

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

Received at London Office

Writing Report 19 When handed in at Local Office 19
 in Book Survey held at Port Adelaide Date: First Survey Aug Last Survey 24 Nov 1950
43 on the Machinery of the Wood, Iron or Steel RANSDORF (No. of Visits Eight)

Gross 469 Vessel built at Amsterdam By whom N.V. Nederl. Dok Maats Year. Month.
 Net 189 Engines made at Hengelo By whom Stork, Co. When 1934
 Main Boilers - Boilers, when made (Main) - (Donkey)
 Donkey Boilers - Owners Commonwealth of Australia Owners' Address -
 Pressure - Managers - (if not already recorded in Appendix to Register Book.)
 Main Boilers - If Surveyed Afloat or in Dry Dock Both Port Sydney Voyage -
 Donkey Boilers - (State name of Dock.)

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Report No. - Port -
 Particulars of Examination and Repairs (if any) Classification survey.
 Periodical Surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly the nature 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 as being detailed in the body of the report, should be briefly summarised at the end of the report. State also the date and initials of any letters respecting this case).

Where 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.

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

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

Donkey „ -

Was not done, state for what reasons? -

At parts of the Boilers could not thus be thoroughly examined? -

At 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? -

Test date of internal examination of each boiler. -

Surveyor examine the Safety Valves of the Main Boiler? - To what pressure were they afterwards adjusted under steam? -

Surveyor examine the Safety Valves of Donkey Boiler? - To what pressure were they afterwards adjusted under steam? -

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

Surveyor examine the drain plugs of the Main Boilers? - and of the Donkey Boilers? -

Surveyor examine all the mountings of the Main Boilers? - and of the Donkey Boilers? -

Was 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 it now been changed? no If so, state reasons no

Has 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? -

Date of examination of Screw Shaft 2.8.50 State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft 16

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

Did the Surveyor examine the generators, motors, switchgear, cables and fuses? yes

Insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? yes

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

Survey for classification. (Previously classed with B.V.)

The main engine and auxiliaries opened up and examined throughout, all cylinders, covers, pistons, top & bottom end bearings, crankshaft & bearings, valve gear, scavange pump blowers, pumps, shaft, tail shaft, propeller, sea valves, overboard discharge valves & connections and found in good condition.

Compressor cylinders pistons and valves etc. etc. & found in good condition, starting air receivers opened up examined & tested to lower working pressure.

Fuel oil settling tank in good condition.

Valves, cocks strainers etc., found in good condition. Modified as

General Observations, Opinion, and Recommendation:—

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, L.M.C. 9.11, or LMC 140 lb. F.D., &c.)

CS 334

This vessel is eligible in my opinion to receive the class contemplated - LMC and to have notation of LMC. 11.50 and tail shaft seen 8.50.

Fee (per Section 29) With First Entry Report

Damage or Repair Fee (if any) (per Section 29.)

Expenses (if chargeable)

Fees applied for, 19.

Received by me, 19.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

dated

See minute on F.F. Ench. Vol.

FRI. 23 NOV 1951

Lloyd's Register Foundation

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deemed necessary (see later). Systems tested under working conditions. Electrical equipment examined, with switchboard, dynamos, fittings, cables and megger tested throughout. Fuses cut. machines run & tested, breakers, tested for overload & reverse current.

Remarks

After examining the machinery arrangements, the following minor alterations have been made.

- (1) Two interconnected plunger pumps are driven directly by the main engine, one serving for cooling water and the other for general service, bilge or in an emergency for circulating. A non return valve has been fitted in the bilge suction line.
- (2) A direct bilge suction with straight pipe from the stem box has been fitted at the aft end of the engine room.
- (3) The two aux. Ruston generators which each has its own circ. pump have been fitted with an additional cooling line from the general service pump.
- (4) The switchboard is somewhat high up at the aft end of the E.R. and a working platform at the back with enclosing and doors has been fitted.

(In London at the beginning of the year, before the vessel set out for Australia, the electrical system and switchboard were renewed at the same time as the Ruston auxiliary sets were installed).

In addition to the engine driven plunger pumps, a horizontal high speed (3000 r.p.m.) centrifugal electrically driven pump is supplied for general service - ballast etc.

The pump when opened up was found to have two impellers in series with a rotary air displacer and was in good condition. It was found to work efficiently on bilges and ballast.

A manoeuvring air compressor is driven off the first end of the engine from the same crank as the pumps.

The auxiliary air compressor is driven by a small two cylinder, hand starting heavy oil engine.

This vessel is designed to carry sulphuric acid in 10 cylindrical tanks arranged athwartships in the hold. The acid is discharged by compressed air supplied from a compressor in the forecabin driven by a four cylinder diesel engine. The discharge pressure is 45 psi and the tanks

have been tested to 90 psi.

This engine also drives the windlass through a clutch and chain.

The engine and compressor have been opened up examined and found in good condition.

The engine built by Workshops under Gardner's licence has 4 cyls each 6" stroke $4\frac{1}{4}$ " bore - of the 4 cycle C.I. cold hand starting type. The compressor has two single acting cylinders 6" bore x 6" stroke. R.P.M. 600.

In connection with the machinery and electrical installation the outstanding remaining items are:-

- (1) Provision of spare rotor for scavenge pump.

[Doubtful if necessary as the vessel trades regularly between Tasmania & Adelaide.]

- (2) Lightning conductors required on wood masts - in hand

- (3) Navigation light switchboard has screwed porcelain fuses of Continental type - not procurable locally and a new board with approved fuses is being made.

b. f. f.