

REPORT ON OIL ENGINE MACHINERY.

No. 97225

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NEWCASTLE-ON-TYNE

Date of writing Report 19 When handed in at Local Office 1st Mar 1939 Port of Newcastle-on-Tyne
No. in Survey held at Reg. Book. Newcastle-on-Tyne Date, First Survey 18 March 1938 Last Survey 17 Feb 1939
Number of Visits 60.

on the Single Triple Quadruple Screw vessel 'DILOMA' Tons Gross Net

Built at Birkenhead By whom built Messrs Cammell Laird & Co Ltd Yard No. 1037 When built 1939.

Engines made at Two-on-Tyne (of Petrol) By whom made Messrs R.W. Hawthorn Leslie & Co Ltd Engine No. 3955 When made 1939.

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

Brake Horse Power 3500 Owners Messrs Anglo Saxon Petroleum Co Ltd Port belonging to London.

Nom. Horse Power as per Rule 502. Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Trade for which vessel is intended Ocean Going.

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

Maximum pressure in cylinders 700 lbs/sq. in. Diameter of cylinders 25 1/2 650 mm Length of stroke 1400 mm No. of cylinders 8 No. of cranks 8

Mean Indicated Pressure 135 lbs/sq. in.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 844 mm Is there a bearing between each crank Yes.

Revolutions per minute 120 Flywheel dia. 2260 mm Weight 6000 kgs Means of ignition Compression Kind of fuel used Diesel oil.

Crank Shaft, dia. of journals as per Rule 448 mm as fitted 460 mm Crank pin dia. 460 mm Crank Webs Mid. length breadth 870 mm Mid. length thickness 278 mm Thickness parallel to axis 267 mm Thickness around eyehole 204 mm

Flywheel Shaft, diameter as per Rule 448 mm as fitted 460 mm Intermediate Shafts, diameter as per Rule 335 mm as fitted Thrust Shaft, diameter at collars as per Rule 341 mm as fitted 460 mm

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 358 mm as fitted Is the tube screw shaft fitted with a continuous liner

7.9. Bronze Liners, 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

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 the 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

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

Forced Thickness of cylinder liners 55 mm Are the cylinders fitted with safety valves 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

ooling Water Pumps, No. Two 1-Rotary on Engine 1-Steam Centrifugal Is the sea suction provided with an efficient strainer which can be cleared within the vessel

lge Pumps worked from the Main Engines, No. 2 Diameter Rotary Stroke 35 mm Can one be overhauled while the other is at work

umps connected to the Main Bilge Line No. and Size How driven

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

angements

llast Pumps, No. and size Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size One Rotary on ME - 40 mm One Standby 8 1/2 x 10 1/2 in.

Two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

umps, No. and size:—In Machinery Spaces In Pump Room

Holds, &c.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Spaces

from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

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

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

at pipes pass through the bunkers How are they protected

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

all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

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

partment to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

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

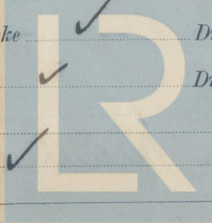
n Air Compressors, No. No. of stages Diameters Stroke Driven by

iliary Air Compressors, No. No. of stages Diameters Stroke Driven by

ll Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

enging Air Pumps, No. Diameter Stroke Driven by

iliary Engines crank shafts, diameter as per Rule as fitted No. Position



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AIR RECEIVERS:—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.
High Pressure 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 Actual
Starting Air Receivers, No. Total cubic capacity Internal diameter thickness
Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules Actual

IS A DONKEY BOILER FITTED?

Is the donkey boiler intended to be used for domestic purposes only. Receivers. Separate Fuel Tanks.
PLANS. Are approved plans forwarded herewith for Shafting. (If not, state date of approval) Pumping Arrangements in Machinery Space

Donkey Boilers. General Pumping Arrangements. Oil Fuel Burning Arrangements.

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,

R. & W. HAWTHORN, LESLIE & CO. LIMITED

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. Engines 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.

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. 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.)

The engine has been constructed under Special Survey in accordance with the Society's Rules and approved plans. The materials & workmanship are sound and good.

The engine has been sent to Messrs Cammell Laird & Co Ltd Birkenhead to be fitted on board.

NHP 502. The amount of Entry Fee. Special. Donkey Boiler Fee. Travelling Expenses (if any).

L. P. Skett

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

Assigned

See Minute on P.E. Machinery



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