

REPORT ON OIL ENGINE MACHINERY.

No. 1834.
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Date of writing Report 10th October 1936 When handed in at Local Office 10th October 1936 Port of Bremen
No. in Survey held at Augsburg Date, First Survey 27th May 1936 Last Survey 10th October 1936
Reg. Book. Number of Visits 76
on the Single Twin Triple Quadruple Screw vessel Tons { Gross _____ Net _____
Built at Hamburg By whom built Deutsche Werft P.G. Yard No. 180 When built 1936
Engines made at Augsburg By whom made M.A.N. Engine No. 691190 When made _____
Donkey Boilers made at _____ By whom made _____ Boiler No. _____ When made _____
Brake Horse Power 3500 Owners _____ Port belonging to _____
Nom. Horse Power as per Rule 973 Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____
Trade for which vessel is intended _____

OIL ENGINES, &c.—Type of Engines 057 60/110 23 5/8 43 5/16 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 1100 mm No. of cylinders 5 No. of cranks 5
Mean Indicated Pressure 5.3 atm 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 120 Flywheel dia. 2100 mm Weight 3400 kg Means of ignition direct ign. Kind of fuel used _____
Crank Shaft, dia. of journals as per Rule 420 mm Crank pin dia. 420 mm Crank Webs Mid. length breadth 740 mm Thickness parallel to axis 265 mm
as fitted 420 mm Mid. length thickness 265 mm shrunk Thickness around eye-hole 185 mm
Flywheel Shaft, diameter as per Rule 420 mm Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule
as fitted 420 mm as fitted as fitted
Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the { tube { shaft fitted with a continuous liner {
as fitted as fitted as fitted
Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per rule Is the after end of the liner made watertight in the
as fitted as fitted as fitted
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 by cam Is a governor or other arrangement fitted to prevent racing of the engine when declutched _____ Means of lubrication
for cast Thickness of cylinder liners 40 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 _____
Is the cooling 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
arrangements _____
Ballast Pumps, No. and size _____ main engine (log wheel type) Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1, 38-40 cm / 1/4 at
400 rpm
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
ed 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 _____
Vacuuming Air Pumps, No. _____ Diameter _____ Stroke _____ Driven by _____
Auxiliary Engines crank shafts, diameter as per Rule 130 mm
as fitted 130 mm

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

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

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

(If not, state date of approval)

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

State the principal additional spare gear supplied

The foregoing is a correct description.

Maschinenfabrik Augsburg-Nürnberg A.G.

Manufacturer.

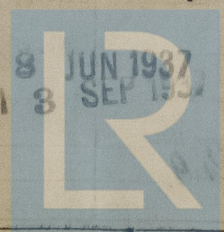
Dates of Survey while building
During progress of work in shops --
During erection on board vessel --
Total No. of visits

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.)
survey in accordance with the Soc. Rules and Regulations as well as with the approved plans and instructions thereto.
The material used in the construction is good and the workmanship is satisfactory.
This main engine has not been tested on the makers test bed.
The three auxiliary engines, Nos 421 290/300/310 have also been constructed under special survey in accordance with the Soc. Rules and Regulations as well as with the approved plans and instructions thereto. The material used in the construction of these auxiliary engines is good and the workmanship is satisfactory. These auxiliary engines have been tested on the test bed of the makers under full load, 10% overload and partial loads during 18 hours in the presence of the undersigned and were found to be in safe working conditions during these trials. After the trials the aux. engines were opened out for inspection and all parts were found in order.
In our opinion the vessel for which this machinery is intended will be eligible for the notation of +LMC [with date] when the whole machinery has been fitted satisfactorily on board and tried under full working conditions.

The amount of Entry Fee
1/5 Special
Donkey Boiler Fee
Travelling Expenses (if any)

Committee's Minute
Assigned
Sec Stam - J. E. 22176



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