

REPORT ON OIL ENGINE MACHINERY.

No. 91443

Received at London Office

26 AUG 1927

Date of writing Report 17th Aug. 1927 When handed in at Local Office

Port of Ipswich (London)

No. in Survey held at
Reg. Book.

Ipswich

Date, First Survey 9th JuneLast Survey 16th Aug. 1927.

Number of Visits

on the ^{Single}
~~Triple~~ Screw vessels

"ISIRY"

Tons ^{Gross}
_{Net}

Master

Built at Brighton

By whom built Aldous & Co.

Yard No. 1291

When built

1927.

Engines made at Stockholm

By whom made J. & C. G. Bolander's Co.

Engine No.

When made

1927.

Donkey Boilers made at

By whom made

Boiler No.

When made

-

Brake Horse Power

Owners

The Argentine Nav. Co.

Port belonging to

Nom. Horse Power as per Rule

34

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

See Spec. Rpt. No. 2775

OIL ENGINES, &c.—Type of Engines

2 or 4 stroke cycle — Single or double acting

Maximum pressure in cylinders

No. of cylinders

No. of cranks

Diameter of cylinders

Length of stroke

Revolutions per minute

Means of ignition

Kind of fuel used

Is there a bearing between each crank

Span of bearings (Page 92, Section 2, par. 7 of Rules)

Distance between centres of main bearings

Is a flywheel fitted

Diameter of crank shaft journals

as per Rule
as fitted

Diameter of crank pins

Breadth of crank webs

as per Rule
as fitted

Thickness of ditto

as per Rule
as fittedDiameter of flywheel shaft
as per Rule
as fitted

Diameter of tunnel shaft

as per Rule
as fitted

88.3 mm = 3.48"

Diameter of thrust shaft

as per Rule
as fittedDiameter of screw shaft
as per Rule
as fitted3.98"
4 3/4"

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

No

Is the after end of the liner made watertight in the propeller boss

If the liner is in more than one length are the joints burned

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

If without liners, is the shaft arranged to run in oil

Type of outer gland fitted to stern tube

Length of stern bush

19"

Diameter of propeller

4'-2"

Pitch of propeller

2'-11"

No. of blades

3

state whether moveable

no

Total surface

6.96

square feet

Method of reversing

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

Thickness of cylinder liners

Are the cylinders fitted with safety valves

Means of lubrication

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

No. of cooling water pumps

Is the sea suction provided with an efficient strainer which can be cleared

within the vessel

Yes

No. of bilge pumps fitted to the main engines

One

Diameter of ditto

4"

Stroke

4"

Can one be overhauled while the other is at work

No. of auxiliary pumps connected to the main bilge lines

One semi-rotary 1/2" hand pump to fore & aft compartments

Sizes of pumps

No. and sizes of suctions connected to both main bilge pumps and auxiliary bilge pumps:—In engine room

one 1 1/2"

and in holds, etc.

one 1 1/2"

No. of ballast pumps

How driven

Sizes of pumps

Is the ballast pump fitted with a direct suction from the engine room bilges

State size

Is a separate auxiliary pump suction fitted in

Engine Room and size

Are all the bilge suction pipes fitted with roses

Yes

Are the roses in Engine Room always accessible

Yes

Are the sluices on Engine Room bulkheads always accessible

None

Are all connections with the sea direct on the skin of the ship

Yes

Are they valves or cocks

cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates

Yes

Are the discharge pipes above or below the deep water line

above

Are they each fitted with a discharge valve always accessible on the plating of the vessel

No

Are all pipes, cocks, valves and pumps in connection with the machinery accessible at all times

Yes

Are the bilge suction pipes, cocks and valves arranged so as to prevent any

communication between the sea and the bilges

Yes

Is the screw shaft tunnel watertight

-

Is it fitted with a watertight door

Is it

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

No. of main air compressors

No. of stages

Diameters

Stroke

Driven by

No. of auxiliary air compressors

No. of stages

Diameters

Stroke

Driven by

No. of small auxiliary air compressors

No. of stages

Diameters

Stroke

Driven by

No. of scavenging air pumps

Diameter

Stroke

Driven by

Diameter of auxiliary Diesel Engine crank shafts

as per Rule
as fitted

Are the air compressors and their coolers made so as to be easy of access

RECEIVERS:—No. of high pressure air receivers

Internal diameter

Cubic capacity of each

Material

Seamless, lap welded or riveted longitudinal joint

Range of tensile strength

Thickness

Working pressure by Rules

No. of starting air receivers

Internal diameter

Cubic capacity

Material

Seamless, lap welded or riveted longitudinal joint

Range of tensile strength

Thickness

Working pressure by rules

Is each receiver, which can be isolated,

Fitted with a safety valve as per Rule

Can the internal surfaces of the receivers be examined

What means are provided for cleaning their

surfaces

Is there a drain arrangement fitted at the lowest part of each receiver

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

HYDRAULIC TESTS:-

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS					
COVERS					
JACKETS					
PISTON WATER PASSAGES					
MAIN COMPRESSORS—1st STAGE					
2nd					
3rd					
AIR RECEIVERS-STARTING					
INJECTION					
AIR PIPES					
FUEL PIPES					
FUEL PUMPS					
SILENCER					
WATER JACKET					
SEPARATE FUEL TANKS	13-7-27.		10 lbs. 0"		

PLANS. Are approved plans forwarded herewith for shafting
(If not, state date of approval)

Receivers

Separate Tanks

SPARE GEAR

The foregoing is a correct description.

Manufacturer.

Dates of Survey while building
During progress of work in shops - June 25, 29, 14, 20. July 8, 11, 13.
During erection on board vessel - July 5. Aug. 9, 16
Total No. of visits 11

Dates of Examination of principal parts - Cylinders - Covers - Pistons - Rods - Connecting rods -
Crank shaft - Thrust shaft - Tunnel shafts 14-6-27. Screw shaft 14-6-27. Propeller 14-6-27. Stern tube 14-6-27. Engine seatings 5-7-27.
Engines holding down bolts 9-8-27. Completion of pumping arrangements 16-8-27. Engines tried under working conditions 16-8-27.
Completion of fitting sea connections 9-8-27. Stern tube 9-8-27. Screw shaft and propeller 9-8-27.
Material of crank shaft - Identification Mark on Do. - Material of thrust shaft - Identification Mark on Do. -
Material of tunnel shafts Steel Identification Marks on Do. A.E.F. Material of screw shafts Blue Identification Marks on Do. A.E.F.
Is the flash point of the oil to be used over 150° F. Yes

Is this machinery duplicate of a previous case Yes If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery has been completed and installed in accordance with the approved plans and the requirements of the Rules. The materials and workmanship are good. The machinery has been tried under full working conditions and found satisfactory. Speed of vessel 8½ knots. R.P.M. of engine at full power 378 ahead & astern. Minimum R.P.M. for manoeuvring 135. The machinery of this vessel is eligible in my opinion to be classed with the record LMC 8.27.

The amount of Entry Fee ... £ : : When applied for, 26.8 1927
Special ... £ 3 : :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : : When received, 25/2/28

Committee's Minute

FRI 2 SEP 1927

Assigned

Thurs 8.27

Oil Engines



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