

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

Received at London Office **15 FEB 1949**

Date of writing Report **14 Dec. 19 48** When handed in at Local Office **19** Port of **SHANGHAI**

No. in Reg. Book **69093** Survey held at **SHANGHAI** Date: First Survey **4 Oct.** Last Survey **27 Nov. 19 48**
(No. of Visits **12**)

on the Machinery of the ~~Wood~~ **Steel** Screw Steamer "NAN SHENG" (ex "Maiwara")

Tonnage { Gross **606** Vessel built at **Danzig** By whom **International SB & E Co.** When **1924** Month.
 Net **331** Engines made at **Danzig** By whom **International SB & E Co.** When **1924**

Nominal Horse Power } **95** Boilers, when made (Main) **1924** (Donkey)

No. of Main Boilers **4** Owners **Nan Fung Industrial Co., Ltd.** Owners' Address **(if not already recorded in Appendix to Register Book.)**

No. of Donkey Boilers **-** Managers **Port Shanghai Voyage**

Steam Pressure in Main Boilers **185 lb.** If Surveyed Afloat or in Dry Dock **Both International Dock** Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Last Report No. **Port (Reclassification Survey)**

Particulars of Examination and Repairs (if any) **LMC, TS, BS, SRL & Docking**

(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 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.)

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

Was 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? **Yes**

" " Donkey " " " " " "

If this was not done, state for what reasons?

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

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?

State latest date of internal examination of each boiler **5-10-48** Present condition of funnel(s) **Good**

Did the Surveyor examine the Safety Valves of the Main Boiler? **Yes** To what pressure were they afterwards adjusted under steam? **185 lbs.**

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

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

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

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

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

Has shaft now been changed? **-** 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? **-**

State date of examination of Screw Shaft **15-10-48 & 23-10-48** State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft **1/16"**

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

If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? **Yes**

Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? **Yes**

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

NOW DONE: Vessel placed in dry dock, propeller, aft end of stern bush with oil packing gland at

at aft end of tail shaft, sea cocks & valves with their shell fastenings, examined

and found or now placed in good condition.

Tail Shaft without liner, examined and ~~found~~ now placed in good condition.

Main Engines opened up for survey:

All cylinders, pistons, valves and rods, crank, thrust & intermediate shafting,

condensers, pumps piping and pumping arrangements examined and found or now placed in

good condition.

The Steam & Feed Pipes were tested by hydraulic pressure to 1 1/4 times W.P., and the

copper steam & feed pipes were annealed before testing. (See Sheet 2)

General Observations, Opinion, and Recommendation:— The machinery and boiler of this vessel are in good

(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, L.M.C. 9,11, or

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

condition and eligible, in my opinion, to be assigned the notation Reclassification Contemplated

with the records of LMC 11,48; Tail Shaft (OG) seen 10,48 and B.S. 10,48.

Survey Fee (per Section 29) **GY\$ 6,000.-** Fees applied for, **27/11/1948**

Special Damage or Repair Fee (if any) **£ : :** Received by me, **19**

Travelling expenses (if chargeable) **GY\$ 500.-** Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI, 18 MAR 1949**

Assigned **Lmc 11.48**

S(OG) 10.48



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

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

011227-011234-0236 1/2

s.s. "NAN SHENG"

The Main Boiler was examined over all parts with doors, mountings & safety valves and found or now placed in good condition. Safety valves adjusted under steam as stated above.

REPAIRS DUE TO WEAR & TEAR:Main Engines:

- 1) HP piston valve renewed and cylinder re-ground.
- 2) LP piston rings renewed.
- 3) LP slide valve renewed.
- 4) HP piston junk ring bolts renewed.
- 5) Thrust shoes 2 off re-metalled and all opened out for inspection and adjustment.
- 6) Cooling water pipe repaired.
- 7) Main bearings with top & bottom end brasses all refitted.
- 8) Valve gears opened out and refitted.
- 9) Main condenser, 2 tubes renewed and 1 doz. removed, tested and replaced; and condenser tested.

Auxiliaries:

- 10) Feed pump piston rod machined and neck & gland bushes renewed, piston machined and rings renewed.
- 11) Deck water service pump, two valve spindles renewed.
- 12) Bilge pump rod skimmed and bushes renewed.
- 13) Circulating water pump stop valve renewed.
- 14) General service pump overhauled.
- 15) Screw Shaft was machined in lathe in way of the oil gland at stern bush after end and replaced in good order.
Stern gland bush repacked.
Oil gland rings at after end now renewed.
- 16) Stern Tube Bush: The after part was now removed, rebored, re-bushed, and replaced.
- 17) Sea Cocks & Valves now opened up for survey and overhaul and placed in good order.
- 18) Propeller found badly deteriorated was now renewed by 4-bladed C.I. type.

Main Boiler:

- 19) Aux. feed check valve, spindle, and seat renewed.
- 20) All mountings opened up for survey and overhaul.
- 21) P. furnace, 1 screwed stay and 2 plain tubes renewed.
- 22) S. furnace, 3 screwed stays, 1 stay tube, and 9 plain tubes renewed.
- 23) Both P.& S. furnaces were found thinned at lower part of front ends and these were now cropped and part renewed for 10" longitudinally and 3'-2" circumferentially in way of latter seam, being fastened by riveting at seam and by electric welding at the three sides of the new parts.

The boiler was subsequently hydraulically tested to 270 lbs./sq.inch and found sound and tight.

24) Donkey Boiler (S.R.L.)

The Donkey boiler was now removed from the vessel.

25) Electrical Equipment:

The electrical equipment for lighting purposes only, installation generally examined and tested under working conditions, lighting circuits tested and insulation resistance found to be not less than 100,000 ohms.

The above repairs and/or renewals were efficiently carried out by Messrs. Hsing Chung S.B. & Eng. Works; and the dry docking items by Messrs. Shanghai Dockyards Ltd.

A. K. K. Lin



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