

RECEIVED

REPORT ON OIL ENGINE MACHINERY.

LPL F.E. R/M NO 130218

No. 74814

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Date of writing Report 26.11.49 19 When handed in at Local Office 28 NOV 1949 19 Port of Glasgow
No. in Survey held at 225300 Date, First Survey 30-5-49 Last Survey 6-10-1949
Reg. Book. Number of Visits 25

Single on the Twin Triple Quadruple Screw vessel M.V. "British Triumph"
Built at Barrow Head By whom built Commercial Harbours Co. Ltd. Yard No. 1129 When built 1949
Engines made at Glasgow By whom made Harland & Wolff Ltd. Engine No. A3280 When made 1949
Donkey Boilers made at By whom made Boiler No. When made
Brake Horse Power 3200 Owners British Tanker Co. Ltd. Port belonging to
M.N. Power as per Rule 696 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted y/s
Trade for which vessel is intended Ocean Going

OIL ENGINES, &c. — Type of Engines Heavy Oil Pressure Injection 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 650 lbf/sq. in. Diameter of cylinders 440 mm Length of stroke 1500 mm No. of cylinders 6 No. of cranks 6
Mean Indicated Pressure 128 lbf/sq. in. Ahead Firing Order in Cylinders 153624 Span of bearings, adjacent to the crank, measured
from inner edge to inner edge 942 mm Is there a bearing between each crank Yes Revolutions per minute 115
Turning dia. 2489 mm Weight 2590 kg Moment of inertia of flywheel (lbs. in² or Kg. cm²) 2355 X.M² Means of ignition Comp. Kind of fuel used Diesel Oil

Crank Shaft, Solid forged dia. of journals as per Rule APPD Crank pin dia. 505 mm Crank webs Mid. length breadth 840 mm Thickness parallel to axis 310 mm
Semi built dia. of journals as fitted 505 mm Crank webs Mid. length thickness 310 mm shrunk Thickness around eye hole 2225 mm
All built dia. of journals as fitted 505 mm Crank webs Mid. length thickness 310 mm shrunk Thickness around eye hole 2225 mm
Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as fitted 454 mm
as fitted Tube Shaft, diameter as per Rule as fitted Remaining shafting fitted in Glasgow as per Rule APPD

Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the
propeller boss 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 tube shaft If so, state type Length of bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of blades Material whether moveable Total developed surface sq. feet
Moment of inertia of propeller (lbs. in² or Kg. cm²) Kind of damper, if fitted NONE

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 505 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. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No. NONE Diameter Stroke Can one be overhauled while the other is at work
Pumps connected to the Main Bilge Line No. and size How driven

Is the cooling 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
arrangements

Ballast Pumps, No. and size Power Driven Lubricating Oil Pumps, including spare pump, No. and size
Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both main bilge pumps and auxiliary
bilge pumps, No. and size:—In machinery spaces In pump room

In holds, &c. Independent Power Pump Direct Suctions to the engine room bilges, No. and size
Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes 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

Are all Sea Connections fitted direct on the skin of the Ship Are they fitted with valves or cocks Are they fixed
sufficiently 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

Are they 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
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

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

Small Auxiliary Air Compressors, No. No. of stages diameters stroke driven by
What provision is made for first charging the air receivers

Scavenging Air Pumps, No. NONE (Under piston supercharge) diameter stroke driven by
Auxiliary Engines crank shafts, diameter as per Rule APPD No. 2 stroke Position

Have the auxiliary engines been constructed under special survey Yes Is a report sent herewith Yes

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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.....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.....

State the principal additional spare gear supplied.....

The foregoing is a correct description,

Manufacturer.

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.....Engine seatings.....Engine holding down bolts.....

Completion of fitting sea connections.....Completion of pumping arrangements.....Engines tried under working conditions.....

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.....

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 machinery which has been constructed under Special Survey in accordance with the Rules and Approved Plans and Secretary's Orders, has been now transported to Birkenhead to be installed in Messrs Cammell Laird & Co Ltd. Yard No 1199 where it will be tried under full power conditions. Materials & workmanship are good.

This machinery is eligible, in our opinion, to be Classed in the Register Book with Record L.M.C (with date) on completion of installation in Messrs Cammell Laird & Co Ltd. Yard No 1199, (Birkenhead)

Remaining forging reports common to A3280 and Nos 1394, 1398, 1399 to follow, will be forwarded on completion.

The amount of Entry Fee.....Donkey Boiler Fee.....Travelling Expenses (if any).....When applied for.....When received.....

Assigned.....Deferred for completion.....

LIVERPOOL 31 JAN 1950
See Minute on Liverpool Registry Rpts.
Foundation