

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office JUL 13 1938

Date of writing Report 13-7-38 When handed in at Local Office 10 Port of HAMBURG

No. in Survey held at Lübeck Date, First Survey 16-5-37 Last Survey 30-6-38 19
Reg. Book. on the Steel S. "Reinbet" REINBEK (Number of Visits 24) Tons {Gross 2584
Net 1644

Built at Lübeck By whom built Lübecker Maschinenbau Ges. Boch. Yard No. 267 When built 1938

Engines made at Berlin - Tege By whom made Rheinmetall-Borsig A.G. Engine No. 8289 When made 1938

Boilers made at Lübeck By whom made Lüb. Maschinenb. Ges. Boiler No. 1291/2 When made 1938

Registered Horse Power 1800 Owners Knober & Burchard Afl. Port belonging to Hamburg

Nom. Horse Power as per Rule 350 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which Vessel is intended Tramp

ENGINES, &c. — Description of Engines Double Compound, contra type No. 11 Revs. per minute 80

Dia. of Cylinders 2 x 510 mm, 2 x 1100 mm Length of Stroke 1100 mm No. of Cylinders 4 No. of Cranks 4

Crank shaft, dia. of journals as per Rule 327 mm Crank pin dia. 350 mm Crank webs Mid. length breadth 630 mm Thickness parallel to axis 210 mm
as fitted 350 mm Mid. length thickness 210 mm shrunk Thickness around eye-hole 162 mm

Intermediate Shafts, diameter as per Rule 300.4 mm Thrust shaft, diameter at collars as per Rule 327 mm
as fitted 318 mm as fitted 340 mm

Tube Shafts, diameter as per Rule 327 mm Screw Shaft, diameter as per Rule 327 mm Is the {tube} shaft fitted with a continuous liner {yes
as fitted 327 mm as fitted 327 mm screw}

Bronze Liners, thickness in way of bushes as per Rule 18.3 mm Thickness between bushes as per Rule 19.25 mm Is the after end of the liner made watertight in the
as fitted 20.5 mm as fitted 19.25 mm

propeller boss yes 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 no If so, state type ✓

Propeller, dia. 4500 mm Pitch 5340 mm No. of Blades 4 Material Cast Steel whether Movable SOLID Total Developed Surface 7.15 sq. ft.

Feed Pumps worked from the Main Engines, No. none Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓

Bilge Pumps worked from the Main Engines, No. 2 Diameter 100 mm Stroke 600 mm Can one be overhauled while the other is at work yes

Feed Pumps { No. and size 3, 280 x 160 mm, 10.1 m³/h injector Pumps connected to the { No. and size 1 of 260 x 310, 1 of 280 x 160, 2 main 33.5 m³/h
How driven steam, simplex Main Bilge Line { How driven all steam. In addition 1 deck centre of 20 m³/h

Ballast Pumps, No. and size 1, 120 m³/h, simplex 260 x 310 mm 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 6 of 80 mm φ, 5. R. Well: 2 of 80 mm φ, Boiler Room: 2 of 65 mm φ, Tunnel: 2 of 80 mm φ

In Pump Room ✓ In Holds, &c. Port: 4 of 80 mm φ, Aft: 4 of 80 mm φ

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 x 175 mm φ Independent Power Pump Direct Suctions to the Engine Room Bilges,
No. and size 1 x 150 mm φ Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes

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 yes

Are all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks valves and cocks/main discharge

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Overboard Discharges above or below the deep water line above

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes

What Pipes pass through the bunkers air & scupper pipes How are they protected wood casing

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 yes

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 yes Is the Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from 2. R. above main dl.

