

RECEIVED

23 OCT 1951

# REPORT ON OIL ENGINE MACHINERY.

No. 18526

Received at London Office 19 OCT 1951

IN D.O. Date of Survey Report 2nd October 1951. When handed in at Local Office 2nd October 1951. Port of Gothenburg

No. in Survey held at Gothenburg Date, First Survey 1st November 1950. Last Survey 5th October 1951. Reg. Book. Number of Visits 29.

40179 on the ~~TYPE~~ <sup>Single</sup> Screw vessel "MARGIT GORTHON" Tons Gross 10170 Net -

Built at Landskrona By whom built Öresundsvarvet AB Yard No. 118 When built 1951

Engines made at Gothenburg By whom made AB Götaverken Engine No. 2244 When made 1951

Donkey Boilers made at - By whom made - Boiler No. - When made -

Brake Horse Power 6500 Owners Rederi AB Gylfe Port belonging to Hålsingborg

M.N. Power as per Rule 1340 Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted Yes

Trade for which vessel is intended General

OIL ENGINES, &c. — Type of Engines Heavy oil, type DM 760/1300 VG 8 2 or 4 stroke cycle 2. Single or double acting Single acting

Maximum pressure in cylinders 49 kgs/cm<sup>2</sup> Diameter of cylinders 760 mm Length of stroke 1300 mm No. of cylinders 8 No. of cranks 8

Mean Indicated Pressure 6.4 kgs/cm<sup>2</sup> Ahead Firing Order in Cylinders 1-8-3-4-7-2-5-6 Span of bearings, adjacent to the crank, measured from inner edge to inner edge 974 mm. Is there a bearing between each crank Yes. Revolutions per minute 117

Flywheel dia. 2368 Weight 8600 kg Moment of inertia of flywheel (kg.cm. sec<sup>2</sup>) 82520 Means of ignition Compr. Kind of fuel used Diesel oil

Crank Shaft, ~~Substituted~~ <sup>as per Rule</sup> dia. of journals 520/130 mm. Crank pin dia 520/105 mm. Crank webs Mid. length breadth - Thickness parallel to axis 320 mm. Mid. length thickness - Thickness around eyehole 250 mm.

Flywheel Shaft, diameter as per Rule - Intermediate Shafts, diameter as per Rule - Thrust Shaft, diameter at collars as fitted 520 mm.

Tube Shaft, diameter as per Rule - Screw Shaft, diameter as per Rule - Is the tube shaft fitted with a continuous liner -

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 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 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

Moment of inertia of propeller (lbs. in<sup>2</sup> or Kg.cm.<sup>2</sup>) - Kind of damper, if fitted -

Method of reversing Engines - Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes. Means of lubrication Forced Thickness of cylinder liners 55 mm. Are the cylinders fitted with safety valves Yes-? 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 - 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. None 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 - Power Driven Lubricating Oil Pumps, including spare pump, No. and size -

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 suction 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. None 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 -

What provision is made for first charging the air receivers -

Scavenging Air Pumps, No. 8 x 1 Under side of the M.E. pistons also one separate scavenge pumps to each cylinder diameter 360 mm. stroke 1300 mm. driven by the engine

Auxiliary Engines crank shafts, diameter as per Rule Appd. 190 mm. No. 2 Position -

Have the auxiliary engines been constructed under special survey Yes Is a report sent herewith Yes

012193-012202-0205

© 2020

Lloyd's Register Foundation

JM  
7/11/51

Cyl.  
5/11/51  
X/1/51

See  
God 14  
10/11/51

Dear



4B 18526.

AIR RECEIVERS:—Have they been made under survey.....State No. of report or certificate.....

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.....

Injection Air Receivers, No.....Cubic capacity of each.....Internal diameter.....thickness.....

Seamless, welded or riveted longitudinal joint.....Material.....Range of tensile strength.....Working pressure.....

Starting Air Receivers, No.....Total cubic capacity.....Internal diameter.....thickness.....

Seamless, welded or riveted longitudinal joint.....Material.....Range of tensile strength.....Working pressure.....

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.....15th August 1951.....Receivers.....Separate fuel tanks.....

Donkey boilers.....General pumping arrangements.....Pumping arrangements in machinery space.....

Oil fuel burning arrangements.....

Have Torsional Vibration characteristics been approved.....Yes.....Date of approval.....15th August 1949.....

### SPARE GEAR.

Has the spare gear required by the Rules been supplied.....To be checked on board.....

State the principal additional spare gear supplied.....

The foregoing is a correct description, and particulars of the installation as fitted are as appd. for torsional vibration characteristics.....

AKTIEBOLAGET ÅBÖVERKEN

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 22/5, 1-3/8 1951 Cover 31/7, 1/8, 3/8 1951 Pistons 15/6 Rods 3/6 Connecting rods 7/6

Crank shaft 13-6-51 Flywheel shaft.....Thrust shaft 27.6.51 Intermediate shafts.....Tube shaft.....

Screw shaft.....Propeller.....Stern tube.....Engine seatings.....Engine holding down bolts.....

Completion of fitting sea connections.....Completion of pumping arrangements.....Engines tried under working conditions 22-8-51

Crank shaft, material SM Steel Identification mark SG. 25.1.51 Flywheel shaft, material.....Identification mark.....

Thrust shaft, material SM Steel Identification mark SG 25.1.51 Intermediate shafts, material.....Identification marks.....

Tube shaft, material.....Identification mark.....Screw shaft, material.....Identification mark.....

Identification marks on air receivers.....

Welded receivers, state Makers' Name.....

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.....

Description of fire extinguishing apparatus fitted.....

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 similar to a previous case.....Yes.....If so, state name of vessel ABGötaverken Yard No. 648, Goth First Entry report No. 17836.

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

This main engine has been built under special survey in accordance with the Rules & appl. plans.

The workmanship & materials used are good and certificates in respect of crank- & thrust shafts are attached.

The engine has been despatched to Messrs Öresundsvarvet AB, Landskrona, for their contract No. 118.

Rec: This machinery is eligible in our opinion, to be classed + LMC with date when securely fitted on

board under inspection of the Society's Surveyors.

The amount of Entry Fee ... 2/3 Kr. 3710:00

Special ... £ : -- : When applied for 15.10 1951.

Donkey Boiler Fee... £ : -- : When received 19

Travelling Expenses (if any) £ : -- :

(Committee's Minute) Assigned

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation