of approval) Donkey boilers... ✓ General pumping arrangements... *12-7-46* Pumping arrangements in machinery space... *as above*
 Oil fuel burning arrangements... ✓ Amended as per fitted plan
 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... *As per specification*

FOR ISAAC PIMBLOTT & SONS LTD.

The foregoing is a correct description,
Isaac Pimblott
 Manufacturing Director

Dates of Survey while building: During progress of work in shops... ✓ During erection on board vessel... ✓ Total No. of visits...
 Dates of examination of principal parts—Cylinders... Covers... Pistons... Rods... Connecting rods...
 Crank shaft... ✓ Flywheel shaft... ✓ Thrust shaft... Intermediate shafts... ✓ Tube shaft... ✓
 Screw shaft... Propeller... Stern tube... *4-9-47* Engine seatings... *11-6-47* Engine holding down bolts... *11-12-47*
 Completion of fitting sea connections... *4-9-47* Completion of pumping arrangements... *11-2-48* Engines tried under working conditions... *3-3-48*
 Crank shaft, material... Identification mark... 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... *D. 1637. 81/461014. 2 D. 1639. 81/461014*
LLOYDS TEST. LLOYDS TEST. 28-1-48.
 Welded receivers, state Makers' Name... ✓
 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... *Potable fire extinguisher in E.R.*
 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... *"Moebai"*

General Remarks (State quality of workmanship, opinions as to class, &c...
The machinery of this vessel has been built under special survey and in accordance with the approved plans and amended specification. Workmanship and materials are good. It has been properly fitted on board, tried under working conditions during basin and river trials and found satisfactory. In my opinion the machinery of this vessel is eligible to be classed in the Register Book with a notation of
4 LMC 3-48
TS (09) -

1/3. Bal of Fee
 The amount of Entry Fee... £ 6 : 13 : 4
 Specification... £ 5 : 0 : 0
 Donkey Boiler Fee... £ : :
 Travelling Expenses (if any) £ 11 : 6 : 8
 When applied for... *30 APR 1948*
 When received... *19*
 Committee's Minute... *LIVERPOOL - 4 MAY 1948*
 Assigned... *+ LMC 348 O.G.*
OIL ENGINES.

C. Reed for *W. H. Wag*
 Engineer Surveyor to Lloyd's Register of Shipping
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Certificate (if required) to be sent to... (The Surveyors are requested not to write on or below the space for Committee's Minute.)