

4b.

REPORT ON OIL ENGINE MACHINERY.

No. 56900

22 APR 1936

Received at London Office

Writing Report

19

When handed in at Local Office

18. 4. 36 Port of

Date, First Survey

Glasgow

8th Nov 1935

Last Survey

1st April 1936

Number of Visits

18

Survey held at

Glasgow

on the

Single

Triple

Quadruple

Screw vessel

Mass. Laidan S.B. & Engineering Co. Ltd. No. 356.
M/V "PLOVER"

Tons

Gross 35.2

Net 16.6

at

Dundee

By whom built

Yard No. 356 When built 1936

es made at

Glasgow

By whom made

British Auxiliary Ltd.

Engine No. 228 When made 1936

Boilers made at

By whom made

Boiler No. When made

Horse Power

500

Owners

Port belonging to

569 Horse Power as per Rule

125

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

for which vessel is intended

13 3/4

22 7/16

ENGINES, &c.

Type of Engines

British Polar Diesel (M 447 Type) 2 or 4 stroke cycle 2 Single or double acting Single

Pressure in cylinders

180 lbs

Diameter of cylinders

34 1/2

Length of stroke

54 1/2

No. of cylinders

4

No. of cranks

4

Indicated Pressure

95

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

48 1/2

Is there a bearing between each crank

Yp.

Revolutions per minute

220

Flywheel dia.

155 1/2

Weight

1.99

Means of ignition

Comp.

Kind of fuel used

Diesel oil

Shaft, dia. of journals

as per Rule 21 1/2

as fitted 220

Crank pin dia.

220 1/2

Crank Webs

Mid. length breadth 308 1/2

Mid. length thickness 122 1/2

shrunk

Thickness parallel to axis

Thickness around eyehole

Propeller Shaft, diameter

as per Rule 21 1/2

as fitted 260

Intermediate Shafts, diameter

as per Rule

as fitted 5 5/8

Thrust Shaft, diameter at collars

as per Rule 145 1/2

as fitted 260

Shaft, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted

Is the

tube

screw

shaft fitted with a continuous liner

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

boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

ner 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

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

If so, state type

Length of Bearing in Stern Bush next to and supporting propeller

er, dia. 6 10 1/2 Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet

of reversing Engines

Direct

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

Yp.

Means of lubrication

Thickness of cylinder liners

25 1/2

Are the cylinders fitted with safety valves

Yp.

Are the exhaust pipes and silencers water cooled or lagged with

ducting material Yp. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Water Pumps, No. 10 120 x 140 1/2 Turbine DA Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Pumps worked from the Main Engines, No.

Diameter

Stroke

Can one be overhauled while the other is at work

connected to the Main Bilge Line

No. and Size

How driven

ooting 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

Pumps, No. and size

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

independent means arranged for circulating water through the Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

No. and size:—In Machinery Spaces

In Pump Room

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

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

Are the Bilge Suctions in the Machinery Spaces

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

Sea Connections fitted direct on the skin of the ship

Are they fitted with Valves or Cocks

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

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

es pass through the bunkers

How are they protected

es pass through the deep tanks

Have they been tested as per Rule

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

angement 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

ent to another

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

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

r Compressors, No.

one

No. of stages

2

Diameters

70 1/2 - 145 1/2

Stroke

350 1/2

Driven by Main Eng.

y Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

uxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

ing Air Pumps, No.

one

Diameter

74 1/2

Stroke

350 1/2

Driven by Main Eng.

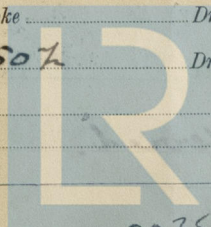
y Engines crank shafts, diameter

as per Rule

as fitted

No.

Position



Lloyd's Register
Foundation

003503 003512 00351

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule. *y/s.*

Can the internal surfaces of the receivers be examined and cleaned. *y/s.*

Is a drain fitted at the lowest part of each receiver. *y/s.*

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. *2*

Total cubic capacity *56 ft.*

Internal diameter *650 mm*

thickness *14 mm*

Seamless, lap welded or riveted longitudinal joint *Welded*

Material *15*

Range of tensile strength *28-32 tons*

Working pressure

by Rules *38*
Actual *33*

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 Shafing. *25.6.34.*

(If not, state date of approval)

Receivers *25.6.34.*

Separate Fuel Tanks

Donkey Boilers

General Pumping Arrangements

Pumping Arrangements in Machinery Space

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied. *y/s.*

State the principal additional spare gear supplied

As per list attached.

The foregoing is a correct description,

John Rogers/McGee

Manufacturer.

Dates
of Survey
while
building

During progress of
work in shops--

During erection on
board vessel--

Total No. of visits

19

Dates of Examination of principal parts—

Cylinders

Crank shaft

Screw shaft

Completion of fitting sea connections

Crank shaft, Material

Thrust shaft, Material

Tube shaft, Material

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 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

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

The amount of Entry Fee

No *y/s.* Special

Donkey Boiler Fee

Travelling Expenses (if any)

Committee's Minute

Assigned

Deferred

When applied for,

When received,

GLASGOW 21 APR 1936

Engineer Surveyor to Lloyd's Register of Shipping

Lloyd's Register Foundation