

REPORT ON MACHINERY.

No. 66141

TUE. MAY. 26. 1914

Date of writing Report

19

When handed in at Local Office

MAY 25 1914

Port of

NEWCASTLE-ON-TYNE.

No. in Survey held at

South Shields

Reg. Book.

70 on the

S.S. 'LINKMOOR'

Date, First Survey

9th Jan 1914

Last Survey

25 May 1914

(Number of Visits)

35

Tons

Gross 4305.89

Net 2746.36

When built

1914

Master

Built at South Shields

By whom built

J. Readhead & Sons Ltd.

Engines made at South Shields

By whom made

J. Readhead & Sons Ltd.

when made

1914

Boilers made at South Shields

By whom made

J. Readhead & Sons Ltd.

when made

1914

Registered Horse Power

Owners Moor Line Ltd. (N. Limerick & Co.)

Port belonging to

London

Nom. Horse Power as per Section 28

386

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

No.

ENGINES, &c.—Description of Engines Triple Expansion Surface Condensing No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 26"-42"-69" Length of Stroke 48" Revs. per minute 14.44 Dia. of Screw shaft as per rule 14.44 Material of screw shaft as fitted 14 1/2" 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 4'-10"

Dia. of Tunnel shaft as per rule 12.93" Dia. of Crank shaft journals as per rule 13.57" Dia. of Crank pin 13 3/4" Size of Crank webs 9"x18" Dia. of thrust shaft under collars 14 1/2" Dia. of screw 17'-6" Pitch of Screw 16'-6" to 18'-6" No. of Blades 4 State whether moveable No. Total surface 87 sq ft

No. of Feed pumps 2 Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 4 3/8" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 3 Sizes of Pumps Duplex Ballast 8"x8"x8" No. and size of Suctions connected to both Bilge and Donkey pumps 7"x4 1/2"x7" No. 1. 2. 3. & 4. Holes Port & Starboard 3 1/2" dia. also Tunnel well suction, 2 1/2" dia.

In Engine Room 3. Pul 3 1/2" Centre 3 1/2" Starboard 3 1/2" In Holds, &c. 9- nos. 1. 2. 3. & 4. Holes Port & Starboard 3 1/2" dia.

No. of Bilge Injections 1 sizes 5 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size 4 1/2" 3 1/2" dia.

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 home

Are all connections with the sea direct on the skin of the ship No. On main right pocket 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 Yes

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 No. as appears plan

What pipes are carried through the bunkers home 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 9-4-14 of Stern Tube 9-4-14 Screw shaft and Propeller 22-4-14

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top of hull

BOILERS, &c.—(Letter for record Yes) Manufacturers of Steel John Spencer & Sons Ltd.

Total Heating Surface of Boilers 6330.48 sq ft Is Forced Draft fitted No. No. and Description of Boilers 2. S.E. Multitubular

Working Pressure 180 lbs. Tested by hydraulic pressure to 360 lbs. Date of test 21.4.14 No. of Certificate 8645

Can each boiler be worked separately Yes Area of fire grate in each boiler 68.36 sq ft No. and Description of Safety Valves to each boiler 2. One Spring loaded Area of each valve 7.47 sq ft 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 17'-19" Length 11'-6" Material of shell plates Steel

Thickness 13/8" Range of tensile strength 25/32 lb. Are the shell plates welded or flanged No. Descrip. of riveting: cir. seams D.R. Lap long. seams 2.R. D.B. Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 9 1/2" Lap of plates or width of butt straps 1'-9 3/4"

Per centages of strength of longitudinal joint rivets 85.1 plate 85.3 Working pressure of shell by rules 182 Size of manhole in shell 12"x16"

Size of compensating ring 7"x1 3/8" No. and Description of Furnaces in each boiler 3 Deighton Material Steel Outside diameter 4'-3"

Length of plain part top Thickness of plates crown 1 1/2" Description of longitudinal joint Weld No. of strengthening rings 1

Working pressure of furnace by the rules 185 Combustion chamber plates: Material Steel Thickness: Sides 3/32" Back 3/32" Top 3/32" Bottom 1"

Pitch of stays to ditto: Sides 9"x10" Back 9 1/8"x9 1/8" Top 9"x10" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 191

Material of stays Steel Diameter at smallest part 2-3/10" Area supported by each stay 932.0" Working pressure by rules 182 End plates in steam space: Material Steel Thickness 1 1/16" Pitch of stays 1'-9"x2'-1" How are stays secured DN + Washers Working pressure by rules 194 Material of stays Steel

Diameter at smallest part 9-8/2" Area supported by each stay 575.0" Working pressure by rules 194 Material of Front plates at bottom Steel

Thickness 7/8" Material of Lower back plate Steel Thickness 1" Greatest pitch of stays 13"x9 1/16" Working pressure of plate by rules 263

Diameter of tubes 3 1/2" Pitch of tubes 4 3/4" Material of tube plates Steel Thickness: Front 7/8" Back 7/8" Mean pitch of stays 9 1/2"

Pitch across wide water spaces 14" Working pressures by rules 244 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 1/4"x2" Length as per rule 2'-6" Distance apart 10" Number and pitch of stays in each 2-9"

Working pressure by rules 230 Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately 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 stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

