

REPORT ON MACHINERY.

No. 52639.

Port of *Newcastle on Tyne*Received at London *106 APR 1897*No. in Survey held at *WallSEND & Antwerp* Date, first Survey *Nov 7 '06* Last Survey *12 March 1907*

Reg. Book.

48 on the *S.S. Neuenstein*Number of Visits *13*Gross *2564*Tons Net *1641*Master *C. Jollens* Built at *Antwerp* By whom built *Antwerp S.B. Co.*When built *1907*Engines made at *Newcastle* By whom made *H.E.M. Eng Co. Ltd.*when made *1906-7*Boilers made at *"* By whom made *"* when made *1907*Registered Horse Power *1* Owners *See Transport Gesellschaft* Port belonging to *Hamburg*Nom. Horse Power as per Section 28 *198* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes*ENGINES, &c.—Description of Engines *Tri C. p.d.* No. of Cylinders *3* No. of Cranks *3*Dia. of Cylinders *22 1/2" 37" 61"* Length of Stroke *42* Revs. per minute *64* Dia. of Screw shaft *as per rule 12.85* Material of *As*Is the screw shaft fitted with a continuous liner the whole length of the stern tube *Yes* Is the after end of the liner made water tightin 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 partbetween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *Yes* If twoliners are fitted, is the shaft lapped or protected between the liners *Yes* Length of stern bush *4' 7"*Dia. of Tunnel shaft *as per rule 11.9* Dia. of Crank shaft journals *as per rule 11.9* Dia. of Crank pin *12"* Size of Crank web *23 1/2" 72"* Dia. of thrust shaft undercollars *12"* Dia. of screw *16 1/2"* Pitch of Screw *16 1/2"* No. of Blades *4* State whether moveable *f* Total surface *80 1/2*No. of Feed pumps *2* Diameter of ditto *3 1/2"* Stroke *21"* Can one be overhauled while the other is at work *Yes*No. of Bilge pumps *2* Diameter of ditto *3 1/2"* Stroke *21"* Can one be overhauled while the other is at work *Yes*No. of Donkey Engines *3* Sizes of Pumps *8x9x10 7/8 8x5 1/2 x 5 1/2 4 1/2 x 2 1/2 x 4* No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room *Three 3"* In Holds, &c. *Two in each hold 3"**One in tunnel web 3 1/2"* Suctions to ballast tanks *3 1/2" 2 1/2"*No. of Bilge Injections *1* sizes *4"* Connected to condenser, or to circulating pump *6"* Is a separate Donkey Suction fitted in Engine room & size *Yes*Are all the bilge suction pipes fitted with roses *Yes* Are the roses in Engine room always accessible *Yes* Are the sluices on Engine room bulkheads always accessible *Yes*Are all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *valves & cocks*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*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*Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *Yes*Dates of examination of completion of fitting of Sea Connections *13-3-07* of Stern Tube *13-3-07* Screw shaft and Propeller *24.1.07*Is the Screw Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *Yes* worked from *Engine Room*BOILERS, &c.—(Letter for record *S*) Manufacturers of Steel *J. Spencer & Sons Ltd.*Total Heating Surface of Boilers *2185 1/2* Is Forced Draft fitted *No* No. and Description of Boilers *2, S.E.*Working Pressure *180 lbs* Tested by hydraulic pressure to *360 lbs* Date of test *15.2.07* No. of Certificate *7432*Can each boiler be worked separately *Yes* Area of fire grate in each boiler *57.6 1/2* No. and Description of Safety Valves toeach boiler *2, Spring* Area of each valve *9.6 1/2* Pressure to which they are adjusted *185 lbs* Are they fitted with easing gear *Yes*Smallest distance between boilers or uptakes and bunkers or woodwork *18"* Mean dia. of boilers *15' 3"* Length *10' 6"* Material of shell plates *S*Thickness *1 1/4"* Range of tensile strength *28 1/2-32* Are the shell plates welded or flanged *ends* Descrip. of riveting: cir. seams *2 1/2 lap*long. seams *2 1/2 butt* Diameter of rivet holes in long. seams *1 3/8"* Pitch of rivets *8 1/2"* Lap of plates or width of butt straps *19 1/8"*Per centages of strength of longitudinal joint *98.7%* Working pressure of shell by rules *186.5 lbs* Size of manhole in shell *End 16x12"*Size of compensating ring *flanged* No. and Description of Furnaces in each boiler *3 deigns* Material *S* Outside diameter *3' 11 1/2"*Length of plain part *top 19"* Thickness of plates *bottom 3 1/2"* Description of longitudinal joint *weld* No. of strengthening rings *Yes*Working pressure of furnace by the rules *198* Combustion chamber plates: Material *S* Thickness: Sides *1 1/2"* Back *5/8"* Top *1 1/2"* Bottom *1"*Pitch of stays to ditto: Sides *8x7"* Back *8x8"* Top *8x7"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *210*Material of stays *S* Diameter at smallest part *1.44* Area supported by each stay *64* Working pressure by rules *180* End plates in steam space:Material *S* Thickness *1"* Pitch of stays *16x16"* How are stays secured *nuts* Working pressure by rules *185* Material of stays *S*Diameter at smallest part *6' 09"* Area supported by each stay *256* Working pressure by rules *237* Material of Front plates at bottom *S*Thickness *1"* Material of Lower back plate *3 1/2"* Thickness *3 1/2"* Greatest pitch of stays *14 1/2"* Working pressure of plate by rules *206 1/2*Diameter of tubes *3 1/4"* Pitch of tubes *4 1/2 x 4 1/2"* Material of tube plates *S* Thickness: Front *1"* Back *3/4"* Mean pitch of stays *9 x 8 3/4"*Pitch across wide water spaces *14 1/2"* Working pressures by rules *195* Girders to Chamber tops: Material *S* Depth andthickness of girder at centre *8 1/2 x 1 1/2"* Length as per rule *29 1/2"* Distance apart *8"* Number and pitch of stays in each *3 of 4"*Working pressure by rules *202* Superheater or Steam chest; how connected to boiler *Yes* Can the superheater be shut off and the boiler workedseparately *Yes* Diameter *Length* Thickness of shell plates *Material* Description of longitudinal joint *Diam. of rivet*holes *Pitch of rivets* Working pressure of shell by rules *Diameter of flue* Material of flue plates *Thickness*If stiffened with rings *Distance between rings* Working pressure by rules *End plates: Thickness* How stayedWorking pressure of end plates *Area of safety valves to superheater* Are they fitted with easing gear

