

REPORT ON MACHINERY.

No. 26105

FRI. JUN. 26 1914

Received at London Office

Date of writing Report 12-5-14 When handed in at Local Office 13-5-14 Port of Sunderland

No. in Survey held at Sunderland Date, First Survey 4th Nov 1913 Last Survey 4 May 1914
 Reg. Book. on the New Steel S.S. "Kalliope" (Number of Visits 26.5 = 3.18) Gross 1434 Tons Net 886
 Master A. Peters 88-14 Built at Antwerp By whom built Antwerp Eng Co Ltd 1068 1/2 When built 1911
 Engines made at Sunderland By whom made North Eastern Marine Eng Co Ltd when made 1911
 Boilers made at Sunderland By whom made North Eastern Marine Eng Co Ltd when made 1911
 Registered Horse Power Owners The Neptune Steamship Co. Port belonging to Bremen.
 Nom. Horse Power as per Section 28 185 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks Three
 Dia. of Cylinders 19" x 31" x 51" Length of Stroke 36" Revs. per minute 11.63 Material of screw shaft as per rule 11.63 as fitted 12 3/8" screw shafts Steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube No liner Is the after end of the liner made water tight in the propeller boss If the liner is in more than one length are the joints burned 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 Length of stern bush 14'-1 1/2"
 Dia. of Tunnel shaft as per rule 9.58 as fitted 9.5" Dia. of Crank shaft journals as per rule 10.06 as fitted 10.5" Dia. of Crank pin 10.5" Size of Crank webs 15 1/2" Dia. of thrust shaft under collars 10 1/8" Dia. of screw 11'-0" Pitch of Screw 11'-0" No. of Blades 14 State whether moveable ho Total surface 61 ft
 No. of Feed pumps Two Diameter of ditto 3" Stroke 16 1/2" Can one be overhauled while the other is at work yes
 No. of Bilge pumps Two Diameter of ditto 3 1/2" Stroke 16 1/2" Can one be overhauled while the other is at work yes
 No. of Donkey Engines Two Sizes of Pumps Ballast 6" x 9" Feed 5 1/2" x 3 1/2" x 5" No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room Three of 2 1/4" In Holds, &c. Forehold 2 of 2 1/2" Aft Hold 2 of 2 1/2"
 No. of Bilge Injections One sizes 3 1/2" Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size Yes, 2 1/4"
 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 None
 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
 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
 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 22-4-14 of Stern Tube 22-4-14 Screw shaft and Propeller 25-4-14
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Main Deck level

BOILERS, &c.—(Letter for record 8) Manufacturers of Steel Spencer & Sons Ltd Newburn
 Total Heating Surface of Boilers 3090 Is Forced Draft fitted No. and Description of Boilers Two single ended.
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 14-11-14 No. of Certificate 3204
 Can each boiler be worked separately Yes Area of fire grate in each boiler 33 ft No. and Description of Safety Valves to each boiler Two direct firing Area of each valve 3 1/4" Pressure to which they are adjusted 180 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 19" Mean dia. of boilers 13'-0" Length 10'-6" Material of shell plates Steel
 Thickness 1 3/8" Range of tensile strength 28 1/2 to 32 tons Are the shell plates welded or flanged ho Descrip. of riveting: cir. seams D.R long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 3/8" Lap of plates or width of butt straps 18 1/8"
 Per centages of strength of longitudinal joint rivets 95 plate 85 Working pressure of shell by rules 185 lbs Size of manhole in shell 16" x 12"
 Size of compensating ring 9 1/2" x 16 1/4" No. and Description of Furnaces in each boiler Two daylightons Material Steel Outside diameter 3'-4 1/2"
 Length of plain part top 33" bottom 6 1/2" Thickness of plates crown 33" bottom 6 1/2" Description of longitudinal joint weld No. of strengthening rings 1
 Working pressure of furnace by the rules 181 lbs Combustion chamber plates: Material Steel Thickness: Sides 1/4" Back 5/8" Top 3/4" Bottom 3/4"
 Pitch of stays to ditto: Sides 8" x 8 1/4" Back 8" x 8" Top 9" x 9" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 211 lbs
 Material of stays Steel Diameter at smallest part 1 1/4" Area supported by each stay 1 1/4" Working pressure by rules 214 lbs End plates in steam space: Material Steel Thickness 1 3/8" Pitch of stays 22 1/2" x 8 1/4" How are stays secured DN Wash Working pressure by rules 203 lbs Material of stays Steel
 Diameter at smallest part 8 1/4" Area supported by each stay 11 1/4" Working pressure by rules 226 lbs Material of Front plates at bottom Steel
 Thickness 8" Material of Lower back plate Steel Thickness 1/8" Greatest pitch of stays 14 1/2" x 8" Working pressure of plate by rules 193 lbs
 Diameter of tubes 3 1/4" Pitch of tubes 14 1/2" x 14 1/2" Material of tube plates Steel Thickness: Front 1/8" Back 1/16" Mean pitch of stays 10 1/2"
 Pitch across wide water spaces 14 1/2" Working pressures by rules 288 lbs 215 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 20 3/8" x 8" Length as per rule 30 1/2" Distance apart 9" Number and pitch of stays in each 2 @ 8 1/4"
 Working pressure by rules 195 lbs Superheater on Steam chest; how connected to boiler independent Can the superheater be shut off and the boiler worked separately yes Diameter of tubes Length 22" Thickness of shell plates 3 mm Material Steel 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 stayed
 Working pressure of end plates Area of safety valves to superheater 1 1/4" Are they fitted with easing gear Yes

