

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

(Received at London Office)

FRI. SEP. 11 1922

Date of writing Report 31. 8. 22 When handed in at Local Office Port of
Survey held at Nethun Date, First Survey 24 July Last Survey 29 August 22
(No. of Visits 15)

on the Machinery of the ~~Wood, Iron or Steel~~ St. St. EMIL GEORG VON STAESS
Gross Tonnage 5311 Vessel built at Smiden By whom Hordoe Nerke When 1914
Net Tonnage 3229 Engines made at Vegeback By whom Bremer Vulkan When 1914
Registered Horse Power 301 Boilers, when made (Main) 1914 (Donkey) 1914
of Main Boilers 2 Owners Steana de Romana Port Constanza Voyage Kardendji
of Donkey Boilers 1 If Surveyed Afloat or in Dry Dock
Steam Pressure of Main Boilers 180
of Donkey Boilers 120 (State name of Dock.)

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

CHARACTER. X for Special Survey, Date of last Survey and of Periodical Surveys.	Years Assigned expired.	Machinery and Boiler Surveys (Including date of N.B., if any).
<u>Svs.</u>	<u>3.22</u>	

Previous Report No. _____ Port _____
Particulars of Examination and Repairs (if any) See Dam & Repairs

Medical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the use 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 details 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? not required Was a damage report made by anyone else? If so, by whom? AB Coll for 4 writers

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

Do. " " Donkey " " " " Yes

What 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? ✓

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes To what pressure were they afterwards adjusted under steam? 180 lbs"

Did the Surveyor examine the Safety Valves of Donkey Boiler? Yes To what pressure were they afterwards adjusted under steam? 120 lbs"

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

Did the Surveyor examine the drain plugs of the Main Boilers? ✓, and of the Donkey Boiler? ✓

Did the Surveyor examine all the mountings of the Main Boilers? Yes, and of the Donkey Boiler? Yes

Has screw shaft now been drawn and examined? No 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 shaft now been changed? ✓ If so, state reasons ✓

Has the shaft now fitted new? ✓ Has it a continuous liner? ✓ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? ✓

What is the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft? 4"

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

Damage alleged to be due to fire in uptakes & funnels. See Ship Surveyor's Report & Log Books. The main funnel & donkey boiler funnel lifted ashore, uptakes and air casing plates cut adrift. Smoke box doors & parts removed. The main funnel plates fixed. The donkey funnel renewed. The smoke box doors, uptakes & air casing plates fixed & replaced. The furnaces' fuel parts of all boilers removed, repaired and replaced. The two funnels replaced. Funnel Damper removed completely.

Modification to Oil Fuel Running Installation.

The connection between O.F. Filling pipe & Cargo oil main on deck removed & pipes blank-flanged. Sump pump discharge connected to O.F. filling pipe with 1 1/2" connection. The O.F. suction from summe...

... & double bottom Biltz Room tanks removed & the filling connections to these tanks blanked. The following are connected & led through a combined suction to the suction filter - High suction to ...

General Observations, Opinion, and Recommendation: - The machinery of this vessel, in my opinion, is now in safe working condition and eligible for record L.M.C. 8. 22 subject to the main boiler pressure not exceeding 180 lbs" with the condition that the main boiler furnaces be again examined before the end of November 1922.

Signature: R. Lee Arness
Engineer Surveyor to Lloyd's Register of Shipping.

Fees applied for: £ 19
Received by me: £ 19
FRI. SEP. 15 1922
L.M.C. 8. 22
Subject

FRI. SEP. 15 1922
TUE. 2 JAN. 1923
TUES. 20 MAY 1924
Lloyd's Register Foundation
002305-002319-0014 13

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

"Emil Georg von Staues" Cont. 2

following pipes are connected & led through a combined pipe to the transfer pump —
 suction to Cross Bunker (P.S.), Low suction to D.B. Tank under Cross Bunker (P.S.), Low suction
 to dam (P.S.) and combined suction from 'ween deck tanks (P.S.)