9800-811

VERTICAL DONKEY BOILER—Manufacturers of Steel

No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure _____ tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of Safety _____

Valves _____ No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ Date of adjustment _____

If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Dia. of donkey boiler _____ Length _____

Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Plates _____

Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____

Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— 1 Set connecting rod bolts & nuts. two main bearing bolts & nuts. 1 set of coupling bolts. 2 set feed and helge pump valves. propeller & shaft. 1 valve spindle for each valve complete. one pair top & bottom end frames. 1 air and air pump rod. Check valves & assorted iron. Boiler tubes 16

The foregoing is a correct description,

NORTH EASTERN MARINE ENGINEERING CO., LTD.

Manufacturer.

Dates of Survey while building _____ During progress of work in shops _____ Secretary. _____ 1906. Nov. 7. 22. Dec. 5. 7. 20. 1907. Jan. 24. 31. Feb. 11. 13. 15. 19. Mar. 1. 12. _____

During erection on board vessel _____ March 20, 22, 27, 28 April 3, 11, 13, 16

Total No. of visits 13 + 8 = 21

Is the approved plan of main boiler forwarded herewith 408.

" " " donkey " " " 70

Dates of Examination of principal parts—Cylinders 24.1.07. Slides 24.1.07. Covers 31.1.07. Pistons 31.1.07. Rods 24.1.07. Connecting rods 24.1.07. Crank shaft 22.11.06. Thrust shaft 22.11.06. Tunnel shafts 13/12.06. Screw shaft 24.1.07. Propeller 24.1.07. Stern tube 24.1.07. Steam pipes tested 9.2.07. Engine and boiler seatings 27.2.07. Engines holding down bolts 28.3.07. Completion of pumping arrangements 13-4-07. Boilers fixed 13-4-07. Engines tried under steam 13-4-07. Main boiler safety valves adjusted 13-4-07. Thickness of adjusting washers Port. P 1/2" S. 1/2" St 3/4" S. 1/2" S. 1/2" LR. Material of Crank shaft S. Identification Mark on Do. JTF 11-06. Material of Thrust shaft S. Identification Mark on Do. JTF 11-06. Material of Tunnel shafts J. Identification Marks on Do. JTF 11-06. Material of Screw shafts J. Identification Marks on Do. JTF 11-06. Material of Steam Pipes W. J. Test pressure 540 lbs

General Remarks (State quality of workmanship, opinions as to class, &c. Machinery and boilers constructed under special survey. Materials and workmanship good and efficient. The Machinery &c. has been shipped to Antwerp to be fitted on board.

The machinery & boilers have been fitted on board in accordance with the Rules. The safety valves have been adjusted under steam to blow off at 185 lbs per sq. The engines worked well under steam. For report upon Donkey Boilers see other forms.

This vessel is eligible in our opinion for the notation + LMC 4.07 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 4.07

See light. J. J. Findlay 19/4/07 J. P. Cornish 19/4/07

The amount of Entry Fee. £ 2 : : When applied for. -5 APR 1907
Special £ 29. 14 : :
Donkey Boiler Fee £ : : : When received.
Travelling Expenses (if any) £ : : : 12/4/07

Committee's Minute

FRI. APR 19 1907

Assigned

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



Lloyd's Register Foundation

MACHINERY CERTIFICATE WRITTEN.

Certificate (if required) to be sent to the Registrar of Shipping.