

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office JUN 21 1937

Date of writing Report 2nd June 1937 When handed in at Local Office 19 Port of STETTIN

No. in Survey held at Berlin - Pregel Date, First Survey 16th June, 1936 Last Survey 14th May, 1937
Reg. Book. (Number of Visits 27)

on the _____ Tons { Gross _____ Net _____

Built at Kiel By whom built Howaldtswerke A.G. Yard No. 756 When built 1937

Engines made at Berlin - Pregel By whom made Rheinmetall-Borsig Engine No. 8174 When made 1937

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 _____

Trade for which Vessel is intended _____

ENGINES, &c.—Description of Engines Double compound, Lentz type No. 12 Revs. per minute 80

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

Crank shaft, dia. of journals as per Rule 366 as fitted 320 Crank pin dia. 380 mm Crank webs Mid. length breadth 645 mm Thickness parallel to axis 230 mm
Mid. length thickness 230 shrunk Thickness around eye-hole 178

Intermediate Shafts, diameter as per Rule 350 mm as fitted 365 Thrust shaft, diameter at collars as per Rule 366 mm as fitted 380

Tube Shafts, diameter as per Rule _____ as fitted _____ Screw Shaft, diameter as per Rule 388 mm as fitted 418 Is the screw shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule 19.5 mm as fitted 22.5 Thickness between bushes as per Rule 14.5 mm 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 yes

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 yes Is an approved Oil Gland or other appliance fitted at the after end of the tube _____

Propeller, dia. 5334 mm Pitch 4850 mm No. of Blades 4 Material bronze whether Moveable yes Total Developed Surface 94.08 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 driven _____ 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 _____

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, &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, &c.—(Letter for record _____) Total Heating Surface of Boilers 530 sqm

Is Forced Draft fitted yes No. and Description of Boilers 2 Working Pressure 15.4 kg/cm²

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 25.4.14.7 Main Boilers _____ Auxiliary Boilers _____ Donkey Boilers _____

(If not state date of approval) 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, 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-TEGEL

© 2019

Lloyd's Register Foundation

W21-02150

1936: 16th, 20th June, 1936, 23rd July, 3rd, 14th, 29th Aug, 5th, 8th, 12th, 15th
 During progress of work in shops -- Sept. 12th, 22nd, 24th Oct. 6th, 12th, 27th Nov. 4th, 10th, 12th Dec. 1937: 6th, 14th, 20th
 During erection on board vessel -- Jan. 18th March: 10th, 14th May.
 Total No. of visits 27.

Dates of Examination of principal parts—Cylinders 17.7. - 22.10.36. Valves 6.11. - 14.1.37. Covers 17.7. - 6.11.36.
 Pistons 3.8.36 - 14.1.37. Piston Rods 8.8.36 - 6.1.37. Connecting rods 14.8.36 - 14.1.37.
 Crank shaft 23.4.36 - 27.10.36. Thrust shaft 12.9. - 10.12.36. Intermediate shafts
 Tube shaft Screw shaft Propeller
 Stern tube Engine and boiler seatings Engines holding down bolts

Completion of fitting sea connections Boilers fixed Engines tried under steam
 Completion of pumping arrangements Thickness of adjusting washers
 Main boiler safety valves adjusted No. 1101-2.
 Crank shaft material S.M. Steel. Identification Mark N.S. 27.10.36. Thrust shaft material S.M. steel Identification Mark No. 1103
 Intermediate shafts, material Identification Marks No 12684. Tube shaft, material Identification Mark
 Screw shaft, material S.M. Steel Identification Mark M.B. 17.4.36. 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 No If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)
 This engine has been built under Special Survey in accordance with the Local Rules and the approved plans for shafting. All steel material has been tested which was used in the construction, the workmanship thereon is satisfactory. The H.P. cylinders were tested to 20 kgs, the I.P. cylinders to 9 kgs, the main stop valve and distribution piece to 45 kgs per sq. cm. water pressure and found tight and sound.
 This engine is eligible in my opinion for part of the record of, "L.M.C." when satisfactorily fitted on board and tried under working conditions.

The amount to be sent to the Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee RM. 40. -- : When applied for.
 Special ... £ 709 : 15th May 1937
 Donkey Boiler Fee ... £ : : When received.
 Travelling Expenses (if any) £ 236: -- : 27.7.37

M. Gold
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 17 AUG 1937
 Assigned See Ham. JE 22443