Two combined suction lines are fitted with a cross connection

suction connection is fitted from the well under the burner pumps

charge valve & connection is made on the ship's side for the transfer pump

O.S. discharge pipe from the burner pumps is placed above the floor level & a
 line of O.S. circulating pipes fitted for main & Donkey Boilers.

Steam valves to the O.S. Plant & transfer pumps are controllable from the deck.

Extinguishing steam line is fitted under the floor plates in the stokehold
 is controlled from the deck.

Oil fuel delivery pipes have been tested to 400 lbs. & the suction lines to
 20". The oil fuel burning plant has been overhauled & put in order.
 requirements of Section No. 49 of the rules are complied with.

Main Engines.

crankshafts, pistons, covers, valves, connecting rods' top & bottom ends the crank &
 nut shaft have been opened out & examined, together with the air pump, feed &
 ram pumps & their connections.

4 Crankshaft Journal has been dressed up. The coupling between crank & thrust
 is broken to test alignment of shafting. New crankshaft gauge made.

piston rings renewed. M.P. piston ring renewed. Aft. ahead eccentric sheave turned
 Aft. valve spindle skimmed & retouched. All top end guide pins dressed fair & braces
 added. All guides & shoes re-adjusted. Feed pump plungers skimmed & retouched.

2 Main & Auxiliary Condensers examined under head of water.

Main Circulating - 2 main type feed pumps, auxiliary Condenser Circulating
 pump, ballast pump, general service pump, dynamo engine, steering
 engine & windlass opened out for survey, Fan Engines opened out

Circulating Pump Engine piston rod skimmed, the top end braces bored & re-metalled.

Feed Pump's pump valves skimmed - & water end bucket rings renewed

General Service pump's bucket rings renewed - valve spindles straightened & new pins fitted
 Windlass driving spur wheel renewed.

Water suction valve chest were examined and valves found to be non-return.

Main and Donkey Boilers, their mountings, doors & fastenings examined

Superheaters of the main Boilers were disconnected. The elements were
 removed ashore, annealed, tested to 500 lbs hydraulic pressure, re-painted
 in place and the installation tested to 400 lbs hydraulic pressure.

Donkey Boilers The tubes were cleaned and re-expanded and about 200

or tubes fitted. The six furnaces were found to be distorted & it was

recommended that they be renewed. The owner's representative agreed to

renew the starboard furnace of the Starboard Boiler & the Centre furnace of

Port Boiler. This was done and the remaining four furnaces were

restored as far as practicable. The two furnaces now renewed are 44 1/2" cube

meter 7 1/8" thick masonry type with four layer backs & new saddle-pieces are fitted.

R. L. Ames.

Emil Georg van Stauss Cont. 3

Four remaining furnaces were gauged and found to be distorted from 1" to 1 7/8" difference in diameters and the Owners' Representative was informed that it was not intended to recommend working pressure of more than 180 lbs/sq in.

Boilers were tested after repairs to 250 lbs/sq in hydraulic pressure and the jacked furnaces gauged during and after the test & found to have deformed slightly under the test. The front combustion chamber of the Starboard Boiler in way of the feed pipe, where it was pitted was dressed up & reinforced locally by Electric welding.

The back end plate of the Port Boiler in way of the internal feed pipe was found to be wanted. This was built up by Electric welding.

Some defective rivets in the tops of the combustion chambers of both boilers were renewed.

Mountings were overhauled & put in good order.

Donkey Boiler Some rivets in furnaces' front seams were hardened up. Tubes were re-expanded. The main Steam Stop valve lid found to be screw on was replaced by a non-return valve lid. The other mountings were overhauled & put in good order.

The main & Donkey Boilers were examined under steam.

Main Boiler safety valves were adjusted to 180 lbs/sq in Superheaters 185 lbs/sq in Donkey Boiler safety valves 120 lbs/sq in.

It is submitted that the furnaces of both main Boilers should be again examined before the end of November, 1922 & a limit letter to this effect has been forwarded.

Propeller in dry-dock Propeller & outside fastenings examined & found in good order.

R. Lee Ames