

REPORT ON OIL ENGINE MACHINERY.

No. 31920

Received at London Office 22 SEP 1936

Date of writing Report

19

When handed in at Local Office

17 Sep 1936

Port of

Sunderland.

Date in Survey held at
g. Book.

Sunderland

Date, First Survey 12 May

Last Survey 15 Sep 1936

Number of Visits 36

Single
Twin
Triple
Quadruple
Screw vessel

"SKIPSEA"

Tons { Gross 4944
Net 3031.

Built at Sunderland

By whom built

Wm. Doyford & Sons Ltd

Yard No. 628

When built 1936

Engines made at Sunderland

By whom made

Wm. Doyford & Sons Ltd

Engine No. 628

When made 1936

Donkey Boilers made at Annan

By whom made

Stockton Chem. Eng. & Riley Bros. Ltd

Boiler No.

When made 1936

Brake Horse Power 2100

Owners

Wm. Brown Atkinson & Co

Port belonging to

Hull.

Nom. Horse Power as per Rule 449

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

Trade for which vessel is intended

OIL ENGINES, &c.—Type of Engines

Opposed piston, airless injection, 2 or 4 stroke cycle 2. Single or double acting Single.

Maximum pressure in cylinders

540 lbs/sq. in.

Diameter of cylinders

560 in.

Length of stroke

Lower 1250 in.

No. of cylinders

3. No. of cranks 3 (3 throw)

Mean Indicated Pressure

90 lbs/sq. in.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

880 in.

Is there a bearing between each crank

3 throw.

Revolutions per minute 110

Flywheel dia. 2240 in.

Crank Shaft, dia. of journals

as fitted 390 in.

Crank pin dia.

420 in.

Crank Webs

Mid. length breadth 610 in.

Thickness parallel to axis 240 in.

Flywheel Shaft, diameter

as fitted 390 in.

Intermediate Shafts, diameter

as fitted 343 in.

Thrust Shaft, diameter at collars

as fitted 420 in.

Tube Shaft, diameter

as fitted 316 in.

Screw Shaft, diameter

as fitted 362 in.

Is the

shaft fitted with a continuous liner

Yes.

Bronze Liners, thickness in way of bushes

as per Rule 14 in.

Thickness between bushes

as fitted 20 in.

Is the after end of the liner made watertight in the

propeller boss

Yes.

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-corrosive

Yes.

If two liners are fitted, is the shaft lapped or protected between the liners

No.

Is an approved Oil Gland or other appliance fitted at the after end of the tube

shaft

No.

If so, state type

Propeller, dia. 15' 3"

Pitch 11' 6"

No. of blades 4.

Material Bronze

whether Moveable

No.

Total Developed Surface

86 sq. feet

Method of reversing Engines

Hand lever

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

Yes.

Means of lubrication

hand.

Thickness of cylinder liners

23 in.

Are the cylinders fitted with safety valves

Yes.

Are the exhaust pipes and silencers water cooled or 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 back to the engine

Yes.

Cooling Water Pumps, No. 1 Steam driven

Bilge Pumps worked from the Main Engines, No. none

Diameter

Stroke

Can one be overhauled while the other is at work

Yes.

Pumps connected to the Main Bilge Line

No. and Size 2

How driven

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

Yes.

Ballast Pumps, No. and size

1 10 1/2" x 13" x 24"

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

Are two independent means arranged for circulating water through the Oil Cooler

Yes.

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size

4 @ 3" in E.R.

1 @ 3" Tunnel well.

In Pump Room

In Holds, &c. No. 1. 3 1/2" x 18. No. 2. 3 1/2" x 18. No. 3. 3" x 18. No. 4. 3 1/2" x 18. Deep Tank 3 1/2" x 18.

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

1 @ 8" (Ballast Pump)

1 @ 5"

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

Yes.

Are the Bilge Suctions in the Machinery Spaces

Yes.

Are all Sea Connections fitted direct on the skin of the ship

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.

What pipes pass through the bunkers

None.

How are they protected

Yes.

What pipes pass through the deep tanks

Forward bilge Suctions

Have they been tested as per Rule

Yes.

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

Yes.

Is it fitted with a watertight door

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

Yes.

Main Air Compressors, No. Two.

No. of stages Three

Diameters 10 1/2" x 8 1/2" x 2 1/2"

Stroke 6"

Driven by

Steam engine

Auxiliary Air Compressors, No. none

No. of stages

Diameters

Stroke

Driven by

None

Small Auxiliary Air Compressors, No. none

No. of stages

Diameters

Stroke

Driven by

None

Scavenging Air Pumps, No. One

Diameter 1600 in.

Stroke 540 in.

Driven by

Main engine.

Auxiliary Engines crank shafts, diameter

as per Rule

as fitted

No.

Position

No.

Position

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