

REPORT ON MACHINERY

No. 12542

THURS. 2 NOV 1893
THURS. 2 NOV 1893

Port of Glasgow
No. in Survey held at Glasgow Date, first Survey 7th July Last Survey 26th October 1893
Reg. Book. on the S.S. Ringsend (Number of Visits 23)
Master John Jones Built at Paisley By whom built Fulmar & Co Tons { Gross 396 Net 154
Engines made at Glasgow By whom made Ross & Duncan when made 1893
Boilers made at Do By whom made Do when made 1893
Registered Horse Power 73 Owners Wallace Bros. Lim Port belonging to Dublin
Nom. Horse Power as per Section 28 ☒

ENGINES, &c.— Description of Engines Compound Reciprocating condensing No. of Cylinders Two
Diameter of Cylinders 21" x 42" Length of Stroke 30" Revolutions per minute 110 Diameter of Screw shaft as per rule 8.10
Diameter of Shaft as per rule 7.78 Diameter of Crank shaft journals 8 1/4" Diameter of Crank pin 8 1/4" Size of Crank webs 15 1/2" x 11 1/2" x 5 1/2"
Diameter of screw 9' 3" Pitch of screw 13' 6" No. of blades 4 State whether moveable yes Total surface 27.09 ft
No. of Feed pumps Two Diameter of ditto 3 1/2" Stroke 15" Can one be overhauled while the other is at work yes
No. of Bilge pumps Two Diameter of ditto 4" Stroke 15" Can one be overhauled while the other is at work yes
No. of Donkey Engines One Sizes of Pumps 6 x 4 x 6 Duplex No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room Three 2 1/2" In Holds, &c. Two 2 1/2"
No. of bilge injections One sizes 3 1/4" Connected to condenser, or to circulating pump pumps Is a separate donkey suction fitted in Engine room & size yes 2 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 hold and fore Peak 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
When were stern tube, propeller, screw shaft, and all connections examined in dry dock at launch Is the screw shaft tunnel watertight none
Is it fitted with a watertight door ✓ worked from ✓

BOILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 1272
No. and Description of Boilers One Cylindrical Multitubular Working Pressure 110 lbs Tested by hydraulic pressure to 220 lbs
Date of test Can each boiler be worked separately ✓ Area of fire grate in each boiler 35 1/2 ft No. and Description of safety valves to each boiler Pair of direct spring Area of each valve 8.29 Pressure to which they are adjusted 110 lbs Are they fitted with easing gear yes Smallest distance between boilers or uptakes and bunkers or woodwork 9" Mean diameter of boilers 13-0
Length 10-0 Material of shell plates Steel Thickness 1 3/16" Description of riveting: circum. seams Lap double pin long seams Butt double pin
Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 6" x 2 1/4" Lap of plates or width of butt straps 14 3/4"
Per centages of strength of longitudinal joint 84.1 Working pressure of shell by rules 118 lbs Size of manhole in shell 15" x 11 1/2"
Size of compensating ring 6" x 1 3/16" No. and Description of Furnaces in each boiler Three Plain Material Steel Outside diameter 42"
Length of plain part top 6-6 bottom 6-11 Thickness of plates crown 1 1/32 bottom 3/32 Description of longitudinal joint bedded No. of strengthening rings (2) 33 1/2"
Working pressure of furnace by the rules 113 lbs Combustion chamber plates: Material Steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 1/2"
Pitch of stays to ditto: Sides 8" x 8" Back 8" x 8" Top 8" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 120 lbs
Material of stays Steel Diameter at smallest part 1 1/16" Area supported by each stay 64 sq" Working pressure by rules 111 lbs End plates in steam space: Material Steel Thickness 1 3/16" Pitch of stays 17" How are stays secured double nuts Working pressure by rules 116 lbs Material of stays Steel
Diameter at smallest part 2 1/16" Area supported by each stay 272 sq" Working pressure by rules 144 lbs Material of Front plates at bottom Steel
Thickness 1 5/8" Material of Lower back plate Steel Thickness 1/2" Greatest pitch of stays 14" Working pressure of plate by rules 140 lbs
Diameter of tubes 3 1/2" Pitch of tubes 4 5/8" Material of tube plates Steel Thickness: Front 5/8" Back 1/2" Mean pitch of stays 11 1/2"
Pitch across wide water spaces 14" Working pressures by rules 116, 140 lbs Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 6 1/2" x 1 3/4" Length as per rule 30" Distance apart 8" Number and pitch of Stays in each Two, 8"
Working pressure by rules 126 lbs Superheater or Steam chest; how connected to boiler ✓ Can the superheater be shut off and the boiler worked separately ✓ 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 ✓

