

# REPORT ON OIL ENGINE MACHINERY.

No. 24249

1 DEC 1950

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of writing Report 8/11/50 19 When handed in at Local Office 9/11/50 19 Port of Greenock  
Received at London Office  
Survey held at Port Glasgow Date, First Survey 5th June 1950 Last Survey 26.10.50 19  
Number of Visits 12  
Single Triple Screw vessel. "Powell"  
Gross 1408  
Net 6624  
Tons  
It at Port Glasgow By whom built Howells & Co Yard No. 1046 When built 1950  
Lines made at Glasgow By whom made D. Rowan & Co Ltd Engine No. 1218 When made 1950  
Key Boilers made at - do - By whom made - do - Boiler No. 1218 When made 1950  
Horse Power 6800 Owners Nector Tankers Ltd Port belonging to London  
Power as per Rule 1334 NTP = 1292 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
Use for which vessel is intended Carrying Petroleum in Bulk Open Sea Service

## ENGINES, &c. — Type of Engines

2 or 4 stroke cycle 4 Single or double acting Single  
Maximum pressure in cylinders 160 Diameter of cylinders 46 Length of stroke 8 No. of cylinders 6 No. of cranks 2  
Indicated Pressure 160 Ahead Firing Order in Cylinders 1-6-5-4-3-2 Span of bearings, adjacent to the crank, measured  
inner edge to inner edge 46 Is there a bearing between each crank Yes Revolutions per minute 460  
Wheel dia. 46 Weight 46 Moment of inertia of flywheel (lbs. in<sup>2</sup> or Kg. cm.<sup>2</sup>) 46 Means of ignition 46 Kind of fuel used 46  
Solid forged 46 dia. of journals 46 Crank pin dia. 46 Mid. length breadth 46 Thickness parallel to axis 46  
Semi built 46 as per Rule 46 Crank webs 46 Mid. length thickness 46 shrunk 46 Thickness around eye hole 46  
All built 46 as fitted 46 Thrust Shaft, diameter at collars 46 as per Rule 46  
Wheel Shaft, diameter 46 as per Rule 46 Intermediate Shafts, diameter 46 as per Rule 46 as fitted 46 as fitted 46  
Screw Shaft, diameter 46 as per Rule 46 as fitted 46 Is the (tube) shaft fitted with a continuous liner ( )

Liner thickness in way of bushes 46 as per Rule 46 as fitted 46 Thickness between bushes 46 as per Rule 46 as fitted 46 Is the after end of the liner made watertight in the  
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-  
If two liners are fitted, is the shaft lapped or protected between the liners Yes Is an approved Oil Gland or other appliance fitted at the after  
If so, state type 46 Length of bearing in Stern Bush next to and supporting propeller 46  
Pitch 46 No. of blades 46 Material 46 whether moveable 46 Total developed surface 46 sq. feet 46  
Kind of damper, if fitted 46 Is a governor or other arrangement fitted to prevent racing of the engine when declutched 46 Means of  
Are the cylinders fitted with safety valves 46 Are the exhaust pipes and silencers water cooled 46  
If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned  
Cooling Water Pumps, No. 46 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes  
Pumps worked from the Main Engines, No. 46 Diameter 46 Stroke 46 Can one be overhauled while the other is at work Yes  
No. and size 46 How driven 46 No. and size 46 How driven 46 No. and size 46 How driven 46

Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2 off 45 tons/hr (each)  
Suctions, connected to both main bilge pumps and auxiliary  
In machinery spaces (IPIS) 46 In pump room 46  
Independent Power Pump Direct Suctions to the engine room bilges, No. and size 2 off 5 (IPIS) RHC  
Are the bilge suction pipes in holds and tunnel well fitted with strum-boxes Yes Are the bilge suction in the machinery spaces led from easily  
Are they fitted with valves or cocks Both Are they fixed  
Are the overboard discharges above or below the deep water line Above  
Are the blow off cocks fitted with a spigot and brass covering plate Yes  
How are they protected 46  
Have they been tested as per Rule 46  
Are the pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times Yes  
Is the shaft tunnel watertight None Is it fitted with a watertight door 46 worked from 46  
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Air Compressors, No. 46 No. of stages 46 diameters 46 stroke 46 driven by 46  
Auxiliary Air Compressors, No. 46 No. of stages 3 diameters 46 stroke 46 driven by 46  
Steam Driven Compressors 46 driven by 46  
Provision is made for first charging the air receivers 46  
Air Pumps, No. 46 diameter 46 stroke 46 driven by 46  
Auxiliary Engines crank shafts, diameter 46 as per Rule 46 as fitted 46 No. 46 Position 46  
Is a report sent herewith 46

SW  
8/12/50

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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.....

Table with 2 columns: Description of spare gear (e.g., Screws, Shafts, Propeller) and Quantity/Specs.

The foregoing is a correct description, LITHGOWS 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, Engine holding down bolts.

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 fitted for carrying oil as cargo, If the notation for ice strengthening is desired, Is this machinery duplicate of a previous case.

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery which has been constructed under Special Survey in accordance with the Society's approved Plans...

A suitable notice has been filed at the Control Station, stating that the main engine is not to be run continuously between 43 and 53 R.P.M. Total service B.H.P. and the maximum designed B.H.P. as given by the Engine Builders is 6800 and 4480 respectively.

The amount of Entry Fee £103, Special Donkey Boiler Fee, Travelling Expenses (if any).

When applied for From Glasgow Office 20/9/50, When received 31st OCTOBER 1950.

A. Clive, Engineer Surveyor to Lloyd's Register of Shipping.

Assigned + LMC 10.50 Oil Engine with torsional endorsement.

