

REPORT ON OIL ENGINE MACHINERY.

No. 12516

Received at London Office MAY 18 1939

Date of writing Report

When handed in at Local Office

13.5.39 Port of Trieste

No. in Survey held at Reg. Book.

Date, First Survey

Last Survey

1939

Number of Visits

8666 on the ^{Single} ~~Double~~ ^{Triple} ~~Quadruple~~ Screw vessel

James J Maguire

Tons { Gross 40525
Net 6065

Built at Monfalcone

By whom built

Lauri Rindell Adriatic Yard No 1207

When built 1939

Engines made at Turin

By whom made

Fiat S. G. M.

Engine No 2567

When made 1939

Donkey Boilers made at Trieste

By whom made

Lauri Rindell Adriatic

Boiler No 1820

When made 1939

Brake Horse Power 3600

Owners

Oriental Tanker Co.

Port belonging to London

Nom. Horse Power as per Rule 1000

Is Refrigerating Machinery fitted for cargo purposes no

Is Electric Light fitted yes

Trade for which vessel is intended

SEE ALSO GENOA REPORT 15644 FIAT 15688 Solid Injection 2 or 4 stroke cycle 2

Type of Engines

Single or double acting single

Maximum pressure in cylinders 50 kg/cm²

Diameter of cylinders

680 mm (26 3/4")

Length of stroke

1100 (43 1/2")

No. of cylinders

8

No. of cranks

8

Mean Indicated Pressure 5.55 "

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

920 mm

Is there a bearing between each crank yes

Revolutions per minute 110

Flywheel dia

2400 mm

Weight

7500 kg

Means of ignition

Compress.

Kind of fuel used

Diesel oil

Crank Shaft, { Solid forged
Semi built dia. of journals
All builtas per Rule 414 mm
as fitted 450 "

Crank pin dia.

450 mm

Crank Webs

Mid. length breadth
Mid. length thickness

Thrust Shaft, diameter at collars

as per Rule 344 "
as fitted 450 "Flywheel Shaft, diameter
as per Rule
as fittedIntermediate Shafts, diameter
as per Rule 327 mm
as fitted 352 "Tube Shaft, diameter
as per Rule
as fittedScrew Shaft, diameter
as per Rule 362 mm
as fitted 398 "

Is the tube screw

shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes
as per Rule 19.78 mm
as fitted 23 "

Thickness between bushes

as per Rule 15 mm
as fitted 18 "

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

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 If so, state type

Length of Bearing in Stern Bush next to and supporting propeller 1770 mm

Propeller, dia. 5000 mm

Pitch

3940 mm

No. of blades

4

Material

bronze

whether Moveable

no

Total Developed Surface

8.64 sq. m

Method of reversing Engines

direct

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

forced

Thickness of cylinder liners

63 mm

Are the cylinders fitted with safety valves

yes

Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material lagged 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. 1 Indip. FW - 1 Dip. Sea W.

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

Bilge Pumps worked from the Main Engines, No. 1

Diameter

60 T/h

Stroke

-

Can one be overhauled while the other is at work

Engine Room

Pumps connected to the Main Bilge Line

No. and Size

One 60 T/h. One 85 T/h. One 150 T/h. One 85 T/h from form. Coff. only

How driven

One by main Engine, others by steam

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 in Pump Spaces: Main - 2 Cargo P. - 1 Stripping & Bilge P. - forward: 2 Bilge & Coff. P. - 2 Oil Transf. P. - 1 Cargo P.

One Stripping P.

No. and size

Two 400 x 280 x 400 x 2

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

1 Main Eng. 50 T

1 independent 40 T

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: - In Machinery Spaces

3 a 3 1/2"

One from EH Cofferdam

2 1/4"

In Pump Room

Main 2 a 3 1/2"

Form. 2 a 3 1/2"

In Holds, &c.

2 a 3"

2 a 4 1/2"

from Cofferdam betw. Cargo Tank & Bunker

1 a 3 1/2"

1 a 10" for Emergency

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

1 a 3 1/2"

1 a 10" for Emergency

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

yes

Are the Bilge Suctions in the Machinery Spaces

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

yes

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

yes with plate box

Are they fitted with Valves or Cocks

valves & Cocks

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

Are the Blow Off Cocks fitted with a spigot and brass covering plate

yes

What pipes pass through the bunkers

after

Suction of forward Cofferdam

How are they protected

-

What pipes pass through the deep tanks

forward

Fore Peak suction

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

none

Is it fitted with a watertight door

-

worked from

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

-

Main Air Compressors, No. none

No. of stages

-

Diameters

-

Stroke

-

Driven by

-

Auxiliary Air Compressors, No. 1 Two Cy 7.

