

Port of Belfast
No. in Survey held at Belfast Date, first Survey 3rd May Last Survey 8th Nov 1906
Reg. Book. on the Flowth Head (Number of Visits 40)
Master J. R. Moore Built at Belfast By whom built Northern Dock & Shipyard Tons 4440 Net 2877
Engines made at Belfast By whom made - when made -
Boilers made at - By whom made - when made -
Registered Horse Power 462 Owners Ulster Steamship Coy Ltd Port belonging to Belfast
Nom. Horse Power as per Section 454 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
Dia. of Cylinders 26"-43"-72" Length of Stroke 48 Revs. per minute 70 Dia. of Screw shaft 14.75 as per rule 14.75 Material of S. Steel
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 ✓ 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 4'-11"
Dia. of Tunnel shaft 13.25 as per rule 13.25 Dia. of Crank shaft journals 13.75 as per rule 13.75 Dia. of Crank pin 13.5 Size of Crank web 24.5 x 9.5 Dia. of thrust shaft under
collars 13.5 Dia. of screw 17'-0" Pitch of Screw 18'-0" No. of Blades 4 State whether moveable Yes Total surface 85 sq. ft.
No. of Feed pumps 2 Diameter of ditto 4" Stroke 27" Can one be overhauled while the other is at work Yes
No. of Bilge pumps 2 Diameter of ditto 4.5" Stroke 27" Can one be overhauled while the other is at work Yes
No. of Donkey Engines 3 Sizes of Pumps 2 1/2, 1 1/2, 1 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 4-3 1/2 General 7 x 5 x 4 in Holds, &c. 9-3 1/2 1-2 1/2

No. of Bilge Injections 1 sizes 8" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room of size 16-3 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 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 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 Fore hold suction How are they protected Wood casings
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 18-9-06 of Stern Tube 18-9-06 Screw shaft and Propeller 18-9-06
Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top platform E. Room

BOILERS, &c.—(Letter for record S) Manufacturers of Steel W. Beardmore & Co
Total Heating Surface of Boilers 6318 sq. ft. Forced Draft fitted Yes No. and Description of Boilers 3- Single End Cyl.
Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 25-9-06 No. of Certificate 386
Can each boiler be worked separately Yes Area of fire grate in each boiler 51 1/2 sq. ft. No. and Description of Safety Valves to
each boiler 2-19 in. Spring Area of each valve 8.29 sq. in. Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
Smallest distance between boilers or uptakes and bunkers 20" Mean dia. of boilers 14'-3" Length 11'-4 1/2" Material of shell plates Steel
Thickness 1 1/4" Range of tensile strength 28-32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. Lap 4"
long. seams Butt Lap Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 18 1/2"
Per centages of strength of longitudinal joint 90-2 Working pressure of shell by rules 184 lbs Size of manhole in shell 16" x 12"
Size of compensating ring Mc Neil No. and Description of Furnaces in each boiler 3- Reighton Material Steel Outside diameter 45 1/2"
Length of plain part 5' Thickness of plates 3 1/2" Description of longitudinal joint Weld No. of strengthening rings ✓
Working pressure of furnace by the rules 194 lbs Combustion chamber plates: Material Steel Thickness: Sides 5" Back 4 1/4" Top 5" Bottom 3 1/2"
Pitch of stays to ditto: Sides 8 1/2" x 8" Back 9 1/2" x 8 1/2" Top 9 1/2" x 8" If stays are fitted with nuts or riveted heads Nuts inside Working pressure by rules 180 lbs
Material of stays Steel Diameter at smallest part 1 1/2" Area supported by one stay 77 1/2" Working pressure by rules 198 lbs End plates in steam space:
Material Steel Thickness 1 1/2" Pitch of stays 22 1/2" x 16" How are stays secured Nuts inside Working pressure by rules 201 lbs Material of stays Steel
Diameter at smallest part 2 1/2" Area supported by one stay 352 sq. in. Working pressure by rules 188 lbs Material of Front plates at bottom Steel
Thickness 1" Material of Lower back plate Steel Thickness 3 1/2" Greatest pitch of stays 13 1/2" Working pressure of plate by rules 196 lbs
Diameter of tubes 2 1/2" Pitch of tubes 3 1/2" x 3 1/2" Material of tube plate Steel Thickness: Front 1" Back 3 1/2" Mean pitch of stays 11 1/4" x 7 1/4"
Pitch across wide water spaces 13 1/2" Working pressures by rules 196 lbs Girders to Chamber tops: Material Steel Depth and
thickness of girder at centre 8 1/2" x (7/8 x 2) Length as per rule 308 Distance apart 8" Number and pitch of stays in each 2-9 1/2"
Working pressure by rules 186 lbs Superheater or Steam chest; how connected to boiler - 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 -

