

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 1314.

Date of writing Report 16th Dec. 1930

When handed in at Local Office 22. 12. 1930 Port of Bremen

Received at London Office

31 DEC 1930

No. in Survey held at Augsburg

Date, First Survey 21st February 1930 Last Survey 16th Dec. 1930

Reg. Book.

Number of Visits 48

Single
on the Twin
Triple
Quadruple
Screw vesselTons { Gross
Net

Built at Hamburg

By whom built Deutsche Werft

Yard No. 144 When built 1930

Engines made at Augsburg

By whom made Masch. Fabrik Augsburg-Nürnberg

Engine No. 330440 When made 1930

Donkey Boilers made at

By whom made

Boiler No. When made

Brake Horse Power 2100

Owners

Port belonging to

Nom. Horse Power as per Rule 1175

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which vessel is intended

OIL ENGINES, &c. Type of Engines 1* D62u 60/90

2 or 4 stroke cycle 2 Single or double acting double

Maximum pressure in cylinders 45 atm

Diameter of cylinders 600 mm

Length of stroke 900 mm

No. of cylinders 6

No. of cranks 6

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 885 mm

Is there a bearing between each crank yes

Revolutions per minute 110

Flywheel dia. 2100 mm

Weight 2350 kg

Means of ignition Solid inject.

Kind of fuel used Diesel oil

Crank Shaft, dia. of journals as per Rule

as fitted 419.6 mm

Crank pin dia. 419.6 mm

Crank Webs Mid. length breadth 520 mm

shrink Thickness parallel to axis

Mid. length thickness 235 mm

Thickness around eyehole

Flywheel Shaft, diameter as per Rule

as fitted 420 mm

Intermediate Shafts, diameter as per Rule

as fitted

Thrust Shaft, diameter at collars as per Rule

as fitted

Tube Shaft, diameter as per Rule

as fitted

Screw Shaft, diameter as per Rule

as fitted

Is the { tube { shaft fitted with a continuous liner {
screw

Bronze 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 If so, state type

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 direct compressed air

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

Means of lubrication

forced Thickness of cylinder liners 42.5 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.

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

Bilge Pumps worked from 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

Ballast Pumps, No. and size

Lubricating Oil Pumps, including Spare Pump, No. and size 1* rotary pumps 38 m³/h, driven by main engine

Are 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 Machinery Spaces

In Pump Room

In Holds, &c.

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

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

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

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

Are they fitted with Valves or Cocks

Are they 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

Are they 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

What pipes pass through the bunkers

How are they protected

What pipes pass through the deep tanks

Have they been tested as per Rule

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

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

Is the Shaft Tunnel watertight

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.

No. of stages

Diameters

Stroke

Driven by

Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Small Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Scavenging Air Pumps, No. 1 Tandem

Diameter 1380 mm

Stroke 700 mm

Driven by main engine

Auxiliary Engines crank shafts, diameter as per Rule

as fitted

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

Can the internal surfaces of the receivers be examined and cleaned

Is a drain fitted at the lowest part of each receiver

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.

Total cubic capacity

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure

by Rules

Actual

002138 - 004150 - 004151

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 Shafting *yes, London letters E* Receivers *31.3.30; 23.5.30; 11.6.30*
(If not, state date of approval) *30.9.30 (Dinnerdorf)*

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied *as per Rules.*

State the principal additional spare gear supplied

The foregoing is a correct description,
Maschinenfabrik Augsburg-Nürnberg A.-G.*M. Schumann* Manufacturer.

Dates of Survey while building
During progress of work in shops - *2 Feb. 30 April. 19.20.22 May. 16.25.28 June. 1.8.19.21.23 July. 6.7.18.23 August. 6.7.8.30 Sept. 4.6.7.13.14.20.21.22.25.27.28.29. 8.10.11.19.20.26.29 Nov. 4.2.3.8.9.10.16 Dec. 1930.*
During erection on board vessel -
Total No. of visits

Dates of Examination of principal parts—Cylinders *30.9/25.10.30* Covers *21.7.30* Pistons *21.7.30* Rods *8.11.30* Connecting rods *25.10.30*
Crank shaft *4.10.30* Flywheel shaft *10.12.30* Thrust shaft Intermediate shafts Tube shaft

Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions

Crank shaft, Material *S. M. Steel* Identification Mark *LLOYD'S F.S. 835/836/837 25.8.30* Flywheel shaft, Material *S. M. Steel* Identification Mark *LLOYD'S F.K. 2194.31.10.30 7.8.28.11.30*

Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks

Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

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 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

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

General Remarks (State quality of workmanship, opinions as to class, &c. *This heavy oil engine has been constructed under special**survey in accordance with the Soc. Rules and Regulations as well as with the approved plans and instructions**The materials used in the constructions are good and the workmanship is satisfactory.**In my opinion the vessel for which this engine is intended will be eligible for the notation of +LMC [with d.a.]**when the machinery has been fitted satisfactory on board and tried under full working conditions.**A copy of this report has been sent to the Hamburg Surveyors*

The amount of Entry Fee .. £ 4 : 16 :
Special ... £ 103 : 10 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ 2 : 10 :
When applied for, *29.12.1930*
When received, *3/2/31*

Committee's Minute

Assigned

Engineer Surveyor to Lloyd's Register of Shipping



© 2020

Lloyd's Register
Foundation