

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 28 JUN 1930

Date of writing Report 25th June 1930 When handed in at Local Office

19 Port of STETTIN

No. in Survey held at Berlin - Tegel
Reg. Book.

Date, First Survey 8th January Last Survey 20th June 1930

(Number of Visits 25)

on the Steel Sp

Tons }
Gross }
Net }

Built at Lubeck By whom built Lubecker Maschinenbau Gesellschaft Yard No. 302 When built 1930

Engines made at Berlin - Tegel By whom made A. Borsig GmbH Engine No. 4970 When made 1930

Boilers made at _____ By whom made _____ Boiler No. _____ When made _____

Registered Horse Power _____ Owners Knoke & Burchard NfL Port belonging to Hamburg

Nom. Horse Power as per Rule 216 Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

Trade for which Vessel is intended _____

ENGINES, &c.—Description of Engines 1694 - 357 "Lentz" Engines Revs. per minute 25
 Dia. of Cylinders 2 of 420, 2 of 900 mm Length of Stroke 900 mm No. of Cylinders 4 No. of Cranks 4
 Crank shaft, dia. of journals as per Rule 262 mm Crank pin dia. 285 mm Crank webs Mid. length breadth 560 mm Thickness parallel to axis 168 mm
 as fitted 285 Crank webs Mid. length thickness 168 Thickness around eye-hole 135
 Intermediate Shafts, diameter as per Rule 229.5 Thrust shaft, diameter at collars as per Rule 262 mm
 as fitted _____ as fitted 285
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 279
 as fitted _____ as fitted _____ Is the { tube } shaft fitted with a continuous liner {
 as fitted _____ as fitted _____ screw }
 Bronze Liners, thickness in way of bushes as per Rule _____ Thickness between bushes as per Rule _____ Is the after end of the liner made watertight in the
 as fitted _____ as fitted _____ propeller boss _____
 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 _____ If so, state type _____ Length of Bearing in Stern Bush next to and supporting propeller _____
 Propeller, dia. 4200 Pitch 4000 No. of Blades 4 Material Brass whether Moveable solid Total Developed Surface 5.85 sq. feet
 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. two Diameter 85 mm Stroke 375 mm Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size _____ Pumps connected to the { No. and size _____
 How driven _____ Main Bilge Line { How driven _____
 Ballast Pumps, No. and size _____ 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 _____
 In Pump Room _____ In Holds, &c. _____

Main Water Circulating Pump Direct Bilge Suctions, No. and size _____ Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size _____ Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes _____
 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 _____
 Are all Sea Connections fitted direct on the skin of the ship _____ Are they fitted with Valves or Cocks _____
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the Overboard Discharges above or below the deep water line _____
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel _____ Are the Blow Off Cocks fitted with a spigot and brass covering plate _____
 What Pipes pass through the bunkers _____ How are they protected _____
 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 _____
 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 _____ Is the Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

MAIN BOILERS, &c.—(Letter for record _____) Total Heating Surface of Boilers 290.2 sqm
 Is Forced Draft fitted _____ No. and Description of Boilers _____ Working Pressure _____
IS A REPORT ON MAIN BOILERS NOW FORWARDED? _____
IS A DONKEY BOILER FITTED? _____ 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 15.11.29 Main Boilers _____ Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval) _____
 Superheaters _____ General Pumping Arrangements _____ 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 piston rod with 2 sets of packings, 1 bottom end and 2 top
 end crasses with bolts & nuts, 2 main bearing bolts & nuts, 2 coupling bolts & nuts,
 10 HP, 3 LP piston rings, 4 HP, 2 LP valves & seats, 6 valve spindles & bushes,
 4 adjusters with bushes & bolts, 2 escape valve spindles & springs, 10 valve springs,
 10% of all studs & nuts.
 Bilge pumps: 2 lever links, 2 valves & seats, 1 spring.
 Condenser: 50 condenser tubes, 150 ferrules & packing rings, 1 escape valve spring.

The foregoing is a correct description,

Manufacturer.

A BORSIG
G.M.B.H.

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PP [Signature] Lloyd's Register
Foundation

W1360-0078

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(2)35 7/16

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2/7/30

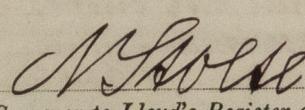
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See
Plan

During progress of work in shops -- Jan. 8, 15, 21; Feb. 5, 13, 20, 26; March 5, 10, 20, 26; April 2, 9, 15, 23, 28; May 7, 13, 20, 28; June 3, 6, 11, 16, 20, 1930.
 Dates of Survey while building }
 During erection on board vessel --- }
 Total No. of visits 25

Dates of Examination of principal parts—Cylinders 5.2, 20.3, 2.4, 15.4, 7.5, 6.6, Slides Valves 9.4, 7.5, 6.6, 30 Covers 13.2, 20.3, 2.4, 9.4, 16.6
 Pistons 15.1, 13.2, 26.2, 5.3, 2.4, 30.5, 30 Piston Rods 8.1, 2.1, 5.3, 20.5, 16.6, 30 Connecting rods 10.2, 26.3, 2.4, 23.4, 13.5, 16.6, 30
 Crank shaft 5.2, 13.2, 26.2, 5.3, 2.4, 20.5, 30 Thrust shaft 13.2, 20.3, 5.3, 2.4, 20.5, 6.6, 30 Intermediate shafts _____
 Tube shaft _____ Screw shaft _____ Propeller _____
 Stern tube _____ Engine and boiler seatings _____ Engines holding down bolts _____
 Completion of fitting sea connections _____
 Completion of pumping arrangements _____ Boilers fixed _____ Engines tried under steam _____
 Main boiler safety valves adjusted _____ Thickness of adjusting washers _____
 Crank shaft material Sp. Steel Identification Mark No. 944-945 NS. 20.5.30 Thrust shaft material Sp. Steel Identification Mark No. 946 NS. 20.5.30
 Intermediate shafts, material _____ Identification Marks _____ Tube shaft, material _____ Identification Mark _____
 Screw shaft, material _____ Identification Mark _____ Steam Pipes, material _____ Test pressure _____ Date of Test _____
 Is an installation fitted for burning oil fuel _____ 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 _____ 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 _____
 Is this machinery duplicate of a previous case m If so, state name of vessel _____

General Remarks (State quality of workmanship, opinions as to class, &c.)
This engine has been built under Special Survey in accordance with the Society's Rules and the approved plan of the crank shaft. All steel material used in the construction has been tested, the workmanship is satisfactory.
The H.P. cylinders have been tested to 19 kgs, the L.P. cylinders to 6 kgs and the main stop valve with branch pieces to 42 kgs water pressure and were found tight & sound, also the condenser at 2 kgs water pressure.
The engine is eligible in my opinion for part of the record of, " + L M C. - " when satisfactorily fixed on board and tried under working conditions.

The amount of Entry Fee ... £ 4 : 0 : } When applied for,
 Special ... £ 21 : 12 : } 23rd June 1930
 Donkey Boiler Fee ... £ : : }
 Travelling Expenses (if any) £ 17 : 18 : } 8.7.30
 TUE. 2 SEP 1930


 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned see Minute on Hamburg
First Entry Report No 19486



Certificate to be sent to the Surveyor requested not to write on or below the space for Committee's Minute.