

REPORT ON MACHINERY.

Port of Dublin

Received at London Office JUN 6 1902

Survey held at Dublin Date, first Survey 30th April Last Survey 4th June 1902
(Number of Visits 7)

In the Machinery of the Twin Screw Barge "Maaney" Tons ^{Gross} ✓ _{Net} ✓
Built at Dublin By whom built Rop & Walpole When built 1892

Made at Dublin By whom made Rop & Walpole when made 1892
Made at " By whom made " when made 1892

Horse Power 13.5 Owners A Guinness Son & Co Ltd Port belonging to Dublin
Power as per Section 28 5.76 Is Refrigerating Machinery fitted no Is Electric Light fitted no

S, &c. — Description of Engines Simple Non Condensing Inverted No. of Cylinders 2 No. of Cranks 2
Diameter 10" Length of Stroke 14 Revs. per minute 90 Dia. of Screw shaft ^{as per rule} 3 1/2 Lgth. of stern bush 10"
Screw shaft ^{as per rule} 3 1/4 Dia. of Crank shaft journals ^{as per rule} 3 1/4 ^{chasing approved} Dia. of Crank pin 3 1/4 Size of Crank webs 1 1/2 x 2 1/2 Dia. of thrust shaft under
Dia. of screw 4' 0" Pitch of screw 7' 6" No. of blades 3 State whether moveable no Total surface 4.8
Pumps 1 Injector Diameter of ditto 1" Stroke ✓ Can one be overhauled while the other is at work ✓
Pumps 1 Injector Diameter of ditto 3" Stroke ✓ Can one be overhauled while the other is at work ✓
Key Engines none Sizes of Pumps none No. and size of Suctions connected to both Bilge and Donkey pumps
Room 2 1/2 In Holds, &c. 2 1/2 + 2 1/2 to Peak tank.

Projections ✓ sizes ✓ Connected to condenser, or to circulating pump ✓ Is a separate donkey suction fitted in Engine room & size ✓
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 ✓
Connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Cocks
And 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
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
Are carried through the bunkers none How are they protected ✓
Cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times yes
Suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges yes
Stern tube, propeller, screw shaft, and all connections examined in dry dock yes Is the screw shaft tunnel watertight ✓
With a watertight door ✓ worked from ✓

S, &c. — (Letter for record S) Total Heating Surface of Boilers 4070 sq ft Is forced draft fitted no
Description of Boilers one Scotch Marine Type Working Pressure 100 Tested by hydraulic pressure to 150 lbs
9th April Can each boiler be worked separately ✓ Area of fire grate in each boiler 8 1/2 sq ft No. and Description of safety valves to
2 - direct spring loaded Area of each valve 4.9 Pressure to which they are adjusted 92 lbs Are they fitted with easing gear yes
Space between boilers or uptakes and bunkers or woodwork 12" from bunker no work Mean dia. of boilers 6' 7 1/2" Length 7' 7" Material of shell plates steel
Range of tensile strength ✓ Are they welded or flanged no Descrip. of riveting: cir. seams single long. seams double
Rivet holes in long. seams 13/16 Pitch of rivets 3 5/16 2 rows Lap of plates or width of butt straps 8 1/2"
of strength of longitudinal joint ^{rivets} 75% Working pressure of shell by rules 120 lbs Size of manhole in shell 14 1/2 x 10 1/2
insulating ring 24 1/2 x 20 3/4 No. and Description of Furnaces in each boiler one, plain Material steel Outside diameter 2' 9"
in part ^{top} 5' 1/2 Thickness of plates ^{crown} 1/2 Description of longitudinal joint welded No. of strengthening rings none
Surface of furnace by the rules 132 sq ft Combustion chamber plates: Material steel Thickness: Sides 7/16 Back 7/16 Top 7/16 Bottom 7/16
to ditto: Sides 6 5/8 x 9 6/7 Back 8 x 8 1/2 Top 8 x 8 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 77 lbs
Stays steel Diameter at smallest part 1 1/4 Area supported by each stay 70 sq in Working pressure by rules 110 lbs End plates in steam space:
Thickness 1/2 Pitch of stays 11 1/2 x 9 How are stays secured double nut Working pressure by rules 106 lbs Material of stays steel
smallest part 1 1/4 Area supported by each stay 106 sq in Working pressure by rules 116 lbs Material of Front plates at bottom steel
Material of Lower back plate steel Thickness 1/2 Greatest pitch of stays 15 x 7 Working pressure of plate by rules 100 lbs
Tubes 1 1/2 Pitch of tubes 25/8 Material of tube plates steel Thickness: Front 9/16 Back 5/8 Mean pitch of stays 9 1/2
Wide water spaces 10" Working pressures by rules 172 lbs Girders to Chamber tops: Material steel Depth and
Girder at centre 4 1/2 x 2 Length as per rule 20" Distance apart 8 1/2 Number and pitch of Stays in each 2 at 8" pitch
Pressure by rules 180 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked
Diameter ✓ Length ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivet ✓
Pitch of rivets ✓ Working pressure of shell by rules ✓ Diameter of flue ✓ Material of flue plates ✓ Thickness ✓
Stays ✓ Distance between rings ✓ Working pressure by rules ✓ End plates: Thickness ✓ How stayed ✓
Pressure of end plates ✓ Area of safety valves to superheater ✓ Are they fitted with easing gear ✓



DONKEY BOILER— No. _____ Description *None*

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

Working pressure tested by hydraulic pressure to _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____

No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from _____

enter the donkey boiler _____ Dia. of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____

strength _____ Descrip. of riveting long. seams _____ Dia. of rivet holes _____ Whether punched or drilled _____ Pitch _____

Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of Stays _____

Dia. of stays. _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____

joint _____ Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by _____

Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *None*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - -

Total No. of visits

Is the approved plan of main boiler forwarded herewith

“ “ “ donkey “ “ “

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

*Engines & Boiler efficient & suitable for service in this Barge
Whale engaged in River work only.*

Material of screw shaft *Iron* 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 *no* If the liner is in more than one length are the joints burnt

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 non-corrosive *fits tightly* If two liners are fitted, is the shaft lapped or protected between the liners *✓*

Screw shafts examined

It is submitted that this vessel is eligible for THE RECORD. B & M 56.02

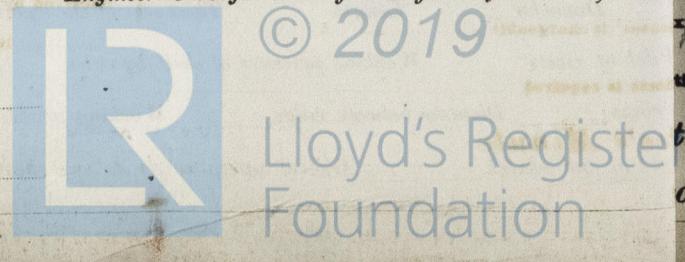
*C.M.
6.6.02
J.L.
7.6.02*

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

The amount of Entry Fee.. £ 2 : 10 :
Special £ : :
Donkey Boiler Fee £ : :
Travelling Expenses (if any) £ : :
When applied for, 5/6/02
When received, 5-7-02

John MacWilliam
Engineer Surveyor to Lloyd's Register of British & Foreign

Committee's Minute TUES. 10 11 02
Assigned *B & M 56.02*



MACHINERY CERTIFICATE
WRITTEN