

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

(Received at London Office)

12 MAR 1930

Date of writing Report 8th March, 1930.

When handed in at Local Office

10th March, 1930 Port of

Malmö

Survey held at Malmö

Date, First Survey

2nd Jan.Last Survey 5th March, 1930.

(No. of Visits 20.)

No. in Book. 5806 Survey held at Malmö on the Machinery of the Wood, Iron or Steel Sc Lt "Boden"

Gross 4251

Net 1985

Nominal Power 449

of Main Boilers 3

of Donkey Boilers

Main Pressure 180 lbs.

in Main Boilers ✓

in Donkey Boilers ✓

Vessel built at Imderland By whom J. Thompson & Sons Ltd. When 1914-5 mo.

Engines made at Imderland By whom J. Dickman & Sons Ltd. When 1914

Boilers, when made (Main) 1914 (Donkey)

Owners Trafik AB Grängesberg-Oregrund Owners' Address

Managers G. Danner Port Stockholm Voyage

If Surveyed Afloat or in Dry Dock (State name of Dock) Malmö Roads

1st Report No. Port

Particulars of Examination and Repairs (if any) XMC & fitting exch turb.

Periodical Surveys, when held, must be reported in detail and seriatim 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 notes being detailed in the body of the report, should be briefly summarised at the end of the report. State also the names and initials of any letters respecting this case.

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?

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

Does the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time?

Do. Donkey " "

Is was not done, state for what reasons?

What parts of the Boilers could not be thus thoroughly examined?

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?

Does the Surveyor examine the Safety Valves of the Main Boiler?

Does the Surveyor examine the Safety Valves of Donkey Boiler?

Does the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers?

Does the Surveyor examine the drain plugs of the Main Boilers?

Does the Surveyor examine all the mountings of the Main Boilers?

Has the screw shaft now been drawn and examined?

Is it fitted with continuous liner?

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

Has the shaft now been changed?

No If so, state reasons

Has the shaft now fitted been previously used?

Has it a continuous liner?

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

Is the distance between lignum vitae bearing metal of stern bush and top of after bearing of screw shaft

4 mm -

Is Survey is not complete, state what arrangements have been made for its completion and what remains to be done

Complete.

Are sea connections, sea cocks and valves, propellers and fastenings examined.

Are cylinders, pistons, slide valves with casings, all covers and rods, crank Thrust and main shafts, condenser, bed plate, all pumps, pipes, valves and strainers of the pumping arrangement examined.

Are turbines examined and their safety valves adjusted under steam as above.

Are superheaters manufactured by Messrs. Chittenden & Sons Ltd., Hothamberg, as per my certificate enclosed herewith have been fitted. Each set of the superheaters is provided with a safety valve fitted with casing gear and these safety valves have been adjusted under steam to 190 lbs. per sq. in. Each superheater made is fitted with a drain valve and pipe.

If the steam piping runned of solid drain, hot finished steel pipes 112 mm in diameter and 5 mm thickness.

General Observations, Opinion, and Recommendation:—

(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, B.S. 9/11, B&M.S. 9/11, or § L.M.C. 9/11, &c.)

In my opinion to remain as now classed in the Register Book with fresh record of **¶ L.M.C. 3-30**. "Exhaust turbine with DR gearing and hydraulic coupling to main shafting."

Is a Certificate required? If so, to be sent to Surveyor of Ships, Halifax.

Fee for survey and inspection £ 400.00 Fees applied for 10th March, 1930.

All Damage or Repair Fee (if any) £ 640.00

Am. for Installation of tub. Turb. £ 640.00

Selling expenses (if chargeable) £

Received by me,

17. 3. 1930

ASM

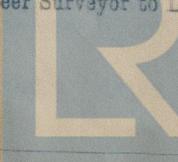
G. D.

Committee's Minute FRI. 21 MAR 1930

Signed + L.M.C. 3-30

Write Memo. CERTIFICATE WRITTEN.

Olundsen 2020
Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
Foundation

W455-0130 1/2

All T pieces and valve chocks in contact with superheated steam excepting the manoeuvring valve chock have been fitted now of cast steel and all guides, valve chocks and T pieces have been tested in my presence to 40 kg/cm². The manoeuvring valve seat and throttle valve removed of steel.

An exhaust steam turbine, system Parry-Wach, built and installed onboard by Messrs. Hockmann Masch. Werkstätte Aktienges. of this port has been fitted.

The turbine has been built under special survey in accordance with plans forwarded with Secretary's letter of the 17th June, 1929, and has been installed onboard and tried under working condition under my supervision and to my satisfaction.

Forging reports of turbine drum, turbine intermediate shaft, hydraulic clutch shaft, pinions and wheel rims, hollow wheel and thrust shafts and coupling piece are enclosed herewith.

The casings etc. of the turbine and gear are listed as follows:-

Screw-nut for change over valve to 5 kg/cm².

Set for hydraulic coupling " 6 "

Change over valve casing " 2 "

Oil cooler " 4 "

Oil filter " 4 "

Hydraulic clutch " 2 "

Regulating valve casing " 4 "

Turbine casing " 2 "

The condenser casing altered to admit the increased area of steam exhaust pipe and the tubes removed. Condenser and exhaust pipes tested to 3 kg/cm².

A feed water heater fitted, the feed piping altered and partly removed and tested to 35 kg/cm².

Spares gear for turbine and gear:- 1 set of bearing bushes for the turbine rotor, hydraulic clutch and gear shafts, $\frac{1}{2}$ set of thrust bearing segments or gards for turbine, hydraulic clutch and main thrust bearing, $\frac{1}{4}$ set of balls for thrust bearing pads of each size of bearing, $\frac{1}{2}$ set of coupling bolts of each size and 2 studs and nuts for turbine rotor, clutch and gear wheel bearings.

A number of studs and nuts for turbine and gear wheel casing joints.

Spring for the turbine governor, 2 safety valve springs.

Pump valves, thermometers etc. for the oil system.

16 turbine blades of each size and a number of packing glands.

Repairs effected:-

H piston rod removed as per forging report attached.

The joint between H & I.P. cylinders re-packed.

H piston valve rings and cylinder liners removed.

I.P. slide valve and cylinder face face removed.

H & I.P. valve spindles and I.P. piston rod shimmed in lathe.

H.P. & I.P. piston and valve rods fitted with metallic packings.

H piston rings renewed.

H crank pin bearing fitted with new white metal.

I.P. crosshead pin and bushes removed.

(To be continued.)

Steel Sc. Fr. "Boden", No. 15806 in the Bay Rock.

A water service - looking pump removed.

Bearings:- 10 plain and 2 stay tiles in centre nest of tubes of centre boiler removed. A new inner flange has been fitted.

Aslunden

Alt. M.P.C. due 3.30 Held at P. turbine
(Boiler wash system) & Superheater fittings
Various types, valves & renewals in
Cast steel.

It is submitted that
this vessel is eligible for
THE RECORD, 4 L.M.C. 3.30.

Q

7/3/30

Addt's engine particulars

"A.L.P. Turbine with
D.R. Gearring & Flywheel
Casing"

N.H.P. 507

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