GLS168-0208

12542 lbs.

DONKEY BOILER—

Description Vertical, two Cross Tubes

Made at Gathhead By whom made Clark Chapman & Co When made 18/9/93 Where fixed on deck

Working pressure 70 lbs tested by hydraulic pressure to 140 lbs No. of Certificate 4171 Fire grate area 16 sq ft Description of safety valves direct spring

No. of safety valves one Area of each 4.9 Pressure to which they are adjusted 70 lbs If fitted with casing gear yes If steam from main boilers can enter the donkey boiler no

Diameter of donkey boiler 4'-3" Length 9'-6" Material of shell plates steel Thickness 3/2"

Description of riveting long. seams Lap double riveted Diameter of rivet holes 1 1/16" Whether punched or drilled drilled Pitch of rivets 2 1/2"

Lap of plating 3 3/8" Per centage of strength of joint Rivets 72 Thickness of shell crown plates 13/32" Radius of do. 5'-0" No. of Stays to do. 3

Dia. of stays 1 3/8" Diameter of furnace Top 3'-2 3/8" Bottom 3'-7" Length of furnace 4'-6" Thickness of furnace plates 13/32" Description of joint Lap single

Thickness of furnace crown plates 13/32" Stayed by as shell crown Working pressure of shell by rules 97 lbs

Working pressure of furnace by rules 79 lbs Diameter of uptake 12" Thickness of uptake plates 3/8" Thickness of water tubes 3/8"

SPARE GEAR. State the articles supplied:—Two connecting rod top end bolts & nuts
Two connecting rod bottom end bolts & nuts; Two main bearing bolts, one set coupling bolts; one set of fuel & budge pump valves, riveted bolts & nuts one bundle of iron of various sizes

The foregoing is a correct description,

Ross & Duncan

Manufacturer.

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

The machinery of this

vessel has been constructed under special survey, the materials and workmanship are of good description, the boilers have been tested by hydraulic pressure as required by the rules of this Society, the machinery has been satisfactorily fitted on board the vessel, steam has been raised on the main and donkey boilers and the safety valves adjusted to the correct working pressure and the engines have been tried under steam. In my opinion this vessel's machinery is eligible to have certification + LMC 10-93 in the Register Book

Whilst on her trial trip, the air pump valves failed to act which caused the pump to become choked and resulted in the breaking of the links and bending of the lever. New links have been fitted the lever straightened & new valves put in air pump. The machinery has been again tried under steam & is now satisfactory

It is submitted that this vessel is eligible for THE RECORD + LMC 10-93-

2/11/93 -

Certificate (if required) to be sent to

Glasgow

The amount of Entry Fee.. £ 1 : 1 : 1 When Applied for, 14/10/93
Special .. £ 10 : 19 : 11
Donkey Boiler Fee .. £ 2 : 2 : 11 When received, 19/10/93
Travelling Expenses (if any) £ : : : 19/10/93

A. M. McLeod

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

Committee's Minute

FRI 3 NOV 1893

Assigned

+ L.M.C. 10.93



© 2019

Lloyd's Register Foundation