

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office TUE JUL 17 1923

Date of writing Report 5<sup>th</sup> July 1923 When handed in at Local Office 10 Port of HAMBURG

No. in Survey held at Rostock Date, First Survey 20<sup>th</sup> July 1922 Last Survey 4<sup>th</sup> July 1923  
 Reg. Book. on the Steel Ss. "Grete" (Number of Visits 21)

Built at Rostock By whom built Actien Gesellschaft Neptun Yard No. 377 Tons { Gross 6567  
 Engines made at Rostock By whom made Act. Gesellschaft Neptun Engine No. 1380 When built 1923  
 Boilers made at Rostock By whom made Act. Gesellschaft Neptun Boiler No. 893/95 when made 1923  
 Registered Horse Power 640 Owners Carl Wohlenberg Port belonging to Hamburg  
 Nom. Horse Power as per Rule 640 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple expansion.

Dia. of Cylinders 24" x 22" x 20" Length of Stroke 1300 mm Revs. per minute 72 No. of Cylinders 3 No. of Cranks 3  
 Dia. of Crank shaft journals as per rule 393 mm Dia. of Crank pin 415 mm Crank webs Mid. length breadth 630 mm Thickness parallel to axis 260 mm  
 Diameter of Thrust shaft under collars as per rule 393 mm Diameter of Tunnel shaft as per rule 374 mm Diameter of Screw shaft as per rule 410 mm  
 Is the after end of the liner made watertight in the propeller boss yes

If the liner is in more than one length are the joints burned yes If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with plastic material insoluble in water and non-corrosive yes  
 If two liners are fitted, is the shaft lapped or protected between the liners no Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated no  
 Pitch of Propeller 5300 mm No. of Blades 4 State whether Moveable yes Total Surface 9.15 sqm. square feet.  
 No. of Feed Pumps fitted to the Main Engines none Diameter of ditto Stroke Can one be overhauled while the other is at work yes  
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 120 mm Stroke 650 mm Can one be overhauled while the other is at work yes  
 Total number and size of power driven Feed and Bilge Auxiliary Pumps Specified on other side. service donkey 230 x 50 x 200  
 No. and size of Pumps connected to the Main Bilge Line 2 bilge pumps as above, 1 ballast pump 200 x 350 x 260 mm, 1 general  
 No. and size of Ballast Pumps one, 200 x 350 x 260 mm No. and size of Lubricating Oil Pumps, including Spare Pump yes  
 Are two independent means arranged for circulating water through the Oil Cooler yes No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 6 of 100 mm, 1 of 90 mm, 1 of 60 mm and in Holds, &c. No 1 hold 2 of 100 mm, No 2 hold 2 of 100 mm, No 3 hold 2 of 100 mm, No 4 hold 2 of 100 mm  
 No. and size of Main Water Circulating Pump Bilge Suctions 1, 225 mm 8.85" No. and size of Donkey Pump Direct Suctions 1, 150 mm 5.90"  
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes  
 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 yes  
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Discharge Pipes above or below the deep water line above & below  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes  
 What Pipes are carried through the bunkers none How are they protected yes  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes  
 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 yes Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from Cylinder grating.

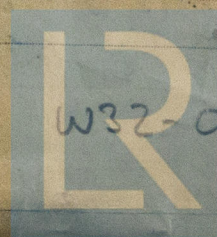
MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 840 sqm. 9042 ft<sup>2</sup>  
 Is Forced Draft fitted yes No. and Description of Boilers 3 Single end multitub. Working Pressure 214 lbs.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes  
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? yes

PLANS. Are approved plans forwarded herewith for Shafting yes Main Boilers yes Auxiliary Boilers yes Donkey Boilers yes  
 General Pumping Arrangements yes Oil fuel Burning Piping Arrangements yes

SPARE GEAR. State the articles supplied:—  
All articles of spare gear required as well as recommended in Section 32 of the Rules have been supplied with exception of the full set of propeller blades. (only 2 blades are supplied)

The foregoing is a correct description,  
 Action-Gesellschaft "Neptun"  
 Schiffswerft u. Maschinenfabrik.

