

REPORT ON MACHINERY

Received at London Office

Date of writing Report 19 When handed in at Local Office MAR 29 1911 Port of Newcastle on Tyne
 No. in Survey held at Newcastle on Tyne Date, First Survey 18th July 1910 Last Survey 28th March 1911
 Reg. Book. on the S. S. Augustya Loherczegno (Number of Visits)
 Master Walker Built at Walker By whom built Must. Dobson & Co Tons ^{Gross} 4289 _{Net} 2706 When built 1911
 Engines made at Walsend By whom made H. E. Marine Engineering Co^l when made 1911
 Boilers made at W By whom made W when made 1911
 Registered Horse Power 342 Owners Hungarian Steam S.S. Co. Ltd Port belonging to Fiume
 Nom. Horse Power as per Section 28 342 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Inverted triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 24, 39, 66 Length of Stroke 45 Revs. per minute 70 Dia. of Screw shaft ^{as per rule} 13.79 Material of Iron
 as fitted 14.71 screw shaft
 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 tight
 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 a plastic material insoluble in water and non-corrosive Yes If two
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 5' 6"
 Dia. of Tunnel shaft ^{as per rule} 12.05 Dia. of Crank shaft journals ^{as per rule} 12.65 Dia. of Crank pin 13 Size of Crank webs 24 1/2 x 8 1/2 Dia. of thrust shaft under
 collars 13 Dia. of screw 17.3 Pitch of Screw 17.3 No. of Blades 4 State whether moceable no Total surface 92 sq ft
 No. of Feed pumps 2 Diameter of ditto 6 Stroke 21 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 3 Sizes of Pumps B-10 1/2 x 12 1/2 x 2 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 4 of 3 1/2 In Holds, &c. 2 of 3 1/2 in each
 No. of Bilge Injections 1 sizes 5" Connected to condenser, or to circulating pump no Is a separate Donkey Suction fitted in Engine room & size Yes - 3 1/2"
 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 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 Yes 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 9.2.11 of Stern Tube 9.2.11 Screw shaft and Propeller 20.2.11
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from top platform

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Must. J. Spencer & Sons
 Total Heating Surface of Boilers 5650 sq ft Is Forced Draft fitted no No. and Description of Boilers 3 S. E. Cyl^l Mull^l
 Working Pressure 185 lbs Tested by hydraulic pressure to 360 lbs Date of test 23.11.10 No. of Certificate 8057
 Can each boiler be worked separately Yes Area of fire grate in each boiler 50 sq ft No. and Description of Safety Valves to
 each boiler 2 spring Area of each valve 7.07 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 open side Mean dia. of boilers 44.0 Length 10.6 Material of shell plates steel
 Thickness 1 1/2 Range of tensile strength 28 3/4 / 32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams d. r. lap
 long. seams l. d. r. s. Diameter of rivet holes in long. seams 1 1/4 Pitch of rivets 8 3/4 Lap of plates or width of butt straps 18 3/4
 Per centages of strength of longitudinal joint ^{rivets} 92.8 Working pressure of shell by rules 183.4 lbs Size of manhole in shell 16 x 12
 plate 85.7
 Size of compensating ring flanged No. and Description of Furnaces in each boiler 3 Morrison Material steel Outside diameter 43
 Length of plain part ^{top} 1 Thickness of plates ^{bottom} 17/32 Description of longitudinal joint weld No. of strengthening rings 1
 Working pressure of furnace by the rules 190 lbs Combustion chamber plates: Material steel Thickness: Sides 23/32 Back 23/32 Top 23/32 Bottom 7/8
 Pitch of stays to ditto: Sides 9 3/4 x 10 1/2 Back 9 3/4 x 10 1/2 Top 9 3/4 x 10 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 180.5 lbs
 Material of stays steel Diameter at smallest part 2.03 Area supported by each stay 98.4 Working pressure by rules 185 lbs End plates in steam space:
 Material steel Thickness 1 3/4 Pitch of stays 24 x 19 1/2 How are stays secured nut & washer Working pressure by rules 185 lbs Material of stays steel
 Diameter at smallest part 8.29 Area supported by each stay 477 Working pressure by rules 184 lbs Material of Front plates at bottom steel
 Thickness 1 Material of Lower back plate steel Thickness 1 5/8 Greatest pitch of stays 14 1/2 x 10 1/2 Working pressure of plate by rules 190 lbs
 Diameter of tubes 3 1/2 Pitch of tubes 4 3/4 x 4 1/2 Material of tube plates steel 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 183 lbs Girders to Chamber tops: Material steel Depth and
 thickness of girder at centre 8 3/4 x 2 Length as per rule 32 Distance apart 10 1/2 Number and pitch of stays in each 2-9 3/4
 Working pressure by rules 182 lbs Superheater or Steam chest; how connected to boiler Yes Can the superheater be shut off and the boiler worked
 separately Yes Diameter — Length — Thickness of shell plates — Material — Description of longitudinal joint 2019 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 — Are they fitted with easing gear —

If not, state whether, and when, one will be sent? Is a Report also sent on the Hull of the Ship?