004364-004368-0348

IS A DONKEY BOILER FITTED? *No.*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 1 Propeller, 2 Top end & 2 bottom end bolts, 2 main bearing bolts, 1 set of coupling bolts, 1 set of feed & bilge pump valves, 1 set of piston springs, various sizes of bolts & nuts & rod iron, 1 feed check valve, 6 flange glasses, 6 boiler tubes, 12 Condenser tubes and ferrules, 2 safety valve springs, 1 circulating pump rod, 1 slide valve spindle, 1 set of valves for air & circulating pumps, Spare packing for rods & spindles & one set of fire bars.

The foregoing is a correct description,

NORTH EASTERN MARINE ENGINEERING CO LTD

S.T. Harrison
Manufacturer.

(A. B. C. D. E. F. G. H. I. J. K. L. M. N. O. P. Q. R. S. T. U. V. W. X. Y. Z. AA. AB. AC. AD. AE. AF. AG. AH. AI. AJ. AK. AL. AM. AN. AO. AP. AQ. AR. AS. AT. AU. AV. AW. AX. AY. AZ. BA. BB. BC. BD. BE. BF. BG. BH. BI. BJ. BK. BL. BM. BN. BO. BP. BQ. BR. BS. BT. BU. BV. BW. BX. BY. BZ. CA. CB. CC. CD. CE. CF. CG. CH. CI. CJ. CK. CL. CM. CN. CO. CP. CQ. CR. CS. CT. CU. CV. CW. CX. CY. CZ. DA. DB. DC. DD. DE. DF. DG. DH. DI. DJ. DK. DL. DM. DN. DO. DP. DQ. DR. DS. DT. DU. DV. DW. DX. DY. DZ. EA. EB. EC. ED. EE. EF. EG. EH. EI. EJ. EK. EL. EM. EN. EO. EP. EQ. ER. ES. ET. EU. EV. EW. EX. EY. EZ. FA. FB. FC. FD. FE. FF. FG. FH. FI. FJ. FK. FL. FM. FN. FO. FP. FQ. FR. FS. FT. FU. FV. FW. FX. FY. FZ. GA. GB. GC. GD. GE. GF. GH. GI. GJ. GK. GL. GM. GN. GO. GP. GQ. GR. GS. GT. GU. GV. GW. GX. GY. GZ. HA. HB. HC. HD. HE. HF. HG. HH. HI. HJ. HK. HL. HM. HN. HO. HP. HQ. HR. HS. HT. HU. HV. HW. HX. HY. HZ. IA. IB. IC. ID. IE. IF. IG. IH. II. IJ. IK. IL. IM. IN. IO. IP. IQ. IR. IS. IT. IU. IV. IW. IX. IY. IZ. JA. JB. JC. JD. JE. JF. JG. JH. JI. JJ. JK. JL. JM. JN. JO. JP. JQ. JR. JS. JT. JU. JV. JW. JX. JY. JZ. KA. KB. KC. KD. KE. KF. KG. KH. KI. KJ. KK. KL. KM. KN. KO. KP. KQ. KR. KS. KT. KU. KV. KW. KX. KY. KZ. LA. LB. LC. LD. LE. LF. LG. LH. LI. LJ. LK. LL. LM. LN. LO. LP. LQ. LR. LS. LT. LU. LV. LW. LX. LY. LZ. MA. MB. MC. MD. ME. MF. MG. MH. MI. MJ. MK. ML. MM. MN. MO. MP. MQ. MR. MS. MT. MU. MV. MW. MX. MY. MZ. NA. NB. NC. ND. NE. NF. NG. NH. NI. NJ. NK. NL. NM. NN. NO. NP. NQ. NR. NS. NT. NU. NV. NW. NX. NY. NZ. OA. OB. OC. OD. OE. OF. OG. OH. OI. OJ. OK. OL. OM. ON. OO. OP. OQ. OR. OS. OT. OU. OV. OW. OX. OY. OZ. PA. PB. PC. PD. PE. PF. PG. PH. PI. PJ. PK. PL. PM. PN. PO. PP. PQ. PR. PS. PT. PU. PV. PW. PX. PY. PZ. QA. QB. QC. QD. QE. QF. QG. QH. QI. QJ. QK. QL. QM. QN. QO. QP. QQ. QR. QS. QT. QU. QV. QW. QX. QY. QZ. RA. RB. RC. RD. RE. RF. RG. RH. RI. RJ. RK. RL. RM. RN. RO. RP. RQ. RR. RS. RT. RU. RV. RW. RX. RY. RZ. SA. SB. SC. SD. SE. SF. SG. SH. SI. SJ. SK. SL. SM. SN. SO. SP. SQ. SR. SS. ST. SU. SV. SW. SX. SY. SZ. TA. TB. TC. TD. TE. TF. TG. TH. TI. TJ. TK. TL. TM. TN. TO. TP. TQ. TR. TS. TT. TU. TV. TW. TX. TY. TZ. UA. UB. UC. UD. UE. UF. UG. UH. UI. UJ. UK. UL. UM. UN. UO. UP. UQ. UR. US. UT. UU. UV. UW. UX. UY. UZ. VA. VB. VC. VD. VE. VF. VG. VH. VI. VJ. VK. VL. VM. VN. VO. VP. VQ. VR. VS. VT. VU. VV. VW. VX. VY. VZ. WA. WB. WC. WD. WE. WF. WG. WH. WI. WJ. WK. WL. WM. WN. WO. WP. WQ. WR. WS. WT. WU. WV. WW. WX. WY. WZ. XA. XB. XC. XD. XE. XF. XG. XH. XI. XJ. XK. XL. XM. XN. XO. XP. XQ. XR. XS. XT. XU. XV. XW. XX. XY. XZ. YA. YB. YC. YD. YE. YF. YG. YH. YI. YJ. YK. YL. YM. YN. YO. YP. YQ. YR. YS. YT. YU. YV. YW. YX. YY. YZ. ZA. ZB. ZC. ZD. ZE. ZF. ZG. ZH. ZI. ZJ. ZK. ZL. ZM. ZN. ZO. ZP. ZQ. ZR. ZS. ZT. ZU. ZV. ZW. ZX. ZY. ZZ.)
Dates of Survey while building { During progress of work in shops 5 - 1913 Nov. 7-14-21-27 Dec 4-5-12-23 Jan. 5-6-15-16-23 Feb. 4-5-11-18-19-20-23.
During erection on board vessel - - - Mar. 6-10-13-18-20-24-26-31 Apr. 2-3-8-9-17-23-28-29 May 2-4 Apr. 22 May 30
Total No. of visits June 4, 5, 9 (26) + 5 Total 31. Is the approved plan of main boiler forwarded herewith yes
" " " donkey " " " None.

