

Rpt. 4.

Hamburg First Entry

Report No. 24768

No. 1218

Vessel's name

Vapour

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 9th March 1939. When handed in at Local Office

19 Port of STETTIN

No. in Survey held at Berlin-Tegel.

Date, First Survey 30th March 38. Last Survey 14th Febr. 1939

Reg. Book.

(Number of Visits 32)

on the

Tons { Gross  
Net

Built at Hamburg By whom built Howaldts werke A.G.

Yard No. 444

When built 1939

Engines made at Berlin-Tegel

By whom made Rheinmetall-Borsig A.G.

Engine No. 8332

When made 1939

Boilers made at

By whom made

Boiler No.

When made

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Rule 424

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

yes

Trade for which Vessel is intended

22 1/2 47 1/2

47 1/2

ENGINES, &amp;c.—Description of Engines Double compound, Lentz type No. 12

Revs. per minute 80

Dia. of Cylinders 2 x 560 - 1200 mm Length of Stroke 1200 mm No. of Cylinders 4

No. of Cranks 4

Crank shaft, dia. of journals as per Rule 366 mm as fitted 320 mm

Crank pin dia. 380 mm

Crank webs

Mid. length breadth 645 mm

Thickness parallel to axis 230 mm

Mid. length thickness 230 mm

Thickness around eye-hole 148 mm

Intermediate Shafts, diameter as per Rule as fitted

Thrust shaft, diameter at collars as per Rule as fitted

366 mm

380 mm

Tube Shafts, 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

Feed Pumps worked from the Main Engines, No. ✓

Diameter

Stroke

Can one be overhauled while the other is at work

Bilge Pumps worked from the Main Engines, No. ✓

Diameter

Stroke

Can one be overhauled while the other is at work

Feed Pumps { No. and size  
How drivenPumps connected to the { No. and size  
Main Bilge Line How driven

Ballast Pumps, No. and size

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;—In Engine and Boiler Room

In Pump Room

In Holds, &amp;c.

Main Water Circulating Pump Direct Bilge Suctions, No. and size

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 Space 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 stokehold 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

MAIN BOILERS, &amp;c.—(Letter for record) Total Heating Surface of Boilers 530 sq.m (of 2 boilers)

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure 15 kg.

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

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 25.4.36. Main Boilers

Auxiliary Boilers

Donkey Boilers

Superheaters

General Pumping Arrangements

Oil fuel Burning Piping Arrangements

## SPARE GEAR.

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

State the principal additional spare gear supplied

1/2 Crank shaft, marked: LLOYD'S No. 1311. N.S. 19.12.38.

2 piston rods, 1 set of L.P. piston rings, 2/2 bottom end brasses,

4/2 crosshead brasses, 1 set of coupling bolts.

The foregoing is a correct description,

RHEINMETALL-BORSIG  
AKTIENGESELLSCHAFT/WERK BORSIG BERLIN-TEGL

Manufacturer.

Lloyd's Register  
Foundation

W1653-0023



Dates of Survey while building  
During progress of work in shops - 1938: 30th March, 21st, 24th April, 5th, 13th, 20th, 30th May, 16th, 22nd June, 5th, 16th, 23rd July, 23rd, 30th Aug. 1st, 9th, 10th, 16th, 18th, 21st Sept., 4th, 10th, 18th, 24th, 31st October, 4th, 18th, 21st November, 12th, 19th December, 1939: 3rd, 17th February.  
During erection on board vessel - - -  
Total No. of visits 32.

Dates of Examination of principal parts—Cylinders 16.6. - 18.11.38. Slides 21.9. - 19.12.38. Covers 4.10. - 21.1.38.  
Pistons 30.8.38 - 3.2.39. Piston Rods 30.5.38 - 3.2.39. Connecting rods 23.8.38 - 3.2.39.  
Crank shaft 23.4. - 19.12.38. Thrust shaft 19.12.38. Intermediate shafts  
Tube shaft Screw shaft Propeller  
Stern tube Engine and boiler seatings Engines holding down bolts  
Completion of fitting sea connections  
Completion of pumping arrangements Boilers fixed Engines tried under steam  
Main boiler safety valves adjusted Thickness of adjusting washers  
Crank shaft material S.M. Steel. Identification Mark No. 1305/6. Thrust shaft material S.M. Steel Identification Mark V.S. 23.8.38.  
Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark  
Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test  
Is an installation fitted for burning oil fuel Is the flash point of the oil to be used over 150°F.  
Have the requirements of the Rules for the use of oil as fuel 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 yes If so, state name of vessel Coimbra, Lova.

General Remarks (State quality of workmanship, opinions as to class, &c.)  
This Engine has been built under Special Survey in accordance with the Society's Rules and the approved plan of shafting. All steel material used in the construction has been tested, the workmanship thereon is satisfactory.  
The H.P. cylinders were tested to 20 kg, the L.P. cylinders to 9 kg, the main stop valve and the steam distribution piece to 45 kg. per sq. cm. water pressure, and found tight and sound.  
On the 1st L.P. cylinder several slight faults in casting were observed in way of the cylinder walls outside, but as 3 test holes, drilled at these places, showed a good and sound casting of efficient thickness, they are in our opinion without any influence of it's safety. 2 photos of the cylinder please find attached.  
This Engine is eligible in our opinion for part of the record of " + L M C ", when satisfactorily fitted on board and tried under working conditions.

The amount of Entry Fee RM 40. - : When applied for,  
Special ... 809. - : and March 1939.  
Donkey Boiler Fee ... £ - : : When received,  
Travelling Expenses (if any) 320. - : 7.6. 1939.

A. Rolfe, H. Schlothauer  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
Assigned See PE machy rft