MAIN BOILERS, &c. — (Letter for record 5) Total Heating Surface of Boilers 487.6 m² = 4925 ft²

Is Forced Draft fitted yes No. and Description of Boilers 2 Scotch Marine Working Pressure 15 kg/cm² = 214 lb

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes

IS A DONKEY BOILER FITTED? no 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 16-4-37 Main Boilers 1-1-37 Auxiliary Boilers ✓ Donkey Boilers ✓
(If not state date of approval)

Superheaters Augsburg General Pumping Arrangements 18-9-37 24 Oil fuel Burning Piping Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes

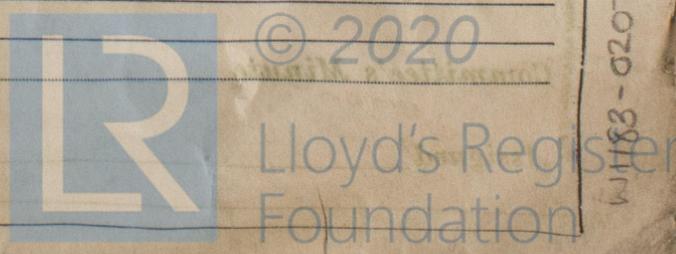
State the principal additional spare gear supplied.

1 top end brass compl., 1 piston rod, 20 condenser tubes, 120 feet main throttle, 4 plain tubes, 4 stay
tubes, a number of parts for the former double steam engine, 1 roller bearing for int. shaft, 1
compl. with liner, 1 steam piston rod - 2 water piston rods for feed pumps.

The foregoing is a correct description,

Lübecker
Maschinenbau-Gesellschaft

Manufacturer.



LO20-0207

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1927 Aug. 16, Nov. 11, Dec. 30, 1928 Jan. - Oct. 10, 16, 22, 29, Apr. 7, 13, 23

During progress of work in shops - - -

Dates of Survey while building

During erection on board vessel - - -

1928: Apr. 28, May: 3, 10, 17, 24, 31, June: 8, 14, 20, 23, 30

Total No. of visits 24 + 36 at Berlin (Stettin Office)

Dates of Examination of principal parts - Cylinders 20.8.27 - 4.8.28 Valves Slides 5.10.27 - 22.3.28 Covers 2.10 - 8.12.27

Pistons 12.7.27 - 22.3.28 Piston Rods 25.6.27 - 2.4.28 Connecting rods 11.8.27 - 22.3.28

Crank shaft 9.7.27 - 2.4.28 Thrust shaft 20.8.27 - 22.8.28 Intermediate shafts 10.2.28

Tube shaft ✓ Screw shaft 10.2.28 Propeller 23.4.28 30.6.28 (spare)

Stern tube 15.2.28 Engine and boiler seatings 28.4.28 Engines holding down bolts 8.6.28

Completion of fitting sea connections 23.4.28

Completion of pumping arrangements 14.6.28 Boilers fixed 10.5.28 Engines tried under steam 30.6.28

Main boiler safety valves adjusted 20.6.28 Thickness of adjusting washers Please See Rpt 5a

Crank shaft material S.M. Steel Identification Mark N.S. 4.1.28 Thrust shaft material S.M. Steel Identification Mark N.S. 4.1.28

Intermediate shafts, material S.M. Steel Identification Marks 4.5. 1.2.28 Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material S.M. Steel Identification Mark 4.5. 1-2-28 Steam Pipes, material S.M. Steel Test pressure 45 kg/cm² Date of Test 8.6.28

Is an installation fitted for burning oil fuel no 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 no 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 yes

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. Please see also Stettin Rpt No. 1189, 19.4.28.)

This machinery has been constructed under Special Survey in accordance with the approved plans and instructions thereto and in compliance with the Rules. It has been satisfactorily fitted on board and the outfit is ample. During the trial trip the machinery has given full satisfaction under working and manœuvring conditions. In my opinion the machinery is ample eligible for notation in the Reg. Book of:-

+LMC-6.38 and TS(CL)

The approved plans are being retained for reference for 3 sister vessels.
 For an oil engine please see Augsburg-Bremen Report No. 1969, 31.10.27.
 This oil engine has been satisfactorily fitted on board. Under working conditions examined and found in order.

Certificate to be sent to Hamburg Office

The amount of Entry Fee 1/5. 2246 60.-

1/5 Special £ 931.-

Electric fittings £ 450.-

Donkey Boiler Fee £ 159.-

Travelling Expenses (if any) £ 159.-

When applied for, 11-7-28 19

When received, 27/7 1928

J.P. Muehlecker
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned + LMC 6.38 (Sp. / 20, 2)