Manufacturer.



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Foundation

20/7; 10/8; 26/10; 7/11; 7/12/1922;  
 During progress of work in shops -- 4/1; 7/2; 3/3; 9/3; 16/3; 28/3; 4/5; 8/5; 12/5 1923.  
 Dates of Survey while building During erection on board vessel --- 29/5; 1/6; 22/6; 27/6; 30/6; 3/7; 4/7; 1923.  
 Total No. of visits 21.

Dates of Examination of principal parts - Cylinders 26/10; 7/12/22; 3/3; 8/5/23. Slides 26/10; 7/12/22; 3/3; 8/5; 27/6/23.  
 Covers 26/10/22; 8/5/23. Pistons 3/3/23; 8/5/23. Rods 7/2/23; 8/5/23.  
 Connecting rods 7/1/22; 7/2; 1/6/23. Crank shaft 7/11; 7/12/22; 8/5/23. Thrust shaft 7/12/22; 7/2/23.  
 Tunnel shafts 4/1/23; 7/2/23; 1/6/23. Screw shaft 4/1/23. Propeller 3/3/23.  
 Stern tube 4/1; 7/2/23. Engine and boiler seatings 7/11/23; 4/1; 1/6/23. Engines holding down bolts 1/6/23.  
 Completion of pumping arrangements 1/6; 22/6/23. Boilers fixed 22/6/23. Engines tried under steam 4th July 1923.  
 Completion of fitting sea connections 28th March 1923. Stern tube 28th March 1923. Screw shaft and propeller 4th May 1923.  
 Main boiler safety valves adjusted 30th June 1923. Thickness of adjusting washers A boiler 73.5. Centre 56.7. B 75.5.  
 Material of Crank shaft Steel Identification Mark on Do. No 1238, HK. 28/3/22, N.S. 8/5/23.  
 Material of Thrust shaft Steel Identification Mark on Do. 6060 HK 28/3/22.  
 Material of Tunnel shafts Steel Identification Marks on Do. 6042/45 HK 7/3/22, 6046 & 6061 HK 2.  
 Material of Screw shafts Steel Identification Marks on Do. 6062, HK 28/3/22.  
 Material of Steam Pipes Steel Test pressure 710 lbs Date of Test 29th June 1923.  
 Is an installation fitted for burning oil fuel no. Is the flash point of the oil to be used over 150°F. ✓  
 Have the requirements of the Rules for carrying and burning oil fuel been complied with ✓  
 Is this machinery duplicate of a previous case no. If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.)

### Specification of pumps:

2 Weir pumps 310 x 610 x 230 mm for feed purposes.  
 1 Injector: 12.5 tons per hour.  
 1 steam pump: 200 x 450 x 140 mm in port. from bilges.  
 1 Duplex 230 x 300 x 150 for anse. feed, fire & deck wash purposes, also  
 1 " 200 x 350 x 260 ballast and bilge purposes.  
 1 " 80 x 75 x 70 Freshwater.

Material and workmanship of Engines & Boilers are of best description the outfit ample. The steel material used for their construction has been made by works approved by the Society & tested in conformity with the Rules requirements. Engines and Boilers have been constructed in accordance with the approved plans and the Secretary's letters E 16/5/22; 23/10/22; 30/12/22; 16/3/23; 6/4/23; and otherwise in conformity with the Rules requirements.

The Machinery has been tried under working conditions and has given full satisfaction. It is submitted that the Machinery is eligible in my opinion, to be classed, "L.M.C.-7, 23" in the Society's Register Book.

The amount of Entry Fee ... £ 6 : 0 :  
 Special ... £ 102 : 0 :  
 Donkey Boiler Fee ... £ ✓ : - :  
 Travelling Expenses (if any) £ 5 : 10 :

When applied for,

6 July 1923

When received,

30. 7. 23

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 3 AUG 1923

Assigned

+ Lmb. 7. 23 J.D. G.



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CERTIFICATE WRITTEN