No. of stages

2

Diameters

240 x 205 mm

Stroke

255 mm

Driven by

Steam Eng.

Small Auxiliary Air Compressors, No. 1 One Cyl.

No. of stages

2

Diameters

165 x 75 mm

Stroke

150 mm

Driven by

Electr. Gen. Steam Engine

What provision is made for first Charging the Air Receivers

Steam Compressors

Scavenging Air Pumps, No. 1 Two Cyl. Tandem

Diameter

1380 mm

Stroke

750 mm

8. Oct. Driven by

Main Eng.

Auxiliary Engines crank shafts, diameter

as per Rule

Ex Breemem Certificate No. 3

as fitted

dated 12th October 1938

Position

2m C.P. port side

Is a report sent herewith

Steam Eng. Cert.

Have the Auxiliary Engines been constructed under special survey

yes

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AIR RECEIVERS:—Have they been made under survey *yes*

State No. of Report or Certificate *812/3-813/4 MB1-4*

Is each receiver, which can be isolated, fitted with a safety valve as per Rule *yes*

Can the internal surfaces of the receivers be examined and cleaned *yes*

Is a drain fitted at the lowest part of each receiver *yes*

Injection Air Receivers, No. *none*

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. *Two*

Total cubic capacity *2.8 m³*

Internal diameter *12 1/2"*

thickness *26 mm*

Seamless, lap welded or riveted longitudinal joint *Fusion Weld*

Material *Steel*

Range of tensile strength *—*

Working pressure *—*

by Rules *Approved*

Actual *28 bar*

IS A DONKEY BOILER FITTED? *yes 2 Cyl. Marine* If so, is a report now forwarded? *yes*

Is the donkey boiler intended to be used for domestic purposes only *—*

PLANS. Are approved plans forwarded herewith for Shafting *See Genoa Report* Receivers

Separate Fuel Tanks *In the ship's structure*

Donkey Boilers *In London*

General Pumping Arrangements *27.5.37*

Pumping Arrangements in Machinery Space *5.6.37*

Oil Fuel Burning Arrangements *5.6.37*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes*

State the principal additional spare gear supplied *See attached list*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- *Please see Genoa Report No 15644*
During erection on board vessel -- *1938 Aug. 4, Oct. 6, 1939 Jan. 31, Feb. 9, 13, 28, Mar. 1, 2, 8, 14, 15, 21, 22, 29, Apr. 3, 7, 14, 17, 25, 26, May 1, 2, 3, 5, 6,*
Total No. of visits *twenty six*

Dates of Examination of principal parts—Cylinders *13.2.39* Covers *13.2.39* Pistons *13.2.39* Rods *13.2.39* Connecting rods *28.2.39*

Crank shaft *15.3.39* Flywheel shaft *—* Thrust shaft *15.3.39* Intermediate shafts *15.3.39* Tube shaft *—*

Screw shaft *27.4.39* Propeller *29.4.39* Stern tube *27.2.39/1/39* Engine seatings *29.4.39* Engines holding down bolts *15.3.39*

Completion of fitting sea connections *29.4.39* Completion of pumping arrangements *26.4.39* Engines tried under working conditions *5.5.39*

Crank shaft, Material *S.M.S.* Identification Mark *5735.70.10.3.38* Flywheel shaft, Material *—* Identification Mark *1506 HK 15.6.3*

Thrust shaft, Material *S.M.S.* Identification Mark *5544 JQ 7.10.37* Intermediate shafts, Material *S.M.S.* Identification Marks *1507 HK 15.6.3*

Tube shaft, Material *—* Identification Mark *—* Screw shaft, Material *S.M.S.* Identification Mark *1505 HK 15.6.3*

Identification Marks on Air Receivers *LLOYD'S No 812/3* *LLOYD'S No 813/4*

WP 28 AT.

WP 28 AT.

1.4.38

MB

1.4.38

MB

Is the flash point of the oil to be used over 150° F. *yes*

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with *yes*

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *Bulk Tanker* If so, have the requirements of the Rules been complied with *—*

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with *no*

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *John A Brown, Edwy R. Brown*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery of this vessel have been constructed under special survey. They have been satisfactorily fitted on board at Monfalcone and tested under full working condition and found in order. In connection with the two cyl. boilers, two CYRO 700 Gumble tube Economizers have been satisfactorily fitted on board and their safety valves have been adjusted to blow at 205 lbs. The whole of the installation has been made in accordance with the Rules and Secretary's letters and in my opinion the machinery is eligible to have in the Society's Register Book the record of + LMC 5-39*

The amount of Entry Fee .. £

1/5 Special

Donkey Boiler Fee

Travelling Expenses (if any) *—*

Committee's Minute

Assigned

When applied for,

When received,



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