

REPORT ON OIL ENGINE MACHINERY

Sld No. 29412

Date of writing Report

When handed in at Local Office

-7 APR 1927

Port of

Received at London Office

8 APR 1927

12 AUG 1927

No. in Survey held at

Sunderland

Date, First Survey 17 Mar, 26

Last Survey

Apr 6 1927

Reg. Book

Number of Visits 110

Single
on the Twin
Triple

Screw vessels

MOTOR VESSEL "PORT GISBORNE"

Tons
Gross
Net

built at Newcastle

By whom built Swan & Hunter

Yard No. 1222 When built

Engines made at Sunderland

By whom made Wm Delford & Sons Ltd

Engine No. 155 When made 1927.

Monkey Boilers made at

By whom made

Boiler No. When made

Indicated Horse Power 1400

Owners Commercial Union Line Ltd

Port belonging to

Indicated Horse Power as per Rule 1281

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

L ENGINES, &c.—Type of Engines

Delford & Sons Ltd

2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders

40 atmos

No. of cylinders 4x2

Diameter of cylinders 580 mm

No. of cranks 4x3

Length of stroke 2x110 mm

Position of bearings, adjacent to the Crank, measured from inner edge to inner edge 1050 mm = 41 3/8"

Is there a bearing between each crank YES

Revolutions per minute 95

Flywheel dia.

4-9

Weight 11 tons

Means of ignition

Kind of fuel used

CRUDE OIL, FLASH POINT ABOVE 150°F

Crank Shaft, dia. of journals

as per Rule

as fitted 430 mm

Crank pin dia.

460 mm

Crank Webs

Mid. length breadth 650 mm

Mid. length thickness 260 mm

Thickness parallel to axis

200 mm

Flywheel Shafts, diameter

as per Rule

as fitted 430 mm

Intermediate Shafts, diameter

as per Rule

as fitted 385 mm

Thrust Shaft, diameter at collars

as per Rule

as fitted 390 mm - 430 mm

Cylinder Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted

Is the tube screw shaft fitted with a continuous liner

Copper 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

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

COMPRESSED AIR

Is a governor or other arrangement fitted to prevent racing of the engine when detached YES

Means of lubrication

LUBRICATION

Thickness of cylinder liners 1/8" ARE the cylinders fitted with safety valves YES

Are the exhaust pipes and silencers water cooled or lagged with

Insulating material YES BOTH

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

Large Pumps fitted to the Main Engines, No.

Diameter

Stroke

Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line

No. and Size

How driven

Fast Pumps, No. and size

Lubricating Oil Pumps, including Spare Pump, No. and size

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 Engine and Boiler Room

Holds, &c.

Independent Pumps, Direct Suctions to the Main Room Bilge, No. and size

All the Bilge Suction pipes in Holds and Tunnel Well fitted with strainers

Are the Bilge Suctions in the Machinery Space

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 side of the ship

Are they fitted with Valves or Cocks

They are fitted 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 are 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

All pipes pass through the bunkers

How are they protected

All 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

compartment to another

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

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

In Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

All Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Suctioning Air Pumps, No.

No. of stages

Diameters

Stroke

Driven by

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Lloyd's Register
Foundation

W1137 - 0167

If so, is a report now forwarded?

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	Plain Cylindrical form soundness ascertained by inspection				
" " COVERS	None				
" " JACKETS	6/22/27 & 23/3/27 14/2/27 & 15/3/27	14 lbs sq	30 lbs sq	J.H. & date.	
" PISTON WATER PASSAGES	✓	✓	✓	✓	
MAIN COMPRESSORS—1st STAGE	✓	✓	✓	✓	
" 2nd "	✓	✓	✓	✓	
" 3rd "	✓	✓	✓	✓	
AIR RECEIVERS—STARTING		600 lbs sq	800 lbs sq		
" INJECTION	✓	✓	✓	✓	
AIR PIPES	10/2/27 & 23/3/27	600 lbs sq	1000 lbs sq	J.H. 10/2/27 & 23/3/27	
FUEL PIPES	14/2/27 & 23/3/27	8000 lbs sq	12000 lbs sq	J.H. 14/2/27 & 23/3/27	
FUEL PUMPS	14/2/27 & 23/3/27	8000 lbs sq	12000 lbs sq	J.H. 14/2/27 & 23/3/27	
SILENCER					
" WATER JACKET					
SEPARATE FUEL TANKS					

SPARE GEAR 2 Cylinder liners, 2 Main Pistons, 32 Piston Rings, 1 upper piston rod, 1 lower piston rod, 2 Centre Connecting Rod top end bearings with bolts & nuts, 1 Centre Connecting Rod bottom end bearing with bolts & nuts, 1 side x head complete, 2 side connecting rod bottom end bearing with bolts & nuts, 1 Main bearing with studs & nuts, 8 Crankshaft Coupling bolts, 4 w. 1 bevel wheel for Camshaft drive, 8 Fuel Valves, 1 starting valve, 1 relief valve, 2 Scavenge Delivery valves & 6 Traps. 2 Scavenge Pump Suction Valve Guards or discs, 1 Fuel Pump Body complete. Set spare springs, Rubber rings, pipe unions, iron assorted bolts, nuts & etc.

Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c. *This machine has been built*

under special turns & the materials & workmanship are good. On completion the engines were tried in the shop under water broke test. The machinery is eligible in my opinion to have the record of LMC with date when satisfactorily fitted in the vessel.

These Argines with their accessories have now been satisfactorily fitted up on board the Vasa
L. G. Shalleron
July 1927.

Donkey Boiler Fee	...	£	:	:	When received, as per letter
Travelling Expenses (if any)	£	:	:		19/10/1913

Committee's Minute TUES. 16 AUG 1927

Assigned See NWC #6, rpt. to 81653 attached

Engineer Surveyor to Lloyd's Register of Shipping.