Dates of Examination of principal parts—Cylinders 19-2-14 Slides 23-4-14 Covers 18-3-14 Pistons 23-4-14 Rods 9-4-14
Connecting rods 9-4-14 Crank shaft 9-4-14 Thrust shaft 24-3-14 Tunnel shafts 23-4-14 Screw shaft 17-4-14 Propeller 18-3-14
Stern tube 8-4-14 Steam pipes tested 4-6-14 Engine and boiler seatings 30-5-14 Engines holding down bolts 30-5-14
Completion of pumping arrangements 9-6-14 Boilers fixed 30-5-14 Engines tried under steam 5-6-14
Main boiler safety valves adjusted 5-6-14 Thickness of adjusting washers P.F. 1/2" A 1/32" S.F. 1 1/32" A 1/32"
Material of Crank shaft Steel Identification Mark on Do. 3445 C.A.B. Material of Thrust shaft Steel Identification Mark on Do. 3457 C.A.B.
Material of Tunnel shafts Steel Identification Marks on Do. 3649 A.F.D. Material of Screw shafts Steel Identification Marks on Do. 3646 A.F.D.
Material of Steam Pipes Mild drawn Steel. Test pressure 540 lbs.

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 Section 49 of the Rules 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.)

This machinery has been built under special survey, the materials & workmanship are of good quality & the hydraulic tests of the boilers & superheaters proved satisfactory. It has been shipped to Antwerp & be fitted on board the vessel. Antwerp surveyors notified

The Engines & Boilers have now been fitted on board in a satisfactory manner and together with the Auxiliary machinery tried under working conditions and found good and eligible, in my opinion, to have the record of + L.M.C. 6-14.

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C. 6-14.

W. D. Butler
30/6/14

The amount of Entry Fee ... £ 2 : 0 : 0 :
Special ... { due to £ 18 : 10 : 0 :
Donkey Boiler Fee { due to £ 9 : 5 : 0 :
Travelling Expenses (if any) £ : : 26-5-1914

When applied for,

13-5-1914

When received,

26-5-1914

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

Committee's Minute

FRI. JUL. 3-1914

Assigned

+ L.M.C. 6-14

MACHINERY CERTIFICATE
WRITTEN



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Lloyd's Register
Foundation