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 _____ Rivets _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ 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 _____ Radius of do. _____ Stayed by _____

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

SPARE GEAR. State the articles supplied:— Propeller, Propeller shaft, $\frac{1}{3}$ " Crank shaft, 1 set top and brass, 1 set bottom and frames (for one engine), 2 main and donkey feed check valves, 2 top end, 2 bottom end, 2 main bearing & 1 set of coupling bolts, 1 set feed & bilge pump valves, 12 piston bolts, $\frac{1}{2}$ set air pump valves & 1 set air pump valves, Bolts & nuts assorted & iron of sizes ✓

The foregoing is a correct description,
NORTH EASTERN MARINE ENGINEERING Co., LTD. Manufacturer.

G. J. Morrison Secretary. 1910
 Jul. 18. 20. 22. 25. 27. 29. Aug. 3. 5. 9. 11. 17. 18. 22. 25. 29. Sep. 1. 6. 8. 12. 13. 20
 1911
 26. 30. Oct. 3. 5. 6. 7. 11. 13. 15. 20. 24. 26. 28. Nov. 1. 3. 4. 7. 9. 10. 14. 17. 23. 25. 27. 30. Dec. 1. 5. 13. 14. 19. 22. Jan. 11. 12. 20.
 25. 30. Feb. 1. 3. 7. 9. 10. 13. 15. 16. 20. 22. 23. 24. 27. 28. Mar. 3. 6. 9. 13. 16. 23. 28.
 Is the approved plan of main boiler forwarded herewith. *Yes* ✓

Dates of Examination of principal parts—Cylinders 10-11-10 Slides 20-1-11 Covers 10-11-10 Pistons 20-1-11 Rods 10-11-10
 Connecting rods 10-11-10 Crank shaft 18-10-10 Thrust shaft 6-10-10 Tunnel shafts 7-11-10 Screw shaft 26-1-11 Propeller 4-11-10
 Stern tube 1-2-11 Steam pipes tested 16-2-11 24-2-11 Engine and boiler seatings 9-2-11 Engines holding down bolts 22-2-11
 Completion of pumping arrangements 6-3-11 Boilers fixed 28-2-11 Engines tried under steam 6-3-11
 Main boiler safety valves adjusted 6-3-11 Thickness of adjusting washers P.P. $\frac{3}{8}$ " P.S. $\frac{5}{16}$ " C.P. $\frac{1}{2}$ " C.S. $\frac{7}{32}$ " S.P. $\frac{5}{16}$ " SS $\frac{3}{8}$ "
 Material of Crank shaft *Steel* Identification Mark on Do. *R.W.C. 11-10* Material of Thrust shaft *Steel* Identification Mark on Do. *R.W.C. 6-10-10*
 Material of Tunnel shafts *Steel* Identification Marks on Do. *R.W.C. 7-11-10* Material of Screw shafts *Iron* Identification Marks on Do. *R.W.C. 25-1-11*
 Material of Steam Pipes *Copper* Test pressure 400 lbs

General Remarks (State quality of workmanship, opinions as to class, &c.) The Machinery of this vessel has been constructed under special survey, the workmanship and materials used are both of good quality, the Engines have been tried under steam and worked satisfactorily

I beg to recommend that this vessel is eligible in my opinion to have the record **L.M.C. 3-11** in the Register Book
 It is submitted that this vessel is eligible for THE RECORD, + L.M.C. 3-11.
J.W.D. 30/3/11

The amount of Entry Fee .. £ 3 : 0 : 0
 Special .. £ 37 : 2 : 0
 Donkey Boiler Fee .. £ : :
 Travelling Expenses (if any) £ : :
 Committee's Minute
 Assigned

When applied for, **MAR 29 1911**
 When received, 30-3-11
FRI. 31 MAR 1911
 + L.M.C. 3-11

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



Certificate (if required) to be sent to Registrar