VERTICAL DONKEY BOILER—Manufacturers of Steel

No. *1111* Description *Vertical Donkey Boiler*

Made at *W. & A. Thompson (Lancs.)* By whom made *W. & A. Thompson* When made *1906* Where fixed *at Liverpool*

Working pressure *15 lbs* tested by hydraulic pressure to *22.5* Date of test *15.11.06* No. of Certificate *1111* Fire grate area *1.5* Description of Safety *Valves*

Valves *2* No. of Safety Valves *2* Area of each *1.5* Pressure to which they are adjusted *22.5* Date of adjustment *15.11.06*

If fitted with easing gear *No* If steam from main boilers can enter the donkey boiler *No* Dia. of donkey boiler *18"* Length *10'*

Material of shell plates *Steel* Thickness *1/2"* Range of tensile strength *30 tons* Descrip. of riveting long. seams *Double*

Dia. of rivet holes *1/4"* Whether punched or drilled *Drilled* Pitch of rivets *2"* Lap of plating *1"* Per centage of strength of joint *100* Rivets *100* Plates *100*

Working pressure of shell by rules *15* Thickness of shell crown plates *1/2"* Radius of do. *10'* No. of stays to do. *2* Dia. of stays *1"*

Diameter of furnace Top *18"* Bottom *18"* Length of furnace *10'* Thickness of furnace plates *1/2"* Description of joint *Double*

Working pressure of furnace by rules *15* Thickness of furnace crown plates *1/2"* Stayed by *2*

Diameter of uptake *18"* Thickness of uptake plates *1/2"* Thickness of water tubes *1/2"* Dates of survey *15.11.06*

SPARE GEAR. State the articles supplied:— *1 Propeller shaft, 2 Propeller blades, set of pump for 14" P. piston, fan spindle for Centrifugal Pump, and all gear to Lloyd's Rules extra.*

The foregoing is a correct description,
FOR WORKMAN, CLARK & CO., LONDON.
W. & A. Thompson Manufacturer.

Dates of Survey *May 3.30. June 1.5, 12, 13, 15, 20, 22, 26, 29 July 2.5.9 Aug 2.8, 20, 22, 23, 28, 31.7. Sept 7.4.7.7.18 up to 1/10/08.*

During progress of work in shops - *May 3.30. June 1.5, 12, 13, 15, 20, 22, 26, 29 July 2.5.9 Aug 2.8, 20, 22, 23, 28, 31.7. Sept 7.4.7.7.18 up to 1/10/08.*

During erection on board vessel - *May 3.30. June 1.5, 12, 13, 15, 20, 22, 26, 29 July 2.5.9 Aug 2.8, 20, 22, 23, 28, 31.7. Sept 7.4.7.7.18 up to 1/10/08.*

Total No. of visits *46*

Is the approved plan of main boiler forwarded herewith *Yes*

Dates of Examination of principal parts—Cylinders *30th May* Stays *30th May* Covers *30th May* Pistons *30th May* Rods *30th May*

Connecting rods *28th Sept* Crank shaft *18th June* Shaft *18th June* Tunnel shafts *18th June* Screw shaft *18th June* Propeller *18th June*

Stern tube *7-9-06* Steam pipes tested *4-9-06* Engines and boiler seatings *16-9-06* Engines holding down bolts *22-9-06*

Completion of pumping arrangements *22-9-06* Boilers fixed *16-9-06* Engines tried under steam *23-9-06*

Main boiler safety valves adjusted *23-9-06* Thickness of adjusting washers *2 1/3 32*

Material of Crank shafts *S. Steel* Identification Mark on Do. *Lloyd's* Material of Thrust shaft *do* Identification Mark on Do. *do*

Material of Tunnel shafts *do* Identification Marks on Do. *do* Material of Screw shafts *do* Identification Marks on Do. *do*

Material of Steam Pipes *W. Iron* Test pressure *450 lbs.*

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

The machinery of this vessel has been constructed under Special Survey, and in accordance with the Rules. The workmanship, and the materials, are of good description and on trial under steam, in Belfast Lough, the machinery worked satisfactorily. In my opinion, it is eligible for record + L.M.C. 11-06 with notation Forced Draft & Electric Light

It is submitted that this vessel is eligible for THE RECORD.

L.M.C. 11.06. FD. ELEC. LIGHT.

16.11.06

The amount of Entry Fee. *£ 3 -* When applied for, *14.11.06*

Special *£ 42.14* When received, *7.1.07*

Donkey Boiler Fee *£*

Travelling Expenses (if any) *£*

Committee's Minute

TUES. NOV 20 1906

Assigned

L.M.C. 11.06

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



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MACHINERY CERTIFICATE WRITTEN.

Certificate (if required) to be sent to Lloyd's Office

(The Surveyors are requested not to write on or below the space for Committee's Minute.)