

Report of Survey for Repairs, &c., of Engines and Boilers.

(Received at London Office

25 MAR 1937

Date of writing Report 13/3/37 When handed in at Local Office 19 Port of HAMBURG
No. in Reg. Book. Survey held at Kiel and Holtenau Date, First Survey 8/2/37 Last Survey 3/3/37 19
71315 on the Machinery of the ~~XXXXXX~~ Steel Sc.Sr. B O R B E C K ex Berwindmoor (No. of Visits)
Tonnage Gross 6002 Vessel built at Belfast By whom Workman, Clark & Co. Ltd. When 1923-9mo
Net 3100 Engines made at Belfast By whom Workman, Clark & Co. When 1923
Nominal Horse Power 636 Boilers, when made (Main) 1923 (Donkey) 1923
No. of Main Boilers 3 58 Owners Fried.Krupp A.G. Owners' Address
No. of Donkey Boilers 1 Managers N.V.Krupp's Reed. en Transp.rtb. Port Bremen Voyage Narvik
Steam Pressure in Main Boilers 180 lb If Surveyed Afloat or in Dry Dock afloat & in graving dock. Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).
in Donkey Boilers 100 lb Fried.Krupp Germania A.G.

Last Report No. Port Particulars of Examination and Repairs (if any) Lim.Surv., TS, MS, Compl.BS.

(Periodical Surveys, when held, must be reported in detail and serialim in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case. H, 4/2/37

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined not required

Was a damage report made by anyone else? If so, by whom? X

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? no

Donkey yes

If this was not done, state for what reasons? X

And what parts of the Boilers could not be thus thoroughly examined? X

Also what special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler? X

State latest date of internal examination of each boiler Donkey:- 9/2/37 Present condition of funnel(s) good

Did the Surveyor examine the Safety Valves of the Main Boiler? yes, under steam To what pressure were they afterwards adjusted under steam? 180 lb

Did the Surveyor examine the Safety Valves of Donkey Boiler? yes, opened up To what pressure were they afterwards adjusted under steam? X

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? yes, under steam, and of the Donkey Boilers? yes

Did the Surveyor examine the drain plugs of the Main Boilers? X, and of the Donkey Boiler? none

Did the Surveyor examine all the mountings of the Main Boilers? yes, under steam only, and of the Donkey Boiler? yes

Has screw shaft now been drawn and examined? yes Is it fitted with continuous liner? yes Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? no

Has shaft now been changed? no If so, state reasons X

Has the shaft now fitted been previously used? X Has it a continuous liner? X Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? X

State date of examination of Screw Shaft 3/3/37 State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft 2.6 mm

Engine parts, when referred to by numbers, should be counted from forward. Is electric light and power fitted? yes, 20 kW

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done complete with exception of Donkey

Boiler, please see below.

Now done:- In dry dook examined propeller, tail shaft when drawn, sternbush,

sea connections opened up and fastenings and found in order after sea connect-

ions have been dressed up as necessary.

Compl. BS:- Examined the donkey boiler internally and externally with mounings

man holes, opened up, sight holes, doors and fastenings, steam pipes and uptake and found

all smoke tubes more or less leaking and requiting to be renewed, remaining

parts in order. On account of the condition of the tubes the donkey boiler

could not be examined under steam. The tubes have been now been ordered and

will be sent to Rotterdam where the donkey boiler will be retubed, as soon as

the tubes are available. Main boilers examined under steam, found tight

and adjusted their safety valves to 180 lb pressure. Cont:-

General Observations, Opinion, and Recommendation:- The machinery of this vessel, as far as

(State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, E.S. 9,11, B.&M.S. 9,11, & L.M.C. 9,11, or

XLMC 140 lb., F.D., &c.)

seen, appears to be in satisfactory condition and eligible in my opinion to

remain as now classed in the Society's Register Book with fresh records of

BS-11,36, MS-3,37 and TS(OL)seen-3,37, subject to donkey boiler being retubed

and its safety valves adjusted under steam.

Survey Fee (per Section 29) 280.- Fees applied for 76.3.1937

Special Damage or Repair Fee (if any) 40.- Received by me, 16.4.37

Travelling expenses (if chargeable) 50.-

Committee's Minute TUE. 27 APR 1937

Assigned + Lmb. M.V. 3.37

BS 11.36 } subject

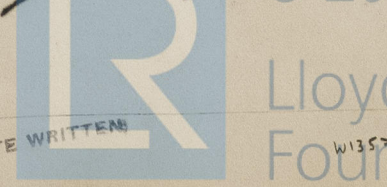
CHARACTER. X for Special Survey Date of last Survey and of Periodical Surveys.	Years elapsed since last survey.	Machinery and Boiler Surveys (Including date of N.B., if any).
+100A1 shelter dk with freeb-6,34 ss Rot No.2-32		+LMC MS-3,32 BS-11,35 TS(OL)N-6,34
CARGO BATTENS NOT FITTED.		

SEE LIMITATION LIST

Insert Character of Ship and Machinery precisely as in the Register Book

Is a Certificate required? If so, to be sent to Owners.

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation

S/S B O R B E C K ,

MS and Limitation Survey:- Examined HP, LP and IP cylinders and pistons, HP cylinder liner, piston rods, slide valves and chests, all connecting rods, top and bottom end brasses, crankshaft throughout with pins and journals, thrust block and thrust shaft, intermediate shaft with bearing holding down bolts, condenser and ~~wish~~ winch condenser under water pressure, pumping arrangement throughout with valves, cocks, pipes and strainers, ~~2x~~ main driven air, bilge and ~~six~~ ^{sanitary} pumps opened up, 2 ballast pumps, 2 Weir feed pumps, circulating pump with its two steam engines, general service pump, donkey feed pump -all of these pumps opened up-steering gear and windlass, also examined steam pipes throughout and found all of the above parts in order after the following repairs have been carried out:- The HP cylinder liner has now been renewed. HP piston junk ring renewed and 2 sets of piston rings supplied. IP and LP bottom end brasses remetalled. Holding down bolts hardened up, 2 of same renewed. Pump casing and ram of main driven sanitary pump renewed. Suction and delivery valves of Weir pumps skimmed up, rings of pistons renewed. General/service pump overhauled throughout in shop. A number of pipes of the bilge and ballast line renewed. Strum boxes in holds cleared and overhauled. Wormwheel and spindle of steering gear renewed.

Windlass overhauled throughout. It is submitted to have the vessel's name removed from the Limitation List.

Electric fittings (20 kW). Examined the prime movers and their steam engines completely opened up and found in order after all of these parts have been cleaned, the cylinder of the port steam engine bored and new piston rings fitted, its piston rod skimmed up and rebushed. Examined the fittings on all main and sub-distribution boards and boxes, electrical conductors, as far as practicable, and megger-tested fittings, cables generators &C and found in order after a cable of about 15 m length have been renewed in way of No.1 hatchway coaming, and a number of fuses renewed. After completion of repairs the installation has been tested under working conditions and was found in good working order.

~~After completion of repairs the installation has been tested under working conditions and was found in good working order.~~

The machinery has been tested under working and manoeuvring conditions with satisfactory result.

All of the main steam pipes and auxiliary steam pipes of 75 mm bore and above have been tested to internal hydraulic pressure of double the working pressure, i.e. 360 lb.

Hamburg, 13th March, 1937.

J. A. Wright